

California Plants as Resources for Lepidoptera:
a guide for gardeners, restorationists and naturalists

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California Plants for Butterflies and Moths

“The more we know, the more we see.” *The Sagebrush Ocean: a Natural History of the Great Basin* by Stephen Trimble, p. 170

Resources for Lepidoptera -- California Plants – native, naturalized, and cultivated

California native plants are those plant species that grew naturally in California before its European discovery a few centuries ago. Most of California’s native plants described from collections made by early botanists in California or western North America.

Many of the truly indigenous species of herbaceous plants and grasses, especially at lower elevations, now displaced by species introduced, accidentally or deliberately, from elsewhere in the world and that have become naturalized. Open areas, in particular, nowadays often swamped with such “non-native” vegetation – greatly to the detriment of the diversity of insects, many of which tend to develop or forage on a limited range of plant species. However, many of the now most common insects, including common butterflies, are precisely those able to utilize the non-native vegetation that now covers so much of the Californian landscape. Therefore, extensive appendices to this work address the Lepidoptera values of naturalized plant species and cultivated species.

Here I share what I have been able to discover about the values of native, naturalized, and cultivated plants as nectar sources for adult butterflies and moths or as forage for their caterpillars – “hostplants”.

This work originally undertaken especially to serve people with butterfly gardening in mind. Alternatively, people with moth gardening in mind – a new possibility with our increasing knowledge. It is the outcome of a long search to find more specific and comprehensive information than previously available. I hope it will also prove at least somewhat useful to lepidopterists and other biologists and those engaged in ecological restoration.

Others and I are alarmed at how few butterflies – and hosts of other interesting creatures -- evident in urban, suburban, rural and even wildland areas nowadays as compared to my memories of several decades ago. With the extirpation of their native larval hosts and nectar plants from most of the increasingly human-dominated landscape there has been corresponding losses of a huge diversity of interesting insects. Thanks in part to huge and rapid incursions of invasive exotic plants, even wildlands – especially remnants of wildlands in or near the urban matrix -- often seem eerily bereft of butterflies and moths.

Modern large-scale agriculture is much more destructive to Lepidoptera than historic, smaller-scale farming, especially in the era before widespread use of mechanized equipment and pesticides. These days even organic agriculture may be devastating to Lepidoptera, since Dipel (*Bacillus thuringensis*) – which kills most Lepidoptera though generally harmless to the rest of the environment – approved for use in organic food production. Jeremy and Chris Thomas, butterfly conservation ecologists, conclude that all major declines in British butterflies are attributable “to changes in traditional forms of agriculture” (Butterfly Conservation Management).

Artificial night lighting has had huge, largely unknown effects on moth populations.

In many urban and suburban landscapes “cleaning up” plant debris and litter with mechanized blowers producing up to 200 mph wind speeds is yet another impact on Lepidoptera species whose life histories, at one point or another, play out on or near the ground.

I feel that the loss of Lepidoptera in daily experience diminishes our quality of life. Feeling the loss of everyday wildlife, more and more people are growing native plants, or otherwise attempting to restore native species to the landscape, with increases in beneficial wildlife one of the main benefits they seek. By this work, I hope to inspire such gardeners and others interested in preserving and increasing butterflies and moths. I hope it will also be helpful for those looking to find, study, conserve or restore Lepidoptera afield – thus I include records for plants that are difficult to cultivate – or thus far mostly unknown in cultivation.

Butterfly populations in many cultivated areas limited more by a lack of hostplants – plants caterpillars eat – than they are by a lack of nectar plants for the adult butterflies. However, specific types of nectar plants are also important for many if not most species. In much of the cultivated landscape both hostplants and nectar plants are radically lacking in comparison to their frequency in undisturbed habitats – as are their associated butterflies and moths.

Butterflies and moths often evident feeding upon their nectar plants, which are important food sources for them. However, a major part of the lepidopteran lifecycle is the caterpillar stage. Many people who care about butterflies do not realize that a full-orbed butterfly garden requires many larval host plants too. Not infrequently larval hosts are different from the nectar plants – though often, especially with native plants, one butterfly’s nectar plant is another butterfly’s larval host! By planting or tending native plants as nectar sources one is more likely to be supplying, if only inadvertently, larval hosts as well. Any native plant, whether larval host, nectar source, both, or neither, generally also serves an array of other native insects and other animals, often a wide array.

Butterfly habitat is far more than flowers. Instead of flower nectar, or in addition to it, rotting fruit draws some butterflies and moths. An overripe banana feeder station is a great addition to a butterfly garden. Alternatively, almost any sort of over-ripe fruit presented ants-free.

Tree sap attracts some butterflies and moths, as that flowing from sapsucker wounds or branches broken in storms.

Fresh dung or mud or even carrion provides sustenance to many butterflies.

Butterflies and moths often congregate at mud puddles.

Many plants on this list serve a broader range of Lepidopteran users than recorded here. The true significance of few observations is difficult to judge! There are few systematic studies and many observations recorded here are merely incidental, gleaned from innumerable sources.

Widely published observations are mostly limited and often vague or mistaken as to exact species of plants and/or butterflies (I have done my best to eliminate errors). Many observers are unable to distinguish between a butterfly and a moth, or unable to distinguish between the various species in each group. When it comes to nectar-feeding, many may fail to distinguish cases of investigative visits by butterflies looking for nectar, or simple cases of butterflies using flowers as a landing pad or resting place or looking for a plant to lay eggs, as opposed to actually feeding on a flower’s nectar.

Sometimes only one or a few species of butterflies find nectar at a given species of plant, or that species is rarely used, distinctions not included in the mere mention “attracts butterflies”. There remains little available data based on intensive, long-term observations by knowledgeable people.

If one species of butterfly gets nectar on a plant, in most cases at least a few others are likely.

Nectar source utilization varies widely from place to place and time to time, depending on what else is available, etc. Many plants listed as “attractive to butterflies” by credible sources are without any details about specific species of butterflies or the degree of their value. Here, wherever I can, I attempt to bring more specific and more useful information. Many sources only indicate a genus or family of plants as being attractive, but there are often great differences in butterfly usage from species to species in a genus – or even noticeable differences in usage between cultivars or selections within a species.

Butterflies and moths typically have a coiled up proboscis as their feeding mouthpart, which they uncoil for feeding. The proboscis is sort of like a straw, alternatively termed their tongue. The length of the proboscis varies widely from species to species, one of the factors that accounts for their varied tastes in flowers. Varying flower structures best serve various categories of insects with tongue length being one of the major compatibility factors. There are also chemical correlations – various plant species produce nectars with varying percentages and types of sugars, amino acids and other chemical constituents. Thus, different species of butterflies and moths seem to exhibit widely

varying tastes. In some of the moths, notably the many showy silk moths, adults do not have functional mouthparts and do not eat at all – we can only list caterpillar food plants – hostplants -- for them!

Various plant species not listed here are likely of value to butterflies and moths, especially less well known species of the Apiaceae (carrot family), Asteraceae (sunflower family), Lamiaceae (mint family), and others. Nowadays both the plants and the butterflies spread so thinly in our often rather degraded habitats that it is often difficult to make useful observations! There are few observers well able to identify both plants and Lepidoptera!

Healthy plants under good moisture conditions produce more nectar. Masses of plants in sheltered, sunny locations get more attention from butterflies and other pollinators. Good or excellent nectar sources that are “common” in a given locale tend to get much more attention than others. If plants are few, even very good nectar sources seemingly overlooked by the insects, perhaps the nectar gathered quickly, unobserved, by a few hungry insects. On the other hand, if nectar resources are abundant and the insects are few – as when larval hosts are rare, as they often are in cultivated areas – in that case few butterflies will be noticed, being so thinly scattered on the nectar sources. In locales (or gardens) where hostplants are absent, rare, or widely scattered, butterflies and moths are generally merely passing through.

Perhaps at least 25 square feet is the minimum patch size in flower in a garden situation for one flowering species to be very likely to be “found” and at all conspicuously attended. Maximum pollinator interest generated with eight or more attractive species in significant patches flowering simultaneously in a given locale. For butterfly gardens, bigger is better! For sheer nectar production or caterpillar forage, bigger plants likely may offer more. A single jungle canopy tree with thousands of flowers may produce hundreds of liters of nectar per day!

Many of our California native plants, as plants from elsewhere, can be successfully cultivated beyond their native ranges. Some plants useful to pollinators – especially those not ‘showy’ enough to attract much horticultural interest – little known and thus not horticulturally assessed. For those interested in experimenting, common species historically native to your locale likely will not prove difficult to grow and may serve the widest array of insect species.

Someone somewhere observed butterflies and moths listed here. Records pulled from scores of sources of varying reliability, often from photographs. In some cases, records are from observations made in other States, which share the same species of plants, and Lepidoptera. These records of nectar plants and caterpillar hostplants merely indicate possibilities.

Obviously, only Lepidoptera species that actually occur in a locale can be attracted to a plant ... as a garden guide, this is a guide to what might work, without guarantees ... but my best attempt to provide the most specific and useful information that I can find. The particular plants that butterflies and moths in a given locale will visit at a particular time are a relative matter, with some species more attractive than others are. Your observations and opinions are welcome!

Moths of Western North America by Jerry A. Powell and Paul A. Opler estimates there are about 13,000 species of Lepidoptera in North America north of Mexico -- with about 94% being moths and among those an estimated one third remain undescribed! So it seemed reasonable to pay some attention to moths in this work. I have particularly sought out information about diurnal species and the larger, showier or more popular moths. With increasing knowledge “moth gardening” is coming along, too.

According to *Moths of Western North America*, “most macro-moths” feed at flowers, as well as many day-flying micro-moths in the families Adelidae, Heliodinidae, Plutellidae, Scythrididae, Sesiidae, and Tortricidae. Adults in some families of macro-moths cannot feed at all: Lasiocampidae, Lymantriidae, and Saturniidae.

Very much remains undiscovered about our moths, but Sphingidae (sphinx moths) and Noctuidae (owlet moths) considered significant pollinators in natural communities. (Very few people observe moths at nectar – a good time to look is the hours just before and after dusk. Putting red cellophane over your flashlight lens enables observation less alarming to the moths.)

Interpreting the accounts of each plant name

The plant lists in each section of this work (native plants, naturalized plants, cultivated plants) organized alphabetically by botanical nomenclature (genus and species of the scientific name). Native and naturalized plants listed by their names, as they appear in *The Jepson manual: higher plants of California*, 1996 edition. Botanical nomenclature is subject to change, so entries at obsolete names note the current names where the Lepidoptera usage notes appear. There are many ‘non-native’ plant species naturalized in California with usefulness to butterflies and moths – records for them are included in Appendix One, also organized alphabetically according to their botanical nomenclature.

Appendix Two is devoted to notes on the Lepidoptera values of cultivated species. The major source for names in this section is the *Sunset Western Garden Book*.

The “Zones” where listed for native plants in this work are the *Sunset Western Garden Book* zones in which the plant thrives in cultivation, according to the horticultural assessments provided in *The Jepson manual: higher plants of California* (1993) based on the experience of a large panel of horticulturists. For more specific cultivation information, it may be useful to consult this work and others!

The range of months in each native plant account and most naturalized plant accounts indicates the time of flowering, mostly according to *The Jepson manual: vascular plants of California* (2012).

In each plant species account, butterflies and moths initially listed without comment refer to flower visitors. Flower visitors are listed first, then caterpillar food plants. Some plants have no flower visitors but may be larval hosts. Others serve flower visitors but are not foodplants for caterpillars. Much remains unknown concerning flower visitors and larval hosts!

Next, if the plant is forage for larval butterflies, notes provided in a paragraph under the nectar usage notes.

After that – or immediately listed if the plant is neither a nectar source nor butterfly caterpillar forage -- the section of an account headed by the names of moth families refers to usage of those plants by as forage by the caterpillars of moth species listed.

There are about ten times more species of moths than butterflies. I have attempted to include most of the macromoths; coverage of micro-moths is less complete. There is always more to learn!

Many literature sources and excellent web sites consulted in the course of compiling this information. The bibliography section may be useful to those seeking additional information. Much information about Lepidoptera previously published in print is now available online—for the curious, it pays to search!

California Native Plants for butterflies and moths as adult resources and caterpillar plants:

Plant taxa known or believed to be present in California at the time of first European contact are native plants.

Note: “fq” = frequent, which signifies what seems to be a favorite or particularly important nectar source for adult Lepidoptera ... or a primary or favorite larval host plant for caterpillars. In many cases, favorites are unknown.

Abies spp. **Firs.** Pinaceae.

Many hostplant records specify only genera, not species. Recorded simply for “Abies” are:

Geometridae: Pale Beauty (*Campaea perlata*). Mottled Gray Carpet (*Cladara limitaria*). Autumnal Moth (*Epirrita autumnata*). Larch Pug (*Eupithecia annulata*). *Eupithecia graefii*. *Eupithecia olivacea*. *Eupithecia spermaphaga*. Grey Pug (*Eupithecia subfuscata*). Hemlock Looper (*Lambdina fiscellaria*). Brown-lined Looper (*Nealcis californiaria*). Spruce-fir Looper (*Macaria signaria*). Pulmonaria Looper (*Stenoporpia pulmonaria*).

Lymantriidae: Pine Tussock Moth (*Dasychira griseifacta*). Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Noctuidae: Subalpine Dart (*Euxoa extranea*). *Xestia mustelina*.

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*). Fir Coneworm (*Dioryctria abietivorella*). Pinyon Tip Moth (*Dioryctria albovitella*).

Tortricidae: Western Black-headed Budworm (*Acleris gloveranus*). Douglas-fir Cone Moth (*Barbara colfaxiana*). Spruce Budworm (*Choristoneura fumiferana*). *Retinia picicolana*. Gray Leafroller (*Syndemis afflictana*). Spruce Needleminer (*Taniva albolineana*). *Zeiraphera canadensis*.

Abies amabilis. **Pacific Slope Fir. Silver Fir. Cascade Fir. Lovely Fir.** Pinaceae.

Hostplant for Pine White (Scott, 2012).

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: Gray Spruce Looper (*Caripeta divisata*). Mottled Gray Carpet (*Cladara limitaria*). Small Engrailed (*Ectropis crepuscularia*). Packard’s Girdle (*Enypia packardata*). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata*). Whitelined Looper (*Epirrita pulcherraria*). Larch Pug (*Eupithecia annulata*). Early Brown Looper (*Eupithecia filmata*). *Eupithecia harrisonata*. *Eupithecia longipalpata*. *Eupithecia olivacea*. *Eupithecia unicolor*. Dyar’s Looper (*Gabriola dyari*). *Hydriomena irata*. Hemlock Looper (*Lambdina fiscellaria*). Western Carpet (*Melanolophia imitata*). Brown-lined Looper (*Nealcis californiaria*). Phantom Hemlock Looper (*Nepytia phantasmaria*). *Pero behrensaria*. Morrison’s Pero (*Pero morrisonaria*). Black-lined Synaxis (*Tetracis pallulata*). *Thallophegma hyperborea*.

Noctuidae: *Agrochola pulchella*. *Cosmia praeacuta*. *Mniotype tenera*. *Panthea virginarius*. Brown Angle Shades (*Phlogophora periculosa*). Otter Spiramater (*Spiramater lutra*). Hooked Silver Y (*Syngrapha alias*). *Xestia mustelina*.

Pyralidae: Fir Coneworm (*Dioryctria abietivorella*). *Promylea lunigerella*.

Tortricidae: *Apotomops wellingtoniana*. Douglas-fir Cone Moth (*Barbara colfaxiana*). Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*).

Pacific Slope Fir a rare species in California, more common further north. Cultivated, Zones 3-7, 15-17.

Abies bracteata. **Santa Lucia Fir. Bristlecone Fir.** Pinaceae.

Tortricidae: Fir Seed Moth (*Cydia bracteata*).

Santa Lucia Fir, with a very limited range in the wild, not harvested for timber, thus its Lepidoptera remain unstudied. Wider-ranging species with considerable economic value garner more records and get a lot more study! Studies of timber trees have yielded much of what we know about the Lepidoptera value of conifers.

Santa Lucia Fir is excellent for cultivation, though we know little of its Lepidoptera value. Best cultivated in Zones 15, 16, 18-21.

Abies concolor. **White Fir.** Pinaceae.

Pine White hostplant (Scott, 2012). White Fir indirectly supports Thicket Hairstreak by playing host to the dwarf pine mistletoe (*Arceuthobium campylopodum*), its caterpillar foodplant, also a foodplant for Johnson's Hairstreak.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Gelechiidae: *Chionodes abella*. *Chionodes sabinianae*.

Geometridae: Mountain Girdle (*Enypia griseata*). *Eupithecia spermaphaga*. Phantom Hemlock Looper (*Nepytia phantasmaria*). Black-lined Synaxis (*Tetraxis pallulata*).

Lymantriidae: Douglas-fir Tussock Moth (*Orgyia pseudotsugata*) – sometimes there are damaging outbreaks (Powell & Opler).

Noctuidae: *Cosmia epipaschia*. Simplex Cutworm (*Egira simplex*). Western Conifer Looper (*Syngrapha celsa*).

Tortricidae: Western Black-headed Budworm (*Acleris gloveranus*). Western Avocado Leafroller (*Amorbia cuneanum*). *Arche pandemis coniferana*. Fruit-tree Leafroller (*Archips argyrospila*). *Argyrotaenia dorsalana*. *Argyrotaenia lautana*. *Argyrotaenia provana*. Douglas-fir Cone Moth (*Barbara colfaxiana*). *Choristoneura carnana*. Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). Sugar Pine Tortrix (*Choristoneura lambertiana subretiniana*). *Choristoneura retiniana*. Fir Seed Moth (*Cydia bracteata*). *Epiblema radicana*. White Fir Needle Miner (*Epinotia meritana*) – periodic outbreaks defoliate the trees (Powell & Opler). Red-striped

Needleworm (*Epinotia radicana*). *Epinotia trossulana*. Fir Cone Borer (*Eucopina siskiyouana*). *Sparganothis senecionana*. Douglas-fir Bud Moth (*Zeiraphera hesperiana*). *Zeiraphera pacifica*.

Ypsolophidae: *Ypsolopha nella*.

White Fir is best cultivated in Zones 2, 3, 4, 6, 7, 10, 14.

Abies grandis. **Grand Fir. Giant Fir. Lowland White Fir.** Pinaceae.

Supports caterpillars of the Pine White.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: *Antepirrhoe fasciata*. Gray Spruce Looper (*Caripeta divisata*). Mottled Gray Carpet (*Cladara limitaria*). Mountain Girdle (*Enypia griseata*). Packard's Girdle (*Enypia packardata*) (fq). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata*). Larch Pug (*Eupithecia annulata*). *Eupithecia harrisonata*. *Eupithecia longipalpata*. *Eupithecia olivacea*. *Eupithecia unicolor*. Dyar's Looper (*Gabriola dyari*). *Hydriomena irata*. *Hydriomena speciosata*. Hemlock Looper (*Lambdina fiscellaria*). Western Carpet (*Melanolophia imitata*). Brownlined Looper (*Neocalcis californiaria*). Phantom Hemlock Looper (*Nepytia phantasmaria*). *Nepytia umbrosaria*. Bruce Spanworm (*Operophtera bruceata*). *Pero behrensaria*. Morrison's Pero (*Pero morrisonaria*). Western Pero (*Pero occidentalis*). Lorquin's Angle (*Macaria lorquinaria*). Black-lined Synaxis (*Tetracis pallulata*). *Thallophegma hyperborea*.

Lymantriidae: Pine Tussock Moth (*Dasychira grisefacta*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*) – outbreaks may cause severe defoliation in the Pacific Northwest (Powell & Opler).

Noctuidae: Rusty Shoulder Knot (*Aseptis binotata*). *Cosmia praeacuta*. Brown Woodling (*Egira perlubens*). *Panthea virginarius*. Variegated Cutworm (*Peridroma saucia*). Otter Spiramater (*Spiramater lutra*). Hooked Silver Y (*Syngrapha alias*). Western Conifer Looper (*Syngrapha celsa*). *Xestia mustelina*.

Tortricidae: Douglas-fir Cone Moth (*Barbara colfaxiana*). Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). Red-striped Needleworm (*Epinotia radicana*). Light Brown Apple Moth (*Epiphyas postvittana*). *Retinia picicolana*.

Grand Fir is best cultivated in Zones 4-7, 15-17.

Abies lasiocarpa. **Subalpine Fir. Rocky Mountain Fir.** Pinaceae. Its needles seem to produce an exudate that attracts the California Tortoiseshell (Gilbert, NorWestLeps #3343).

Reported to support caterpillars of Pine White (Scott, 2012). By hosting Dwarf Pine Mistletoe (*Arceuthobium campylopodum*), their larval host, Subalpine Fir indirectly supports Thicket Hairstreak (*Callophrys spinetorum*, Lycaenidae) and Dwarf Mistletoe Snout Moth (*Dasyphyga alternosquamella*, Pyralidae).

Arctiidae: Little White Lichen Moth (*Clemensia albata*) – feeds on lichens in the trees. Silver-spotted Tiger Moth (*Lophocampa argentata*).

Gelechiidae: *Chionodes abella*.

Geometridae: Gray Spruce Looper (*Caripeta divisata*). Mottled Gray Carpet (*Cladara limitaria*). Small Engrailed (*Ectropis crepuscularia*). Mountain Girdle (*Enypia griseata*). Packard's Girdle (*Enypia packardata*). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata*). Whitelined Looper (*Epirrita pulchraria*). Barred Yellow (*Eulithis propulsata*). Larch Pug (*Eupithecia annulata*). *Eupithecia harrisonata*. Spruce Cone Looper (*Eupithecia mutata*). *Eupithecia olivacea*. *Eupithecia unicolor*. Dyar's Looper (*Gabriola dyari*). *Hydriomena californiata*. *Hydriomena irata*. Hemlock Looper (*Lambdina fiscellaria*). Western Carpet (*Melanolophia imitata*). Brown-lined Looper (*Neocalcis californiaria*). Phantom Hemlock Looper (*Nepytia phantasmaria*). Bruce Spanworm (*Operophtera bruceata*). *Pero behrensaria*. Morrison's Pero (*Pero morrisonaria*). Sharp-lined Yellow (*Sicya macularia*). Black-lined Synaxis (*Tetracis pallulata*). *Thallophegma hyperborea*. White-striped Black (*Trichodezia albovittata*) – a striking diurnal species, easily mistaken for a butterfly.

Lymantriidae: Pine Tussock Moth (*Dasychira griseifacta*). Antique Tussock Moth (*Orgyia antiqua*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Noctuidae: Rusty Shoulder Knot (*Aseptis binotata*). *Cosmia praeacuta*. Nameless Pinion (*Lithophane innominata*). *Panthea virginarius*. Western Conifer Looper (*Syngrapha celsa*). Hooked Silver Y (*Syngrapha alias*). *Xestia mustelina*.

Pyrilidae: Dwarf Mistletoe Snout Moth (*Dasyphyga alternosquamella*). Fir Coneworm (*Diorycytria abietivorella*).

Tortricidae: Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). *Cochylis dormitoria*. Red-striped Needleworm (*Epinotia radicana*). *Retinia picicolana*. Gray Leafroller (*Syndemis afflictana*).

Subalpine Fir, little known in cultivation, grows very slowly.

Abies magnifica. **California Red Fir**. Pinaceae.

Lymantriidae: Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Tortricidae: *Argyrotaenia dorsalana*. *Argyrotaenia provana*. Douglas-fir Cone Moth (*Barbara colfaxiana*). Sugar Pine Tortrix (*Choristoneura lambertiana subretiniana*, Oregon). *Choristoneura retiniana*. Fir Seed Moth (*Cydia bracteatana*). White Fir Needle Miner (*Epinotia meritana*) – periodic outbreaks defoliate the trees (Powell & Opler). Red-striped Needleworm (*Epinotia radicana*). *Epinotia trossulana*. Fir Cone Borer (*Eucopeina siskiyouana*). *Sparganothis senecionana*.

California Red Fir is best cultivated in Zones 1, 2, 3 and 6.

Abies magnifica var. *shastensis*. **Shasta Fir**. Pinaceae.

Geometridae: *Eupithecia spermaphaga*.

Tortricidae: Fir Cone Borer (*Eucopeina siskiyouana*).

Abies procera. **Noble Fir**. Pinaceae.

Noble Fir is host to *Arceuthobium tsugense* (a formerly recognized segregate of *A. campylopodum*), a dwarf mistletoe that is one of the larval hosts for the rare Johnson's Hairstreak (*Callophrys johnsoni*, Lycaenidae).

Pyralidae: Fir Coneworm (*Dioryctria abietivorella*).

Tortricidae: Fir Cone Borer (*Eucopeina siskiyouana*).

Abronia alpina. **Ramshaw Meadows Abronia**. Nyctaginaceae. Nectar: Anise Swallowtail, Edith's Checkerspot, Edith's Copper, Mexican Cloudywing (fq) (an important likely pollinator), Sonora Skipper (fq), Clark's Day Sphinx, White-lined Sphinx (fq) (judged the most effective potential pollinator). The bee fly *Bombylius lancifer* (fq) also. July – August.

Jabis, Meredith D., Tina J. Ayers, and Gerard J. Allan. 2011. "Pollinator-mediated Gene Flow Fosters Genetic Variability in a Narrow Alpine Endemic, *Abronia Alpina* (Nyctaginaceae)." *American Journal of Botany* 98 (10): 1583-594. <http://www.jstor.org/stable/41315642>.

Abronia latifolia. **Yellow Sand Verbena**. Nyctaginaceae. Myrtle's Silverspot, a segregate of the Zerene Fritillary, seeks nectar at Yellow Sand Verbena flowers. Large, dense flowering patches up to several meters in diameter were most attractive to Myrtle's Silverspot in the Point Reyes National Seashore area. The flowers have a "powerful heady fragrance worthy of a fine perfume" according to Patti Kreiberg. May - October.

Arctiidae: A secondary hostplant for the Ranchman's Tiger Moth (*Arctia virginalis*).

Geometridae: *Euphyia implicata* (documented by Alice Abela, nature photographer).

Noctuidae: Hostplant for *Psammopolia wyatti*, a nocturnal moth found along sandy beaches, and for a related species, *Psammopolia arietis*, as well as for the Sand Verbena Moth, *Copablepharon fuscum* – says Wikipedia. The Sand Verbena Moth has been collected as far south as San Luis Obispo County (Essig Museum's California Moth Specimens Database).

Heliodinidae: *Lithariapteryx abroniaeella*. *Lithariapteryx elegans*.

Zones 5, 17.

Abronia maritima. **Red Sand Verbena**. Nyctaginaceae. Nectar: Geometridae: *Euphyia implicata* (Alice Abela) February - October.

Heliodinidae: *Lithariapteryx abroniaeella*.

Zones 17, 24.

Abronia pogonantha. **Mojave Sand Verbena**. Nyctaginaceae. Nectar: White-lined Sphinx. April - July.

Abronia umbellata. **Pink Sand Verbena**. Nyctaginaceae. Nectar: Western Tiger Swallowtail (Alice Abela photograph), Painted Lady, California Tortoiseshell, Square-spotted Blue, Wandering Skipper, Fiery Skipper. Moths visiting flowers include Sphingidae: White-lined Sphinx (*Hyles lineata*). Noctuidae: *Autoplusia egenoides*. *Copablepharon robertsoni*. *Copablepharon sanctaemonicae*. Cabbage Looper

(*Trichoplusia ni*). Pyralidae: *Phobus funerellus*. (Moth flower visitors from Doubleday, 2012). Small white moths at night.

Nursery owner Patti Kreiberg says it is “incredibly more fragrant at night than during the day” – thus quite attractive to moths. Flowers all year.

Geometridae: *Euphyia implicata* – mines the leaves, Alice Abela posted photographs.

Heliodinidae: *Lithariapteryx abroniaeella* *Lithariapteryx elegans*.

Zones 5, 17, 24.

Abronia villosa var. *villosa*. **Desert Sand Verbena**. Nyctaginaceae. Flower visitors include the Sleepy Orange, Painted Lady, West Coast Lady, White Checkered-Skipper, Fiery Skipper and White-lined Sphinx. February - July.

Sphingidae: A major host for the White-lined Sphinx (*Hyles lineata*). Its caterpillars, at times extremely abundant, were food for the aboriginal Cahuilla people.

Geometridae: *Euphyia implicata*.

Zone 13.

Abronia villosa var. *aurita*. **Chaparral Sand Verbena**. Nyctaginaceae. March - August.

Zones 13, 18-24.

Abutilon palmeri. **Indian Mallow**. Malvaceae. Nectar: California Dogface, Gulf Fritillary (Pete Veilleux). March - May.

Larval host for Arizona Powdered-Skipper.

Zones 8, 9, 11-13.

Acacia greggii is now *Senegalia greggii*. **Catclaw Acacia**. Fabaceae.

Acaena pinnatifida var. *californica*. **California Sheepburr**. Rosaceae. Sanguisorbeae. Sanguisorbinae. Nectar: Mission Blue [segregate of Boisduval's Blue] (San Bruno Mountain Watch). March – June.

Acamptopappus shockleyi. **Shockley's Goldenhead**. Asteraceae. Astereae. Nectar: Mormon Metalmark, Neumogen's Sagebrush Checkerspot, Leanira Checkerspot, Common Checkered-Skipper, and Alphaeus Sootywing. April - June.

Shockley's Goldenhead is a foodplant for caterpillars of Neumogen's Sagebrush Checkerspot.

Considered worth cultivating.

Acamptopappus sphaerocephalus. **Desert Goldenhead**. **Rayless Goldenhead**. Asteraceae. Astereae. Nectar source for the Variable Checkerspot. Hundreds of *Ypsolopha maculatella* (a micromoth whose

caterpillars eat *Ephedra*) observed congregating on flowering Desert Goldenhead by Aaron Schusteff (photographs on BugGuide; individuals appear to be at nectar). March - June.

Desert Goldenhead is a hostplant for Acastus Checkerspot (aka Sagebrush Checkerspot) in eastern San Diego County (Monroes).

Noctuidae: *Cucullia dammersi*.

Acanthomintha ilicifolia. **San Diego Thornmint**. Lamiaceae. Rural Skipper (a few flower visits observed in a pollination study). April – June.

Acanthomintha obovata subsp. *obovata*. **San Benito Thornmint**. Lamiaceae. April – July.

Paul Johnson observed an ovipositing *Pyrausta* sp. (Crambidae) – “very tiny, brightly colored” and possibly undescribed in southern San Benito County, Laguna Mountain Trail on 10 May 2013 (reported on NorWestLeps 5/27/2013).

Acer spp. **Maple**. Sapindaceae.

Geometridae: Pale Beauty (*Campaea perlata*), Linden Looper (*Erannis tiliaria*), *Hydriomena albifasciata*), American Barred Umber (*Plagodis pulveraria*), Friendly Proboscis (*Probole amicaria*).

Noctuidae: Northern Scurfy Quaker (*Homorthodes furfurata*). *Orthosia pacifica*, Purple Arches (*Polia purpurissata*), Variegated Cutworm (*Peridroma saucia*), Bicolored Sallow (*Sunira bicolorago*), Setaceous Hebrew Character (*Xestia c-nigrum*), Lunate Zale (*Zale lunata*), Colorful Zale (*Zale minerea*).

Notodontidae: Angle-lined Prominent (*Clostera inclusa*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). White-triangle Tortrix (*Clepsis persicana*, Canada). *Gypsonoma substitutionis* (Canada). *Oreana unicolora* (BugGuide). Maple Tip Moth (*Proteoteras aesculana*).

Acer circinatum. **Vine Maple**. Sapindaceae. An occasional nectar plant for Anise Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Gray Hairstreak, Western Brown Elfin, and Western Pine Elfin (Paul Severns). Also known as a nectar plant for the rare Johnson’s Hairstreak. Paul Severns notes wild trees often grow in excessive shade for generating much insect activity. With this and all other nectar plants, specimens in full sunshine are much more attractive to pollinators!

The Honey Bee Suite web site, “Honey bee forage: vine maple” relates: “John Lovell in *Honey plants of North America* (1926) says the vine maple is a more important honey plant than the broadleaf (bigleaf) maple, *Acer macrophyllum*, probably because it blooms a little later. He says, “The honey has a fine flavor and is white or amber-colored with a faint pinkish tinge.” According to *Nectar and Pollen Plants of the Pacific Northwest* (1989), the nectar is 27-58% sugar and some years the trees produce large amounts.” May - June.

Vine Maple is a larval host for Western Tiger Swallowtail.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*), Western Sheepshead (*Hemileuca eglanterina*).

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Geometridae: American Barred Umber (*Plagodis pulveraria*), Pale Beauty (*Campaea perlata*), Linden Looper (*Erannis tiliaria*), *Eupithecia misturata*, Emasculated Grey (*Iridopsis emasculatum*), Mournful Thorn (*Lambdina fiscellaria*), Speckled Granite (*Macaria exauspicata*), *Macaria plumosata*, Western Carpet (*Melanolophia imitata*), Brown-lined Looper (*Neocalcis californiaria*), Bruce Spanworm (*Operophtera bruceata*), Rindge's Pero (*Pero mizon*), George's Carpet (*Plemyria georgii*), Walnut Spanworm (*Phigalia plumogeraria*), Brown-tipped Thorn (*Selenia alciphearia*), October Thorn (*Tetracis jubararia*), Pearsall's Carpet (*Venusia pearsalli*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*), Rusty Shoulder Knot (*Aseptis binotata*), Large Gray Pinion (*Lithophane georgii*), Stormy Arches (*Polia nimbosa*), Otter Spiramater (*Spiramater lutra*), Colorful Zale (*Zale minerea*).

Notodontidae: Rough Prominent (*Nadata gibbosa*), Red-washed Prominent (*Oligocentria semirufescens*).

Tortricidae: *Epinotia lomonana*.

Zones 4-7, 14-17.

Acer glabrum var. *diffusum*. **Mountain Maple**. Sapindaceae. Nectar: Echo Azure in Clark County, Nevada. Likely other segregates of the Mountain Maple also so serve. April - May. (var. *glabrum* flowers May - June.)

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Geometridae: *Macaria plumosata*. Walnut Spanworm (*Phigalia plumogeraria*). George's Carpet (*Plemyria georgii* – a nocturnal species but often seen in the daytime).

Noctuidae: Large Gray Pinion (*Lithophane georgii*). Nameless Pinion (*Lithophane innominata*).

Acer macrophyllum. **Bigleaf Maple**. Sapindaceae. Good butterfly nectar plant – *Growing Native* and others. Nectar source for the Painted Lady (“clouds” of them feeding on the flowers in the notable migration year of 2009), Green Comma, Mourning Cloak, California Tortoiseshell (Gary Pearson, Springfield, Oregon). Pacuvius Duskywing was present, but he was not sure they were getting nectar. The fragrant flowers are insect-pollinated; great for bumblebees. March - June.

Foodplant for the Western Tiger Swallowtail and likely for the Echo Azure.

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*) (fq).

Cossidae: Carpenterworm (*Prionoxystus robiniae*) may seriously damage living trees, especially those growing in the open.

Gelechiidae: *Chionodes lector* feeds on catkins and developing seeds (Powell & Opler).

Geometridae: Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Linden Looper (*Erannis tiliaria*). Horned Spanworm (*Nematocampa resistaria*). Brown-lined Looper (*Neocalcis*

californiaria). Bruce Spanworm (*Operophtera bruceata*). George's Carpet (*Plemyria georgii*). Brown-tipped Thorn (*Selenia alciphearia*). October Thorn (*Tetracis jubararia*). Western Red Twin-spot (*Xanthorhoe defensaria*).

Gracillariidae: *Caloptilia acerifoliella* (Powell & Opler).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*).

Noctuidae: *Acerra normalis*. Funerary Dart (*Acronicta funeralis*). Copper Underwing (*Amphipyra pyramidoides*) (fq). *Andropolia aedon*. *Annaphila arvalis* (a day-flying, flower-visiting species). Rusty Shoulder Knot (*Aseptis binotata*) (fq). Garden Cutworm (*Fishia discors*). *Lithophane pertorrada*. Speckled Green Cutworm (*Orthosia hibisci*). *Pseudorthodes irrorata*. Otter Spiramater (*Spiramater lutra*). *Sunira decipiens*. American Swordgrass Moth (*Xylena nupera*).

Notodontidae: Rough Prominent (*Nadata gibbosa*). Pale Prominent (*Oligocentria pallida*). Red-washed Prominent (*Oligocentria semirufescens*). Red-humped Caterpillar (*Schizura concinna* [Haggard & Haggard]).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*) (fq).

Tortricidae: Maple Tip Moth (*Proteoteras aesculana*).
Zones 4-7, 14-24.

Acer negundo. **Box Elder**. Sapindaceae. Flowers do not offer nectar. March - April.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Yellow Woollybear (*Spilosoma virginica*).

Cossidae: Locust Borer (*Prionoxystus robiniae*).

Gelechiidae: Pale-headed Aspen Leafroller Moth (*Anacamptis niveopulvella*, Canada).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray (*Anavitrinella pampinaria*). Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Small Engrailed (*Ectropis crepuscularia*). Maple Spanworm (*Ennomos magnaria*). Linden Looper (*Erannis tiliaria*). Common Angle (*Macaria aemulataria*). *Macaria plumosata*. Spring Cankerworm (*Paleacrita vernata*). Morrison's Pero (*Pero morrisonaria*, Canada).

Gracillariidae: Alder Leafminer (*Caloptilia alnivorella*). Boxelder Leafroller (*Caloptilia negundella*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). the Vaporor (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: *Abagrotis orbis*. *Abagrotis reedi*. Copper Underwing (*Amphipyra pyramidoides*). Three-spotted Sallow (*Eupsilia tristigmata*). Striped Cutworm (*Euxoa tessellata*). Large Gray Pinion (*Lithophane georgii*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Gray Sword-grass Moth (*Xylena cineritia*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Red-humped Caterpillar (*Schizura concinna*). Morning-glory Prominent (*Schizura ipomoeae*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Three-lined Leafroller (*Pandemis limitata*). Maple Tip Moth (*Proteoteras aesculana*). Western Box Elder Twig Borer (*Proteoteras arizonae*).

Zones 7-9, 14-24.

Achillea millefolium. **White Yarrow**. Asteraceae. Anthemideae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Clodius Parnassian, Rocky Mountain Parnassian. Cabbage White, Western White, Checkered White, Margined White, Pine White, Large Marble, Dainty Sulphur, Orange Sulphur. Great Arctic, California Ringlet, Small Wood-Nymph, Great Basin Wood-Nymph, Ridings's Satyr. West Coast Lady, Painted Lady, American Lady, Common Buckeye, Variable Checkerspot, Edith's Checkerspot, Gabb's Checkerspot, Leanira Checkerspot, Northern Checkerspot, Sagebrush Checkerspot, Field Crescent, Mylitta Crescent, Pearl Crescent, Zerene Fritillary, Callippe Fritillary, Atlantis Fritillary, Hydaspe Fritillary, Great Spangled Fritillary [Michigan], Pacific Fritillary, Gulf Fritillary, Northwestern Fritillary, Mormon Fritillary, Lorquin's Admiral, Red Admiral, Milbert's Tortoiseshell, Green Comma, Hoary Comma. Western Brown Elfin, Moss's Elfin, Western Pine Elfin, Thicket Hairstreak, Gray Hairstreak, Great Purple Hairstreak, Juniper Hairstreak, Muir's Hairstreak, Nelson's Hairstreak, Behr's Hairstreak, California Hairstreak (fq), Sagebrush Sooty Hairstreak, Sylvan Hairstreak, Hedgerow Hairstreak. Gorgon Copper, Great Copper, Mariposa Copper, Purplish Copper, Lustrous Copper, Edith's Copper, Lilac-bordered Copper, Ruddy Copper, Tailed Copper, Blue Copper. Sooty Gossamer-Wing, Boisduval's Blue including Mission Blue, Pacific Dotted-Blue, Melissa Blue, Lupine Blue, Marine Blue, Eastern Tailed Blue, Greenish Blue, Northern Blue. Northern Cloudywing, Propertius Duskywing, Mournful Duskywing, Funereal Duskywing, Silver-spotted Skipper, Common Checkered-Skipper, Fiery Skipper, Umber Skipper, Dun Skipper, Lindsey's Skipper, Mardon Skipper, Woodland Skipper. *Heliothodes diminutiva*, *Tebenna gemmalis* (Choreutidae) (fq), *Diastictis caecalis* (Crambidae). Yellow-collared Scape Moth (*Cisseps fulvicollis*, Arctiidae), Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae) (fq). Snowberry Clearwing (*Hemaris thetis*, Sphingidae). Himmelman's Plume Moth (*Geina tenuidactylus*, Pterophoridae), Morning Glory Plume Moth (*Emmelina monodactyla*, Pterophoridae), diurnally active moths related to *Neoscythris confinis* (Scythrididae) (Powell & Opler, p. 80), *Synanthedon chrysidipennis* (Sesiidae), Oceanspray Fairy Moth (*Adela septentrionella*), Corn Earworm (*Helicoverpa zea*, Noctuidae).

Despite its many potential visitors, White Yarrow may easily prove secondary to other flowers that are more preferred. Comes out ahead by being long flowering and ubiquitous! April - September.

White Yarrow is among hostplants for the Painted Lady and American Lady, though likely rather secondary.

Arctiidae: Garden Tiger Moth (*Arctia caja*).

Gelechiidae: *Chionodes nanodella* reared from Santa Barbara Island populations, where the moth is very abundant; eats decaying leaves at the base of the plant.

Geometridae: Wormwood Pug (*Eupithecia absinthiata*). *Eupithecia nimbicolor* (hostplant given as “Achillea”). Satyr Pug (*Eupithecia satyrata*).

Noctuidae: Voluble Dart (*Agrotis volubilis*). The day-flying Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Northern Scurfy Quaker (*Homorthodes furfurata*). Olive Arches (*Lacinipolia olivacea*). *Paradiarsia littoralis*.

Pterophoridae: *Gillmeria pallidactyla*. Williams’ Plume Moth (*Platyptilia williamsi*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leaf-tier (*Cnephasia longana*). Light Brown Apple Moth (*Epiphyas postvittana*). *Pelochrista passerana*, a root borer. *Sparganothis senecionana*.

All Zones.

Achillea millefolium ‘**Calistoga**’, ‘**Mesa Blanca**’ and other selections.

Achillea millefolium ‘**Island Pink**’ – photographs document its popularity with butterflies.

Achlys triphylla. **Sweet After Death. Deer-foot. Vanilla-leaf.** Berberidaceae. April - June.

Noctuidae: Caramel Looper (*Autographa corusca*).

Best cultivated in Zones 4-5, 16-17; considered difficult.

Achnatherum lemmonii is now *Stipa lemmonii*. **Lemmon’s Needle Grass.**

Achnatherum nevadense is now *Stipa nevadensis*. **Nevada Needle Grass.**

Achnatherum occidentale ssp. *occidentale* is now *Stipa occidentalis* var. *occidentalis*. **Western Needle Grass.**

Achnatherum pinetorum is now *Stipa pinetorum*. **Pine Woods Needle Grass.**

Achyraea mollis. **Blow Wives.** Asteraceae. Madieae. March - June.

Served as a secondary larval host for Painted Lady after the 1992 dispersion event.

Acleisanthes longiflora. **Angel Trumpets.** Nyctaginaceae. Flower visitors include the Five-spotted Hawkmoth (*Manduca quinquemaculatus*, Sphingidae) and Rustic Sphinx (*Manduca rustica*, Sphingidae). The flowers have extremely long tubes – and these sphinx moths have extremely long tongues! May.

Acmispon americanus was *Lotus purshianus*. **Spanish Clover.** Fabaceae. Loteae. Nectar: Orange Sulphur, Common Buckeye, Gray Hairstreak, Acmon Blue, Eastern Tailed Blue, Silvery Blue, Melissa Blue, Persius Duskywing, Afranius Duskywing, Common Sootywing, Common Checkered-Skipper, and the Sachem. May – October.

Spanish Clover is a hostplant for Orange Sulphur, Gray Hairstreak, Acmon Blue, Eastern Tailed Blue, Silvery Blue, Melissa Blue, Persius Duskywing (fq), and Afranius Duskywing. Shapiro considers Spanish Clover “the most useful summer annual in our grassland flora” for butterflies.

Used in revegetation and pastures. Zones 1-11, 14-24.

The current Jepson Manual, of this taxonomic entity [assigned to *Acmispon americanus* var. *americanus*] notes: “Many races, ecological forms.” It seems very close to or synonymous with *Acmispon unifoliolatus* aka *Lotus purshianus* var. *glaber*.

Acmispon argophyllus was *Lotus argophyllus*. **Silver Bird’s-foot Trefoil**. Fabaceae. Loteae. April-July.

Larval host for Avalon Hairstreak and Bramble Green Hairstreak.

Acmispon argophyllus var. *adsurgens* was *Lotus argophyllus* var. *adsurgens*. Fabaceae. Loteae. **San Clemente Island Bird’s-foot Trefoil**. Fabaceae. Loteae. Nectar: Acmon Blue, Common Checkered-Skipper, Sandhill Skipper. March-June.

Acmispon brachycarpus was *Lotus humistratus*. **Colchita**. Fabaceae. Loteae. March-June.

Larval host for Acmon Blue.

Acmispon dendroideus var. *dendroideus* was *Lotus dendroideus* var. *dendroideus*. **Island Broom**. Fabaceae. Loteae. January – August.

Chris and Trish Meyer (Wildscaping) saw a Gray Hairstreak ovipositing on it in their Sherman Oaks garden. They highly recommend it for the garden.

Acmispon denticulatus was *Lotus denticulatus*. **Toothed Lotus**. Fabaceae. Loteae. May-July.

Larval host for Acmon Blue.

Acmispon glaber was *Lotus scoparius*. **Chaparral Broom. Deerweed**. Fabaceae. Loteae. Nectar: ‘Desert’ Black Swallowtail, Whites, Sleepy Orange, Orange Sulphur, Harford’s Sulphur, California Dogface, Painted Lady, Behr’s Metalmark, Brown Elfin, Bramble Green Hairstreak, Gray Hairstreak, Acmon Blue, Lupine Blue (*monticola*) (David S. Horner, Marine Blue (fq), Silvery Blue, Western Tailed Blue, Ceraunus Blue, Funereal Duskywing, Mournful Duskywing, Common Checkered-Skipper, Fiery Skipper, Rural Skipper, Sandhill Skipper, Umber Skipper, Wandering Skipper. A diurnal moth, Duskywing Moth (*Euclidia ardata*, Noctuidae) often hangs around the plant. Shapiro notes Chaparral Broom generally used much more heavily in southern California than in northern California. A very important butterfly garden plant in southern California (NABA). March – August.

Chaparral Broom is a foodplant for Orange Sulphur, Harford’s Sulphur, Queen Alexandra’s Sulphur, Bramble Green Hairstreak, Avalon Hairstreak, Coastal Green Hairstreak, Gray Hairstreak, Thorne’s Hairstreak, Acmon Blue, Marine Blue, Silvery Blue, Eastern Tailed Blue, Echo Azure, Funereal Duskywing, and Persius Duskywing. Important Green Hairstreak host plant in the Green Hairstreak Corridor project in San Francisco. It was a hostplant for the extinct Xerces Blue.

In an extensive laboratory test by Pratt & Ballmer, 14 species of lycaenid butterflies not known to use Fabaceae in nature were, nevertheless, successfully reared to adulthood on this plant!

Chaparral broom is a preferred roosting plant for the rare Lange's Metalmark.

Arctiidae: Painted Tiger Moth (*Arachnis picta*). Vestal Tiger Moth (*Spilosoma vestalis*).

Coleophoridae: *Coleophora accordella*.

Gelechiidae: *Arla diversella*.

Geometridae: Californian Granite (*Digrammia californiaria*). *Eupithecia nevadata*.

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*, photograph by Hartmut Wisch).

Nepticulidae: *Acalyptris lotella*.

Noctuidae: Duskywing Moth (*Euclidia arditia*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leafroller (*Platynota stultana*).

Zones 7-9, 14 - 24. Most commonly used in revegetation.

Acmispon grandiflorus was *Lotus grandiflorus*. **Large Leaved Lotus**. Fabaceae. Loteae. Flowers attract hummingbirds. Wildscaping reports "one of the more pleasant additions to our garden" – easily grown from seed as a fast-growing filler between developing shrubs. Tolerates drought but fine with supplemental water. April - July.

Hostplant for Orange Sulphur and Silver-spotted Skipper.

Arctiidae: California Tiger Moth (*Leptarctia californiae*).

Acmispon heermannii. **Heermann's Lotus**. Fabaceae. Loteae. April – July.

Oviposition on it by Harford's Sulphur reported in 1995 Season Summary.

Acmispon nevadensis was *Lotus nevadensis*. **Nevada Deervetch**. Fabaceae. Loteae. In a two-year study in Stanislaus National Forest, Tuolumne County, 123 butterfly nectar-seeking visits observed to its flowers. Arctic Blue. Glenn Fine notes two Lepidoptera species at its flowers in Siskiyou County May-August.

Foodplant for Acmon Blue, Melissa Blue, Bramble Green Hairstreak, Afranius Duskywing, Persius Duskywing, Northern Cloudywing (fq), and the Silver-spotted Skipper.

Zones 1-3, 7.

Acmispon parviflorus was *Lotus micranthus*. **Hill Lotus**. Fabaceae. Loteae. March – May.

Hostplant for Acmon Blue.

Acmispon procumbens was *Lotus procumbens*. **Silky California Broom**. Fabaceae. Loteae. April – June.

Foodplant for the Acmon Blue.

Acmispon prostratus was *Lotus nuttallianus*. **Beach Lotus**. Fabaceae. Loteae. Flower visitors include the Acmon Blue, Common Checkered-Skipper, and Sandhill Skipper. March - June.

Acmispon rigidus was *Lotus rigidus*. **Desert Lotus**. Fabaceae. Loteae. Nectar: Desert Black Swallowtail. Gray Marble (Dennis Walker, SoCal Butterflies). Spring Azure (Liz Makings). Monroes: Sara Orangetip, Sleepy Orange, Silvery Blue. March – May.

Hostplant for Silvery Blue.

1993 *Jepson Manual*: a ‘try’ species, ‘insufficiently tested but worth pursuing’ in cultivation, ‘especially in its native range’.

Acmispon strigosus was *Lotus strigosus*. **Bishop Lotus**. Fabaceae. Loteae. Nectar: Monroes: California Patch. Afranius Duskywing (Jay Keller). March – June.

Larval host for Orange Sulphur, Bramble Green Hairstreak, Coastal Green Hairstreak, Acmon Blue, Western Tailed Blue. Afranius Duskywing seems possible.

Noctuidae: Beet Armyworm or Small Mottled Willow (*Spodoptera exigua*) – feeding caterpillar photographed by Alice Abela in Santa Barbara County.

Acmispon wrangelianus was *Lotus wrangelianus* and *Lotus subpinnatus*. **Calf Lotus**. Fabaceae. Loteae. Acmon Blue. March – June.

Larval host for Orange Sulphur.

Tortricidae: *Grapholita caeruleana*.

Aconitum columbianum. **Monkshood**. Ranunculaceae. Nectar: White-lined Sphinx (fq). David James notes Juba Skipper and Cabbage White at its flowers in Yakima, Washington, but by no means preferred. Pyle has never seen a butterfly on its flowers. *Aconitum* flowers attract butterflies, according to *Butterfly Gardening in the Pacific Northwest*. Calliope Hummingbird, Rufous Hummingbird, various bumblebees are major flower visitors. July - September.

Brink, Donald E. "Reproduction and Variation in *Aconitum Columbianum* (Ranunculaceae), with Emphasis on California Populations." *American Journal of Botany* 67, no. 3 (1980): 263-73.
<http://www.jstor.org/stable/2442335>.

Aconogonon davisiae was *Polygonum davisiae*. **Davis Knotweed**. Polygonaceae. June – August.

Sesiidae: *Synanthedon chrysidipennis*.

Considered worthy of cultivation.

Aconogonon phytolaccifolium was *Polygonum phytolaccifolium*. **Alpine Knotweed**. Polygonaceae. June-August.

Foodplant for Edith's Copper and Gray Hairstreak.

A plant for Zones 1 & 2.

Acourtia microcephala. Asteraceae. Nassauvieae. **Sacapellote**. Nectar: Pale Swallowtail, American Lady, Painted Lady, and Funereal Duskywing, grass skippers (observations and photographs by Marc Kummel). Desert Survivors Nursery recommends *Acourtia wrightii* of neighboring states as attractive to butterflies. May - August.

Pterophoridae: *Oidaematophorus longifrons* (Walsingham).

Good for restoring degraded areas.

Adenophyllum cooperi. **Cooper Dyssodia**. **Cooper's Dogweed**. Asteraceae. Tageteae. Nectar: Sagebrush Checkerspot. April - June, September - November.

Adenophyllum porophylloides. **San Felipe Dyssodia**. Asteraceae. Tageteae. Estimated by Lynn Monroe a close second to Butterweed (*Senecio flaccidus* var. *douglasii*) as a butterfly magnet on a mid-November outing to Anza-Borrego State Park. March - June. October - December.

Caterpillar food plant for Dainty Sulphur (Monroes).

Adenostoma fasciculatum. **Chamise**. Rosaceae. Sorbarieae. A Variable Checkerspot seen at nectar in an online photograph. Nancy Asquith photographed a California Ringlet on the flowers. Gray Hairstreak (Butterworth). Muir's Hairstreak (Bouton). Hedgerow Hairstreak (Aaron Schusteff and Ken Ichi-Ueda photographs). Some nectar value for the rare Hermes Copper, according to the U.S. Fish & Wildlife Service. Acmon Blue. Boisduval's Blue -- rated occasional on its flowers by Moldenke. Lompoc Blue [a segregate of Small Blue] (Alice Abela). It seems it may be among secondary nectar sources in general. Shapiro finds that occasionally hill-topping butterflies simply rest on the flowers. May - June.

Paul Johnson reports observing what appeared to be feeding on scale insect exudate/mold on Chamise by the California Tortoiseshell, Red Admiral and California Sister.

Chamise is a larval host for Echo Azure, Brown Elfin, and even the Marine Blue. According to Emmel & Emmel (1973) Comstock erroneously listed it as a hostplant for the Mountain Mahogany Hairstreak, noting "it is merely a common chaparral associate of *Cercocarpus*."

Chamise itself is a hostplant for hemiparasitic plants that themselves are Lepidoptera resources, such as Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*) (rarely), Indian Paintbrush (*Castilleja affinis*) and Indian Warrior (*Pedicularis densiflora*) (Corelli, web page).

Gelechiidae: *Aristotelia adenostomae*. *Aristotelia eldorada*. *Aroga eldorada*.

Geometridae: *Aethaloida packardaria*. Banks' Emerald (*Chlorosea banksaria*). Sulphur Wave (*Hesperumia sulphuraria*). *Hulstina grossbecki*, feeding on flowers [Seven Backyards web site]. Wright's *Hulstina* (*Hulstina wrightiaria*). *Nasusina vaporata*. *Paleacrita longiciliata*. *Pterotaeta lamiaria*.

Noctuidae: *Aseptis genatrix* = Rusty Shoulder Knot (*Aseptis binotata*). *Aseptis perfumosa* (larvae found and reared on it in Napa County, 1984 Season Summary). *Lacinipolia quadrilineata*.

Oecophoridae: *Pleurota albastrigulella*.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*) (1984 Season Summary). Electra Buckmoth (*Hemileuca electra*).

Tortricidae: *Argyrotaenia niscana*.

Zones 7, 14-16, 18-24.

Aesculus californica. **California Buckeye**. Sapindaceae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail (a pollinator for this species), Pale Swallowtail (fq), Two-tailed Swallowtail (fq), Anise Swallowtail. Cabbage White, Large Marble, California Dogface, Sara Orangetip, Orange Sulphur. Monarch, Variable Checkerspot (fq), Northern Checkerspot (fq), Edith's Checkerspot, California Sister, Lorquin's Admiral (fq), Red Admiral, Mourning Cloak, California Tortoiseshell (fq), West Coast Lady, Painted Lady, Common Buckeye, Mylitta Crescent, Green Comma, Satyr Comma, Callippe Fritillary, Coronis Fritillary (fq), Gulf Fritillary, Unsilvered Fritillary, Common Ringleet, Common Wood-Nymph, Great Basin Wood-Nymph. Bramble Green Hairstreak, Thicket Hairstreak, Gold-hunter's Hairstreak (fq), Hedgerow Hairstreak (fq), Dryope Hairstreak, California Hairstreak (fq), Mountain Mahogany Hairstreak (fq), Sylvan Hairstreak, Great Purple Hairstreak, Gray Hairstreak, Tailed Copper, Gorgon Copper, Great Copper, Acmon Blue, Boisduval's Blue, Echo Azure, Bernardino Dotted-Blue. Mournful Duskywing, Propertius Duskywing, Northern White-Skipper, Silver-spotted Skipper, Common Checkered-Skipper, Northern Cloudywing, Rural Skipper (fq), Lindsey's Skipper (fq), Umber Skipper. Snowberry Clearwing (*Hemaris thetis*), Sequoia Sphinx (*Sphinx sequoiae*); Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae), Ipsilon Dart (*Agrotis ipsilon*, Noctuidae), Variegated Cutworm (*Peridroma saucia*, Noctuidae), *Eupithecia* sp. (Geometridae), and other moths.

56% of flower-visiting insect species on it were Lepidoptera (Benseler, Rolf W. 1975. "Floral Biology of California Buckeye." *Madroño* 23 (1): 41-53. <http://www.jstor.org/stable/41423981>).

Moldenke found one diurnal and eight nocturnal moth species associated with its flowers. One of the most important butterfly nectar sources in its range! At times many species at nectar simultaneously on one tree. Hints saw over 200 individuals of Variable Checkerspot on one tree on Mt. Diablo! Great for hummingbirds, too. May - June.

California Buckeye is a larval host for the Echo Azure – I saw a cloud of them around a San Francisco specimen grown as a street tree! It seems to be one of their preferred hosts.

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: February Miller (*Feralia februalis*). *Orthosia pacifica*. Protector Quaker (*Orthosia praeses*).

Tortricidae: Fruit Tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*).

Zones 7-9, 14-24.

Agastache parvifolia. **Small-leaved Horsemint**. Attractive flowers – a butterfly nectar plant (Gut, et. al.). Lamiaceae. May – June.

Agastache urticifolia. **Nettleleaf Giant Hyssop, Horsemint**. Lamiaceae. “One of the best” for butterflies” – Las Pilitas Nursery. Nectar: Western Tiger Swallowtail, Two-tailed Swallowtail, Pale Swallowtail, Monarch, California Sister, Lorquin’s Admiral, Callippe Fritillary, Common Wood-Nymph, Dun Skipper. “In its native Sierran range: Clodius Parnassian, Pale Swallowtail, Zerene Fritillary, Coronis Fritillary, Hydaspe Fritillary, Leto Fritillary, Painted Lady, American Lady, West Coast Lady, Silver-spotted Skipper, Propertius Duskywing, California Tortoiseshell, and on and on ... species with long proboscides” (Arthur Shapiro). Northern Checkerspot (Jeff Phippen). Ron Wolf got a photograph of two attractive day-flying moths on one inflorescence: Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae) and Sierra Pericopid (*Gnophaela latipennis*, Arctiidae). White-lined Sphinx (*Hyles lineata*, Sphingidae) is also a flower visitor. Bumblebees. June - August.

Zones 1-7. ‘Sierra Beauty’ is a horticultural selection.

Agave deserti. **Desert Agave**. Agavaceae. Nectar: *Catocala chelidonia* (Noctuidae) (Barnes & McDunnough, 1918, p. 33). May – July.

Larval host for California Giant-Skipper (Heath). Larval host for Stephens’s Giant Skipper and Bauer’s Giant Skipper (Garth & Tilden).

Prodoxidae: *Prodoxus pallidus*.

Tortricidae: *Nycthia pimana*.

Zones 8-10, 12, 14, 19-21.

Agave shawii. **Shaw’s Agave**. Agavaceae. Nectar: White-lined Sphinx (Alan Harper). September – May.

Larval host for Comstock’s Giant Skipper (*Agathymus comstocki*, Hesperidae), described in 1957. This butterfly thus far only been found in Baja California, but it should be sought in the remaining Californian native populations of Shaw’s Agave.

Batrachedridae: *Batrachedra striolata* (Wikipedia).

Recommended for cultivation.

Agave utahensis. **Clark Mountain Agave**. Agavaceae. April – May.

Mojave Giant-Skipper hostplant; third instar larvae from Inyo County reported in 1997 Season Summary; larvae and pupae reported in 1973 Season Summary.

Ageratina herbacea. **Fragrant Snakeroot or Apache Snakeroot or Western Throughwort or Desert Ageratina**. Asteraceae. Eupatorieae. Recommended as a butterfly nectar plant by Desert Survivors Nursery. On October 27, 2012, Fred Heath observed Painted Lady, West Coast Lady, American Lady, and Red Admiral all at nectar at one time on one small patch of Fragrant Snakeroot in southern Arizona, allowing close approach (SoWestLep #3525). *Lycomorpha fulgens* (Arctiidae), a strikingly red-with-

black-accented day-flying lichen moth, is among its flower visitors (seen in Bob Beatson photograph). May - June, October - November.

Ageratina occidentalis. **Western Eupatorium** or **Western Snakeroot**. Asteraceae. Eupatorieae. Nectar: Great Basin Fritillary, Mormon Metalmark (Shapiro). Attested by various sources to be a good butterfly plant. June - October.

Zones 2, 7.

Ageratina shastensis. **Shasta Eupatorium**. Asteraceae. Eupatorieae. Showy flowers with a nymphalid butterfly in attendance on CalPhotos (Len Linstrand III). This rare wildflower is endemic to Shasta County. June - October.

Agoseris aurantiaca var. *aurantiaca*. **Orange Agoseris**. Asteraceae. Cichorieae. Nectar: Western Tiger Swallowtail, Clodius Parnassian, Rocky Mountain Parnassian, Western White, American Lady, Callippe Fritillary, Northwestern Fritillary, Mormon Fritillary, Pacific Fritillary [aka Western Meadow Fritillary], Uncas Skipper. Pyle: "Western Meadow Fritillaries on Orange Agoseris ... a very handsome sight" (NorWestLeps #4301) An especially attractive flower for butterflies, which are also important pollinators (Pojar, 1970). June – September.

Agoseris glauca. **Pale Dandelion**. Asteraceae. Cichorieae. Nectar: Clouded Sulphur, Western White, West Coast Lady, Northwestern Fritillary, Mormon Fritillary, Variegated Fritillary, Lilac-bordered Copper, and Purplish Copper. Most visited nectar plant in a sub-alpine meadow study. A nectar plant for Edith's Checkerspot, at least in Colorado. June - August.

Noctuidae: *Heliolonche modicella*, a day-flying species.

Agoseris grandiflora. **California Dandelion**. Asteraceae. Cichorieae. Field Crescent, Mission Blue [segregate of Boisduval's Blue] (San Bruno Mountain Watch). *Schinia* sp. K (Moldenke) – a day-flying moth. Limited information – likely serves as a nectar plant for other Lepidoptera. April - July.

In cultivation.

Agoseris heterophylla. **Annual Agoseris**. Asteraceae. Cichorieae. A photograph on the Sauntering Oregon blog site shows a Satyr Comma at nectar on this native Agoseris. Mylitta Crescent, Rural Skipper, and Woodland Skipper in other online photographs. May - June.

Noctuidae: *Heliolonche modicella*, an attractive day-flying noctuid species – see Paul Johnson's photograph of it on the Moth Photographers Group website.

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Agrostis sp. **Bentgrass**. Poaceae. Poaceae.

Reported larval host for Common Ringlet, Fiery Skipper and Common Roadside-Skipper.

Noctuidae: Army Cutworm (*Euxoa auxiliaris*). Armyworm (*Mythimna unipuncta*).

Agrostis scabra. **Rough Bentgrass**. **Ticklegrass**. Poaceae. Poaceae.

Foodplant for Sandhill Skipper. Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." *The Great Basin Naturalist* 37 (4): 443-52. <http://www.jstor.org/stable/41711594>.

Algae.

Crambidae: Confusing Petrophila Moth (*Petrophila confusalis*) -- aquatic larvae live on algae-covered rocks (Powell & Opler, p. 180). *Petrophila jaliscalis* – similar but adapted to slower, less well-oxygenated waters.

Allionia incarnata. **Trailing Four O'clock**. Nyctaginaceae. Nectar: Pipevine Swallowtail, Checkered White, Orange Sulphur (fq), Sleepy Orange (Ned Harris), Painted Lady, Bordered Patch, Variegated Fritillary, Ceraunus Blue, Arizona Powdered-Skipper, Common Checkered-Skipper, Common Sootywing, Eufala Skipper, Golden-headed Scallopwing, White-lined Sphinx. March - September.

Alisma triviale. **Northern Water Plantain**. Alismataceae. Nectar: Mylitta Crescent (Hints, iNaturalist post 26 July 2015). July – November.

Allium spp. **Wild Onions**. Alliaceae. Nectar: Anise Swallowtail, Spring White, Harford's Sulphur, Thoosa Orange-tip, Painted Lady, Edith's Checkerspot, Gray Hairstreak, Thicket Hairstreak, Boisduval's Blue, Propertius Dusky-wing, Sleepy Duskywing, Columbian Skipper, Eufala Skipper, Hammock Skipper, Juba Skipper, Lindsey's Skipper, Long-tailed Skipper.

Herbaceous generalists noted simply as eating "Allium" on HOSTS:

Noctuidae: Nutmeg (*Anarta trifolii*). Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Zebra Caterpillar (*Melanchra picta*).

Other herbaceous generalists recorded by HOSTS for the garden onion (*Allium cepa*):

Crambidae: Beet Webworm (*Loxostege stricticalis*).

Erebidae: Salt Marsh Moth (*Estigmene acrea*) [HOSTS – *Allium cepa*, garden onion]. Yellow Woolly Bear (*Spilosoma virginica*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale-sided Cutworm (*Agrotis malefida*). Pale Western Cutworm (*Agrotis orthogonia*). Alfalfa Semilooper (*Autographa californica*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). *Euxoa punctigera*. Striped Cutworm (*Euxoa tessellata*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Allium acuminatum. **Tapertip Onion**. Alliaceae. Nectar plant for Fender's Blue (a segregate of Boisduval's Blue) in Oregon. Paul Severns finds it well liked by Western Tiger Swallowtail, Purplish Copper, Acmon Blue, Boisduval's Blue, Eastern Tailed Blue, Propertius Duskywing, and Persius Duskywing. April - July.

Allium amplexans. **Narrowleaf Onion**. Alliaceae. Mylitta Crescent (Alice Cummings). A top nectar plant for the endangered Fender's Blue in Oregon and other wise a significant butterfly nectar plant. Acmon Blue (Alice Cummings). Ken Wilson photographed John Muir's Hairstreak and California Hairstreak at its flowers. An Alice Cummings photograph shows what appears to be a Common Flower Moth (*Schinia pulchripennis*, Noctuidae) at nectar on Jasper Ridge. April - July.

Zones 14-18.

Allium bisceptrum. **Twincrest Onion**. **Aspen Onion**. Alliaceae. Nectar: Edith's Checkerspot (<https://www.inaturalist.org/observations/9446293>).

Allium falcifolium aka *Allium breweri*. **Sickle Leaf Onion**. Alliaceae. An important nectar source for the Bay Checkerspot, a segregate of Edith's Checkerspot. April – June.

Allium fimbriatum. **Fringed Onion**. Alliaceae. Butterflies – Pollinator Partnership. April - June.

Allium hickmanii. **Hickman's Onion**. Alliaceae. Its many flower visitors include a checkerspot, Greenish Blue, and Sandhill Skipper. Also Calliope Hummingbird. March - May.

Allium hyalinum. **Paper-flowered Onion**. **Glassy Onion**. Alliaceae. Butterflies – Sal Levinson. March - May.

An adaptable species, seeds heavily, may spread.

Allium lemmonii. **Lemmon's Onion**. Alliaceae. Nectar: “Yuba Skipper, many Blues, Tecumseh Skipper, Common Checkered-Skipper, Edith's Checkerspot, Variable Checkerspot, Northern Checkerspot, Mylitta Crescent, Great Basin Ringlet, Juniper Hairstreak ...” (Shapiro, observations in the wild on eastern slope of the Sierras). May - June.

Allium obtusum. **Red Sierra Onion**. Alliaceae. Nectar: Clodius Parnassian (Ron Wolf), Orange Sulphur (<https://www.inaturalist.org/observations/12987064>), Mylitta Crescent (Alice Cummings). Six-spotted Litocala (*Litocala sexsignata*) (<https://www.inaturalist.org/observations/12987063>). May - June.

Allium peninsulare. **Mexicali Onion**. Alliaceae. Nectar: Sara Orangetip.

Allium sanbornii var. *sanbornii*. **Sanborn's Onion**. Alliaceae. Nectar: Gray Hairstreak. June - August.

Allium serra formerly *Allium serratum*. **Jeweled Onion**. Alliaceae. Nectar: Clodius Parnassian (Ron Wolf), Variable Checkerspot, Bay Checkerspot, a segregate of Edith's Checkerspot, Fairy Moth (*Adela septentrionella*). April - May.

Allium tolmei var. *tolmei*. **Tolm's Onion**. Alliaceae. Nectar: Gray Hairstreak (Christopher Christie, CalPhotos). April - July.

Allium tuolumnense. **Rawhide Hill Onion**. Alliaceae. Its many flower visitors include a checkerspot, Greenish Blue, and Sandhill Skipper. March - May.

Allium unifolium. **Colony Onion**. Alliaceae. Shapiro notes Propertius Duskywing “dotes” on this and other native onions. Online photograph also shows a Woodland Skipper at nectar. May - June.

Colony Onion is very easy to cultivate – increases readily in the garden, too much so for some gardeners – good in tubs, too. Zones 7, 9, 14-17, 19-24.

Allium validum. **Swamp Onion**. Alliaceae. Nectar: Orange Sulphur (Ron Wolf), Painted Lady (Ron Wolf), Fritillary, Thicket Hairstreak (Christopher Christie), Persius Duskywing (Christopher Christie).

Allophyllum glutinosum. **Sticky False Gilyflower**. Polemoniaceae. Nectar: Sara Orangetip (Kummel). April – June.

Almutaster pauciflorus (formerly *Aster pauciflorus*). **Alkali Marsh Aster**. Asteraceae. Astereae. Pearl Crescent (T. Beth Kinsy, The Firefly Forest). Attracts butterflies. June – October.

Alnus spp. **Alders**. Betulaceae.

Larval hosts for Western Tiger Swallowtail.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Drepanidae: Arched Hooktip (*Drepana arcuata*).

Geometridae: Infant (*Archiearis infans*). Dark-bordered Granite (*Digrammia neptaria*). Orange-spotted Carpet (*Dysstroma walkerata*). Autumnal Moth (*Epirrita autumnata*). *Eulithis destinata* (Canadian record). Chevron (*Eulithis testata*). Northwest Phoenix (*Eulithis xylina*). *Eupithecia lachrymosa*. *Eupithecia maestosa*. *Eupithecia misturata*. *Eupithecia multistrigata*. *Eupithecia perfusca*. Satyr Pug (*Eupithecia satyrata*). Grey Pug (*Eupithecia subfuscata*). Sulphur Wave (*Hesperumia sulphuraria*). July Highflier (*Hydriomena furcata*). Oak Winter Highflier (*Hydriomena nubilofasciata*). Split-lined Angle (*Macaria bitactata*). White-Banded Black (*Rheumaptera subhastata* -- a day-flying moth of late spring to early summer).

Hepialidae: Four-spotted Ghost Moth (*Sthenopis purpurascens*). Larvae are root borers.

Noctuidae: *Abagrotis variata*. An ‘eye candy’ nocturnal moth dubbed the ‘Caramel Looper’ (*Autographa corusca*). *Diarsia esurialis*. Western Woodling (*Egira rubrica*). Cuneate Arches (*Laciniolia cuneata*). *Lasionycta perplexa*. False Pinion (*Litholomia napaea*). American Brindle (*Lithomoia germana*). Large-spotted Pinion (*Lithophane dilatocula*). Wanton Pinion (*Lithophane petulca*). Ceanothus Nola (*Nola minna*). *Papestra cristifera*. *Papestra invalida*. Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*). Polia Moth (*Polia piniae*) (PNW Moths). Stormy Arches (*Polia nimbosa*). Purple Arches (*Polia purpurissata*). The Herald (*Scoliopteryx libatrix*). *Setagrotis pallidicollis*. Inscribed Looper (*Syngrapha epigaea*). Smith’s Dart (*Xestia smithii*). Gray Swordgrass Moth (*Xylena cineritia*). Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). Western Swordgrass Moth (*Xylena thoracia* – this a Canadian foodplant record). V-lined Quaker (*Zosteropoda hirtipes*).

Notodontidae: Angle-lined Prominent (*Clostera inclusa*). Rough Prominent (*Nadata gibbosa*).

Alnus incana ssp. *tenuifolia*. **Mountain Alder**. Betulaceae.

Larval host for Western Tiger Swallowtail. Oviposition by Pale Swallowtail reported in 1995 Season Summary. A related form of Mountain Alder in Finland is a Mourning Cloak foodplant, which seems possible here, too.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*).

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Drepanidae: Arched Hooktip (*Drepana arcuata*). Tufted Thyatirid (*Pseudothyatira cymatophoroides*, Canada).

Geometridae: American Barred Umber (*Plagodis pulveraria*, Canadian foodplant record). Common Angle (*Macaria aemulataria*). Pale Beauty (*Campaea perlata*). Lorquin's Angle (*Macaria lorquinaria*). Northwest Phoenix (*Eulithis xyliana*). Tawny Eupithecia (*Eupithecia ravocostaliata*). July Highflier (*Hydriomena furcata*). Renounced Hydriomena (*Hydriomena renunciata*). Emasculated Grey (*Iridopsis emasculatum*). Morrison's Pero (*Pero morrisonaria*, Canada). White-banded Black (*Rheumaptera subhastata*) -- a day-flying flower-visiting moth. Scallop Shell (*Rheumaptera undulata*). *Scopula ancellata*. October Thorn (*Tetracis jubararia*). Pearsall's Carpet (*Venusia pearsalli* Canada).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Lymantriidae: the Vaporor (*Orgyia antiqua*).

Noctuidae: Alder Dagger (*Acronicta dactylina*). Fragile Dagger (*Acronicta fragilis*). Impressed Dagger (*Acronicta impressa*). Copper Underwing (*Amphipyra pyramidoides*, Canada). *Andropolia aedon*. Large Looper (*Autographa ampla*). Intermediate Cucullia (*Cucullia intermedia*). Pale Enargia (*Enargia decolor*). American Angle Shades (*Euplexia benesimilis*). Three-spotted Sallow (*Eupsilia tristigmata*). Large-spotted Pinion (*Lithophane dilatocula*). Hitched Arches (*Melanchra adjuncta*). Speckled Green Cutworm (*Orthosia hibisci*). *Paradiarsia littoralis*. Brown Angle Shades (*Phlogophora periculosa*). Stormy Arches (*Polia nimbose*). Otter Spiramater (*Spiramater lutra*). *Xestia infimatis*. Colorful Zale (*Zale minerea*).

Notodontidae: Rough Prominent (*Nadata gibbosa*).

Sesiidae: Mountain Alder in Europe supports the Large Red-belted Clearwing (*Synanthedon culiciformis*), a moth also found in California.

Tortricidae: *Acleris caliginosana*. Marbled Dog's-tooth Tortrix (*Acleris maccana*, Canadian foodplant record). Ugly-nest Caterpillar (*Archips cerasivorana*, Canada). Large Aspen Tortrix (*Choristoneura conflictana*, Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*, Canada). *Epinotia replicana* (Canada). Birch Leafroller (*Epinotia solandriana*, Canada). Spiraea Leaf-tier (*Evora hemidesma*, Canada). Three-lined Leafroller (*Pandemis limitata*, Canada). Black-and-Gray Banded Leafroller (*Syndemis afflictana*, Canada).

Zones 1-3, 7.

Alnus rhombifolia. **White Alder**. Betulaceae.

White alder is one of the foodplants for the Western Tiger Swallowtail. Arthur Shapiro reports confirming it is a Pale Swallowtail hostplant at his Gates Canyon study site in 2012 (personal communication). White Alder is a hostplant for the Green Comma in the Willamette Valley, Oregon (Salix Associates) and reported as a hostplant for the Mourning Cloak in southern California.

White Alder indirectly supports Great Purple Hairstreak as itself a hostplant for Bigleaf Mistletoe (*Phoradendron leucarpum* subsp. *macrophyllum*, Santalaceae).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Renounced Hydriomena (*Hydriomena renunciata*). Lorquin's Angle (*Macaria lorquinaria*).

Gracillariidae: Alder Leafminer (*Caloptilia alnivorella*). *Phyllonorycter incanella*.

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*).

Noctuidae: Gray Dagger (*Acronicta grisea*). Speckled Green Cutworm (*Orthosia hibisci quinquefasciata*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*) – said to use it at Jasper Ridge Biological Preserve.

Sesiidae: Red-belted Clearwing (*Synanthedon culiciformis*).

Tortricidae: *Epinotia albangulana*. Birch Leafroller (*Epinotia solandriana*).

White Alder likely supports many other Lepidoptera species, as other alders; many foodplant references are vague, merely “*Alnus*”. The Red Alder ranges into more jurisdictions with active publishing professional lepidopterists!

Zones 1-3, 7, 9, 14-18.

Alnus rubra. **Red Alder**. Betulaceae.

Red Alder is a larval host for the Pale Swallowtail and Western Tiger Swallowtail.

Arctiidae: Garden Tiger Moth (*Arctia caja*, Canada). Fall Webworm (*Hyphantria cunea*). Silver-spotted Tiger Moth (*Lophocampa argentata*, Canada). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Wandering Tiger Moth (*Spilosoma vagans*) (fq – PNW Moths). Vestal Tiger Moth (*Spilosoma vestalis*) (fq – PNW Moths). Choreutidae: Diana's Choreutis (*Choreutis diana*, Canada).

Drepanidae: Arched Hooktip (*Drepana arcuata*). Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Infant (*Archiearis infans*, Canada). Pepper-and-salt Geometer (*Biston betularia*). Pale Beauty (*Campaea perlata*). (*Chlorosea nevadaria*), an emerald. Hollow Dot Wave (*Cyclophora pendulinaria*, Canada). Dark Marbled Carpet (*Dysstroma citrata*, Canada). Maple Spanworm (*Ennomos magnaria*). Linden Looper (*Erannis tiliaria*). Northwest Phoenix (*Eulithis xylina*, Canada). Columbia Pug (*Eupithecia columbiata*). *Eupithecia harrisonata*. *Eupithecia maestosa* (Canada). Grey Pug (*Eupithecia subfuscata*). July Highflier (*Hydriomena furcata*, Canada).

Hydriomena irata, Canada. Renounced Hydriomena (*Hydriomena renunciata*, Canada). Emasculated Grey (*Iridopsis emasculatum*, Canada). Hemlock Looper (*Lambdina fiscellaria*). *Lobophora simsata* (Canada). Birch Angle or Peacock Moth (*Macaria notata*, Canada). Western Carpet (*Melanolophia imitata*). Horned Spanworm (*Nematocampa resistaria*, Canada). Bruce Spanworm (form formerly Western Winter Moth) (*Operophtera bruceata*, Canada). *Pero giganteus*. Morrison's Pero (*Pero morrisonaria*, Canada). Straight-line Plagodis (*Plagodis phlogosaria*). American Barred Umber (*Plagodis pulveraria*). George's Carpet (*Plemyria georgii*, Canada). Alien Probole (*Probole alienaria*). Friendly Probole (*Probole amicaria*, Canada). Spear-marked Black (*Rheumaptera hastata*, Canada). White-banded Black (*Rheumaptera subhastata*, Canada) -- a day-flying flower-visiting moth. Omnivorous Looper (*Sabulodes aegrotata*). Brown-tipped Thorn (*Selenia alciphearia*). *Sicya crocearia*. Sharp-lined Yellow (*Sicya macularia*, Canada). Lorquin's Angle (*Macaria lorquinaria*). October Thorn (*Tetracis jubararia*, Canada). *Thallopgha hyperborea* (Canada). Welsh Wave (*Venusia cambrica*, Canada). Pearsall's Carpet (*Venusia pearsalli*). Western Red Twin-spot (*Xanthorhoe defensaria*).

Gracillariidae: Alder Leafminer (*Caloptilia alnivorella*). Cherry Leafcone Caterpillar (*Caloptilia invariabilis*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*, Canada). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: *Acerra normalis*. Alder Dagger (*Acronicta dactylina*). Funerary Dagger (*Acronicta funeralis*). Gray Dagger (*Acronicta grisea*). Yellow-haired Dagger (*Acronicta impleta*). *Agrochola pulchella*. *Agrochloa purpurea*. Copper Underwing (*Amphipyra pyramidoides*). *Andropolia aedon*. Rusty Shoulder Knot (*Aseptis binotata*, Canada). Large Looper (*Autographa ampla*). *Egira crucialis* (Canada). *Egira hiemalis*. Brown Woodling (*Egira perlubens*). Simplex Cutworm (*Egira simplex*). American Angle Shades (*Euplexia benesimilis*). Garden Cutworm (*Fishia discors*). Wandering Brocade (*Fishia illocata*). Aster Cutworm (*Trichordestra lilacina*). Large-spotted Pinion (*Lithophane dilatocula*, Canada). Large Gray Pinion (*Lithophane georgii*, Canada). Nameless Pinion (*Lithophane innominata*). Wanton Pinion (*Lithophane petulca*, Canada). Hitched Arches (*Melanchra adjuncta*). Speckled Green Cutworm (*Orthosia hibisci*). *Papestra cristifera*. *Papestra invalida*. Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*). Stormy Arches (*Polia nimbosa*). *Pseudorthodes irrorata*. Otter Spiramater (*Spiramater lutra*). Smith's Dart (*Xestia smithii*). Gray Swordgrass Moth (*Xylena cineritia*). American Swordgrass Moth (*Xylena nupera*).

Notodontidae: Rough Prominent (*Nadata gibbosa*, Canada). Pale Prominent (*Oligocentria pallida*). Red-washed Prominent (*Oligocentria semirufescens*).

Oecophoridae: *Exaeretia ciniflonella*.

Pyalidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*, Canada). Ceanothus Silkmoth (*Hyalophora euryalus*).

Tortricidae: *Acleris braunana* (recorded as a hostplant in Canada, moth found in California). *Acleris caliginosana*. Marbled Dog's-tooth Tortrix (*Acleris maccana*, Canada). *Acleris senescens* (Canada).

Epinotia albangulana feeds on catkins. Birch Leafroller (*Epinotia solandriana*). Three-lined Leafroller (*Pandemis limitata*, Canada). Poplar Leafroller (*Pseudosciaphila duplex*, Canada).

Zones 4-7, 16-17.

Alnus viridis ssp. *sinuata*. **Sitka Alder**. Betulaceae.

Foodplant for Western Tiger Swallowtail and the Green Comma (aka Rustic Anglewing).

Choreutidae: Diana's Choreutis (*Choreutis diana*).

Drepanidae: Arched Hooktip (*Drepana arcuata*).

Geometridae: Pale Beauty (*Campaea perlata*). Hollow Dot Wave (*Cyclophora pendulinaria*). Dark Marbled Carpet (*Dysstroma citrata*). Lorquin's Angle (*Macaria lorquinaria*). Emasculated Grey (*Iridopsis emasculatum*). Mournful Thorn (*Lambdina fiscellaria*). Speckled Granite (*Macaria exauspicata*, Canada). Western Carpet (*Melanolophia imitata*, Canada). Straight-lined Plagodis (*Plagodis phlogosaria*, Canada). American Barred Umber (*Plagodis pulveraria*). George's Carpet (*Plemyria georgii*, Canada). Friendly Probosc (*Probole amicaria*, Canada). White-banded Black (*Rheumaptera subhastata*) -- a day-flying flower-visiting moth. Falcate Synaxis (*Tetraxis cervinaria*). Pearsall's Carpet (*Venusia pearsalli*).

Gracillariidae: Alder Leafminer (*Caloptilia alnivorella*).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Gray Dagger (*Acronicta grisea*). Rusty Shoulder Knot (*Aseptis binotata*, Canada). Wanton Pinion (*Lithophane petulca*). *Papestra cristifera*. *Papestra invalida*.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Tortricidae: White-angle Tortrix (*Clepsis persicana*). Eye-spotted Bud Moth (*Spilonota ocellana*).

Zones 1-3, 7.

Aloysia wrightii. **Oreganillo**. Verbenaceae. Butterfly nectar plant – Desert Survivors Nursery, others. I have seen a photograph of a Ceraunus Blue at least perched on the flowers. When field botanist Duncan Bell first found this plant in flower, he noticed over a dozen species of invertebrates on it in just a few minutes. August - October.

Sphingidae: One of several known larval hosts for the Rustic Sphinx (*Manduca rustica*).

Zones 8-13, 19-24.

Amaranthus spp. **Pigweeds**. Amaranthaceae.

Larval hosts for Common Sootywing.

Pigweeds eaten by many herbaceous generalists such as:

Crambidae: Spinach Moth (*Spoladea recurvalis*).

Erebidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Nutmeg (*Anarta trifolii*). Black Cutworm (*Agrotis ipsilon*). Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Bertha Armyworm (*Mamestra configurata*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Amaranthus blitoides. **Mat Amaranth**. Amaranthaceae.

Larval host for Common Sootywing (Berry Nall).

Amaranthus fimbriatus. **Fringe Amaranth**. Amaranthaceae.

Larval host for Common Sootywing.

Amaranthus palmeri. **Palmer's Pigweed**. Amaranthaceae.

A larval host for the Western Pygmy Blue (caterpillars collected from it by Berry Nall) and the Common Sootywing.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) (fq) – preferred host according to Young, William R. & Juan Antonio Sifuentes. 1959. "Biological and Control Studies on *Estigmene acrea* (Drury), a Pest of Corn in the Yaqui Valley, Sonora, Mexico." *Journal of Economic Entomology* 52:6:1109-1111.

Amaranthus powellii. **Powell's Amaranth**. Amaranthaceae.

Hostplant for Common Sootywing.

Amauriopsis dissecta was *Bahia dissecta*. **Yellow Ragleaf**. Asteraceae. Bahieae. Nectar: Variegated Fritillary (Scott). Las Pilitas Nursery says "great for a butterfly garden". August – October.

Ambrosia spp. **Ragweeds**. Asteraceae. Heliantheae. Ambrosiinae.

Return to Ambrosia Nearctic search on HOSTS

Reported as larval hosts for Common Sootywing; Scott (1986) notes this as an error, saying larvae refuse to eat them.

Erebidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: *Ponomotia acutus* reared on an *Ambrosia* species.

Ambrosia acanthicarpa. **Annual Burrweed**. Asteraceae. Heliantheae. Ambrosiinae. September – November.

Tortricidae: *Epiblema sosana*.

Ambrosia chamissonis. **Beach-bur**. Asteraceae. Heliantheae. Ambrosiinae. Nectar: secondary nectar source for Square-spotted Blue. May – October.

Arctiidae: an unpreferred larval plant for the polyphagous Ranchman's Tiger Moth (*Arctia virginalis*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Pyralidae: *Heterographis morrisonella* (Powell & Opler, p. 194). Now *Ancylosis morrisonella*.

Scythrididae: Sand-dune Grasshopper Moth (*Areniscythris brachypteris*). Alice Abela photographed the caterpillar, its peculiar "larval sand tubes", and various adults, with a mating pair (January and March 2015, posted on Flickr).

Tortricidae: *Epiblema sosana* –probable; ID of moth somewhat uncertain (BugGuide). Stem-galling Moth (*Epiblema strenuana*).

Ambrosia confertiflora. **Weakleaf Burr Ragweed**. Asteraceae. Heliantheae. Ambrosiinae. May – November.

Tortricidae: *Epiblema sosana* ("probable" – ID of moth somewhat uncertain; BugGuide).

Ambrosia dumosa. **Burro-weed**. Asteraceae. Heliantheae. December – June.

Geometridae: *Animomyia morta*. Southern Emerald Moth (*Synchlora frondaria*).

Noctuidae: *Schinia dobla*.

Tortricidae: *Eugnosta beevorana*. Omnivorous Leafroller (*Platynota stultana*).

Ambrosia psilostachya. **Western Ragweed**. Asteraceae. Heliantheae. Ambrosiinae. June – November.

Bucculatricidae: *Bucculatrix transversata*.

Cosmopterigidae: *Cosmopterix opulenta*.

Noctuidae: *Schinia sexplagiata*. Olive-shaded Bird Dropping Moth (*Ponometia candefacta*, Canada).

Pterophoridae: Ambrosia Plume Moth (*Adaina ambrosiae*).

Tortricidae: Stem-galling Moth (*Epiblema strenuana*). *Phaneta* sp. Omnivorous Leafroller (*Platynota stultana*).

Cosmopterigidae: *Cosmopterix opulenta* is a leaf miner.

Oecophoridae: *Depressariodes gracilis*.

Ambrosia salsola was *Hymenoclea salsola*. **Burrobush**. Asteraceae. Heliantheae. Ambrosiinae. Nectar: Queen (fq) and American Snout (fq) (Austin, 1978). February – June.

Geometridae: *Somatolophia cuyama*.

Noctuidae: *Ponomotia elegantula* (Noctuidae), a bird-dropping moth (recently documented by Jennifer Bundy).

Amelanchier spp. **Serviceberries**. Rosaceae. Maleae. Nectar: Clodius Parnassian.

Geometridae: Northwest Phoenix (*Eulithis xyliana*). Columbia Pug (*Eupithecia columbiata*). Sulphur Wave (*Hesperumia sulphuraria*). Brown-lined Looper (*Neolcis californiaria*).

Noctuidae: *Abagrotis apposita*. *Abagrotis nefascia*. *Abagrotis orbis*. *Abagrotis variata*. *Xestia infimatis*.

Amelanchier alnifolia. **Serviceberry**. Rosaceae. Maleae. Nectar: Pale Swallowtail, Lorquin's Admiral, Brown Elfin, Common Ringlet, Gray Hairstreak, Echo Azure. Secondary nectar source for Edith's Checkerspot in western Oregon (Severns & Warren). Shapiro: "Not as nearly as strong a nectar draw as Choke Cherry." March - June.

Serviceberry fruits, over ripe and rotting, attract various butterflies.

Recorded as a larval host for Pale Swallowtail, Lorquin's Admiral, Weidemeyer's Admiral, California Hairstreak, Coral Hairstreak.

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*), Brown Tiger Moth (*Spilosoma pteridis*).

Drepanidae: *Ceranemota fasciata*, *Ceranemota tearlei*, Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Pepper-and-salt Geometer (*Biston betularia*), Pale Beauty (*Campaea perlata*), Mottled Gray Carpet (*Cladara limitaria*), Linden Looper (*Erannis tiliaria*), Johnson's Euchlaena (*Euchlaena johnsonaria*). Northwest Phoenix (*Eupithecia maestosa*), Sulphur Wave (*Hesperumia sulphuraria*), Twilight Moth (*Lycia rachelae*), Bruce Spanworm (*Operophtera bruceata*), Day Emerald (*Mesothea incertata*), Rindge's Pero (*Pero mizon*), Friendly Proboscis (*Proboscidea amica*), October Thorn (*Tetracis jubararia*).

Gracillariidae: Serviceberry Leafminer (*Parornix alta*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*), Forest Tent Caterpillar (*Malacosoma disstria*), Lappet Moth (*Phyllodesma americana*).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*), European Gypsy Moth (*Lymantria dispar*), the Vaporizer (*Orgyia antiqua*).

Noctuidae: *Acerra normalis*. Fragile Dagger (*Acronicta fragilis*). Lost Dagger (*Acronicta perdita*). Radcliffe's Dagger (*Acronicta radcliffei*). *Agrochola pulchella*. *Agrochloa purpurea*. Rusty Shoulder

Knot (*Aseptis binotata*). Large Looper (*Autographa ampla*). Dryotype opina. *Egira hiemalis*. Three-spotted Sallow (*Eupsilia tristigmata*). Common Hyppa (*Hyppa xylinoides*). False Pinion (*Litholomia napaea*). Large Gray Pinion (*Lithophane georgii*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). *Pseudorthodes irrorata*. *Setagrotis pallidicollis*. Pirate Looper (*Syngrapha epigaea*). American Sword-grass Moth (*Xylena nupera*). Gray Sword-grass Moth (*Xylena cineritia*).

Notodontidae: Rough Prominent (*Nadata gibbosa*), Pale Prominent (*Oligocentria pallida*), Red-washed Prominent (*Oligocentria semirufescens*), Morning-glory Prominent (*Schizura ipomoeae*), Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Destructive Pruneworm (*Acrobasis tricolorella*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*), Western Sheepmoth (*Hemileuca eglanterina*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Tortricidae: Lesser Appleworm Moth (*Grapholita prunivora*).

var. *pumila*: Zones 2, 6-7, 14-18;

var. *semiintegrifolia*: Zones 5-7,
14-18.

Pete Veilleux finds Serviceberry performs well as a container plant, flowering and fruiting for years in a medium large pot.

Amelanchier utahensis. **Utah Service Berry**. Rosaceae. Maleae. Flowers April - June.

Hostplant for Lorquin's Admiral (Plants for Pollinators in the Intermountain West) (fq) and Weidemeyer's Admiral. Todd Stout finds more favored for Lorquin's Admiral oviposition than quaking aspen, narrowleaf willow or yellow willow in central Idaho.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Utah Service Berry seems much less studied and no doubt has value for various Lepidoptera.

Ammannia coccinea. **Scarlet Toothcup**. Lythraceae. Nectar: Little Yellow, Checkered White, Eastern Tailed Blue. June - August.

Amorpha spp. **False Indigos**. Fabaceae.

Larval host for Gray Hairstreak -- Gray Hairstreak caterpillars eat a wide variety of plants, especially legumes.

Amorpha californica. **California False Indigo**. Fabaceae. Amorpheae. California Dogface, Gabb's Checkerspot, California Hairstreak and Silver-spotted Skipper visit its flowers – and surely others, especially those whose caterpillars eat it. Hummingbirds, too. May - July.

The Grinnells noted an association with Marine Blue in the San Bernardino Mountains in their 1907 account, surely both a nectar source and larval host for it.

Larval plant for California Dogface, Southern Dogface, Gray Hairstreak, Marine Blue, and Northern Cloudywing. 7 May 2017 a Silver-spotted Skipper photo-documented laying an egg on it in Marin County.

California False Indigo is the essential caterpillar food plant for our state insect, the California Dogface. Says butterfly gardener Jack Schieffelin: “The California Dogface used to be very widespread around the state, but as people built, they would rip up the plant.” Planting it in cultivated landscapes, he suggests, would help prevent our state insect from going the way of the California Grizzly, the extinct animal that adorns our state flag. (*Growing Native*). The last indigenous California False Indigo plants in Santa Cruz County grubbed out in the 1890s!

Geometridae: Californian Granite (*Digrammia californiaria*).

Noctuidae: *Egira curialis*. Leadplant Flower Moth (*Schinia lucens*).

Pyralidae: *Sciota dammersi*.

For var. *napensis*: Zones 14-17. Connie Vadheim suggests this species does fine in large containers.

Amorpha fruticosa. **False Indigo**. Fabaceae. Amorpheae. Blues. “Big magnet for nectaring butterflies” says Narca Moore Craig, an Arizona birder; she recalls “massive numbers of” the Queen “plus numerous smaller species” drawn to its flowers. On another trip “numerous” Gray Hairstreak, Siva Juniper Hairstreak, and Marine Blue were reported by Ken Kertell (SoWestLep #9842). Echo Azure. Hummingbirds. May - July.

False Indigo is a larval plant for Southern Dogface, California Dogface, Marine Blue, Northern Cloudywing, and Silver-spotted Skipper. Gray Hairstreak seems very likely!

Zones 2-3, 6-7, 14-24.

Supports moth caterpillars:

Gelechiidae: *Filatima ornatifimbriella*.

Oecophoridae: *Agonopterix argillacea*.

Pyralidae: Genista Broom Moth (*Uresiphita reversalis*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Three-lined Leafroller (*Pandemis limitata*).

Amsinckia sp. **Fiddleneck**. Boraginaceae. Nectar: Pale Swallowtail, Large Marble, Pearly Marble, Margined White, Spring White, Sara Orangetip, Thoosa Orange-tip, Sagebrush Checkerspot (Bart Jones), Sonoran Blue, Silvery Blue, Boisduval’s Blue, Propertius Duskywing, Painted Lady, Gabb’s Checkerspot, White-lined Sphinx.

Amsinckia spp. serve as larval hosts for the Painted Lady.

Amsinckia douglasiana. **Douglas' Fiddleneck**. Boraginaceae. March - June.

Foodplant for Painted Lady.

Amsinckia intermedia. **Common Fiddleneck**. Boraginaceae. Nectar: Pipevine Swallowtail, Cabbage White, Checkered White, Large Marble, Sara Orangetip (fq), Sleepy Orange, Orange Sulphur, Painted Lady, Variable Checkerspot, Edith's Checkerspot, Gabb's Checkerspot, Sonoran Blue, Silvery Blue (fq), Acmon Blue, California Ringlet, Funereal Duskywing and Mournful Duskywing. March - June.

Caterpillar plant for the Painted Lady.

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Zones 7-10, 14, 18-23.

Amsinckia lunaris. **Bent-flowered Fiddleneck**. Boraginaceae. March – June.

Ethmiidae: *Ethmia albitogata*.

Showy species, rare.

Amsinckia menziesii. **Rancher's Fireweed**. Boraginaceae. Nectar: Large Marble, Desert Orangetip, Sara Orangetip, Gabb's Checkerspot (Lynn Watson), Western Pygmy Blue. May - July.

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*, form formerly known as *Grammia geneura*).

Ethmiidae: *Ethmia charybdis*.

Amsinckia spectabilis. **Woolly Breeches. Seaside Fiddleneck**. Boraginaceae. Flower visitors include the Acmon Blue and an unidentified Lady. April - August.

Arctiidae: among foodplants for the Ranchman's Tiger Moth (*Arctia virginialis*).

Ethmiidae: *Ethmia albitogata*.

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Zones 16, 17, 24.

Amsinckia tessellata. **Bristly Fiddleneck**. Boraginaceae. Nectar: Desert Black Swallowtail, Cabbage White, Checkered White, Spring White, Desert Orangetip, Sara Orangetip, Southwestern Orangetip, Queen, Red Admiral, Painted Lady, Sagebrush Checkerspot, California Patch, Variable Checkerspot, Purplish Copper, and Funereal Duskywing. February - June.

Caterpillar plant for the Painted Lady – the main and preferred host in Inyo County in the 1991 migration year.

Depressariidae: *Ethmia charybdis*.

Amsinckia vernicosa. **Green Fiddleneck**. Boraginaceae. Nectar: Desert Orangetip. March – May.

Amsonia tomentosa. **Woolly Bluestar**. Apocynaceae. Nectar plant for Southern Dogface, Variable Checkerspot, likely others. March - May.

Anaphalis margaritacea. **Pearly Everlasting**. Asteraceae. Gnaphalieae. Nectar: Anise Swallowtail, Clodius Parnassian, Pine White (fq), Western White, Orange Sulphur. Lorquin's Admiral, Red Admiral, American Lady, Painted Lady, Oregon Silverspot, Atlantis Fritillary, Hydaspe Fritillary, Mormon Fritillary, Northwestern Fritillary, Pacific Fritillary, Field Crescent, Mylitta Crescent, Variable Checkerspot, Milbert's Tortoiseshell, Mourning Cloak, Hoary Comma, Oreas Comma, Green Comma, Satyr Comma, Zephyr Anglewing, Chryxus Arctic, Small Wood-Nymph. Mormon Metalmark. Gray Hairstreak, Juniper Hairstreak, Sylvan Hairstreak (fq), Hedgerow Hairstreak, Thicket Hairstreak, Golden Hairstreak (Pyle, and a photograph posted on *Mountain Plants of the Western Cascades* web site), Great Copper, Purplish Copper (fq), Lustrous Copper, Mariposa Copper (fq), Blue Copper (fq), Ruddy Copper, Tailed Copper, Greenish Blue. Common Checkered-Skipper (fq), Juba Skipper, Western Branded Skipper, Woodland Skipper (fq), European Skipper. Police Car Moth (*Gnophaela vermiculata*, Arctiidae). Shadowy Arches (*Drasteria adumbrata*, Erebidae). Fireweed Clearwing (*Albuna pyramidalis*, Sesiidae). July - October.

In much of its range the magnificent Golden Hairstreak is not usually observed at nectar on flowers (rather, normally seen by day resting on its larval hosts), but in the Northwest, Pyle says, it comes down to nectar late in the day, and Pearly Everlasting is one of the flowers it visits.

Pearly Everlasting is a primary hostplant for American Lady and a secondary hostplant for the Painted Lady. Tatum notes the second brood of the polyphagous Gray Hairstreak on southern Vancouver Island develops on its flowers.

Choreutidae: *Caloreas leucobasis*. Everlasting Tebenna (*Tebenna gnaphaliella*).

Gelechiidae: *Rifseria fuscotaeniella*. *Scrobipalpa psilella* sensu lato (Powell & Opler).

Gracillariidae: *Cremastobombycia grindeliella*.

Pterophoridae: Williams' Plume Moth (*Platyptilia williamsii*).

Pyralidae: *Patagonia peregrinum*.

Tortricidae: *Clepsis fucana*. *Sparganothis senecionana*.

Zones 4-6, 14-24.

Anemopsis californica. **Yerba Mansa**. Saururaceae. Nectar: Monarch (B.J. Stacey), Northern White-Skipper (Monroes). White-lined Sphinx (Kummel). March - September.

Zones 7-12, 14-24.

Arctiidae: Salt Marsh Moth. *Estigmene acrea*. Reported in Windthread Blog, 9/13/2014, avidly consuming leaves – perhaps a favorite host, others have noted feeding damage on the leaves.

Angelica spp. **Angelica**. Apiaceae. Selineae. Nectar: Anise Swallowtail. ‘Many lycaenids’ (Shapiro) – coppers, hairstreaks, blues, metalmarks.

Angelica species among the most favored Anise Swallowtail caterpillar plants.

Geometridae: White-spotted Pug (*Eupithecia tripunctaria*).

Noctuidae: Cow Parsnip Borer (*Papaipema harrisii*).

Angelica arguta. **Lyal’s Angelica**. Apiaceae. Selineae. Flowers July - August.

A primary Anise Swallowtail hostplant in northwestern California.

Oecophoridae: *Agonopterix rosaciliella*.

Angelica breweri. **Brewer’s Angelica**. Apiaceae. Selineae. June - August.

Larval host for Anise Swallowtail at Donner Pass. Cultivated plants work well at lower elevations -- the chemistry!

Angelica genuflexa. **Kneeling Angelica**. Apiaceae. Selineae. July – August.

Hostplant for Old World Swallowtail.

Angelica hendersonii. **Coast Angelica**. Apiaceae. Nectar: Pale Swallowtail. Selineae. June - July.

Larval host for Anise Swallowtail on San Bruno Mountain, San Mateo County.

Oecophoridae: *Agonopterix oregonensis*. *Agonopterix rosaciliella*.

Angelica kingii. **King’s Angelica**. Apiaceae. Selineae. June - August.

Larval host for Anise Swallowtail.

Angelica lineariloba. **Poison Angelica**. Apiaceae. Selineae. June - August.

Thought to be a primary Anise Swallowtail larval host on the eastern slopes of the Sierra Nevada Mountains.

Angelica lucida. **Sea-watch**. Apiaceae. Selineae. May – August.

Hostplant for Anise Swallowtail (Patterson, NorWestLeps #2280, others).

Oecophoridae: *Agonopterix oregonensis*.

Angelica tomentosa. **Woolly Angelica**. Apiaceae. Selineae. Nectar: Mylitta Crescent, an unidentified Comma. June - August.

Woolly Angelica is an Anise Swallowtail caterpillar plant, but perhaps less used than others may.

Anisocarpus madioides. **Woodland Madia**. Madieae. April – July.

Tortricidae: *Epiblema deverrae* (Tortricidae Foodplants Database).

Anisocoma acaulis. **Scalebud**. Asteraceae. Cichorieae. Butterfly nectar plant. March – June.

Antennaria spp. **Pussy-toes**. Asteraceae. Gnaphalieae. Nectar source for Thicket Hairstreak, Lustrous Copper.

Noctuidae: White-spotted Midget (*Eutricopis nexilis*) – a day-flying flower-visiting moth. Black-spotted Gem (*Schinia honesta*) – considered likely hostplants (PNW Moths).

Antennaria dimorpha. **Gray Cushion Pussytoes**. Asteraceae. Gnaphalieae. May - June.

Gelechiidae: *Chionodes impes* (Wikipedia).

Antennaria howellii. **Howell's Pussy-toes**. Asteraceae. Gnaphalieae. July - August.

Foodplant for the American Lady.

Noctuidae: Howell's Pussy-toes is a likely foodplant for the White-spotted Midget (*Eutricopis nexilis*), which is recorded as using the very closely related *Antennaria neglecta*.

Antennaria luzuloides. **Woodrush Pussy-toes**. Asteraceae. Gnaphalieae. May - July.

Foodplant for the American Lady.

Antennaria parvifolia. **Small Leaf Pussytoes**. Asteraceae. Gnaphalieae. Nectar: Scott records: Rocky Mountain Parnassian, Chryxus Arctic, Hoary Comma, Thicket Hairstreak, Dreamy Duskywing, Pacuvius Duskywing, Persius Duskywing, also various Colorado lycaenids.

Antennaria rosea. **Rosy Everlasting**. Asteraceae. Gnaphalieae. June - August.

Noctuidae: Likely foodplant for the White-spotted Midget (*Eutricopis nexilis*), which was photographed on it. Moldenke records getting a *Schinia* sp. on Rosy Everlasting – which may refer to the White-spotted Midget.

Antheropeas wallacei aka *Eriophyllum wallacei*. **Wallace's Woolly Daisy**. Asteraceae. Madieae. Nectar: Orange Sulphur, Acmon Blue, Sagebrush Checkerspot, California Patch, Leanira Checkerspot. December
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Anthoxanthum occidentale was *Hierochloe occidentalis*. **California Sweet Grass** or **Vanilla Grass**. Poaceae. Pooideae. Poaeae. January – July.

Elachistidae: *Elachista indisella* (Powell & Opler, p. 73).

Antigonon leptopus. **Coral Vine. Queen's Wreath. Rosa de Montana.** Polygonaceae. Nectar: Giant Swallowtail, Large Orange Sulphur (fq), Monarch, Gulf Fritillary, Gray Hairstreak, Western Pygmy Blue, Mallow Scrub-Hairstreak, Silver-banded Hairstreak, and many bees. Hummingbirds. Flowers from spring to autumn. Beyond California, serves the White Peacock and Malachite, likely others since it said to be generally attractive.

Berry Nall has documented Coral Vine as another Gray Hairstreak hostplant. He found Large Orange Sulphur oviposited on it, but its caterpillars died.

Native to Baja California. Zones 12, 23, 18-24.

Antirrhinum spp. **Snapdragons.** Plantaginaceae.

Snapdragons are hostplants for Common Buckeye.

Noctuidae: Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Scribbled Sallow (*Sympistis perscripta*).

Antirrhinum coulterianum (aka *Sairocarpus coulterianus*). **White Snapdragon.** Plantaginaceae. April – July.

Foodplant for Common Buckeye and Quino Checkerspot (a segregate of Edith's Checkerspot). Considered a secondary foodplant for Quino Checkerspot.

Antirrhinum multiflorum (aka *Sairocarpus multiflorus*). **Rose Snapdragon.** Plantaginaceae. 'Butterflies love it' – Annie's Annuals. Shapiro thinks it improbable that it serves as a butterfly nectar plant. Anise Swallowtail (Kummel, 2 June 2018 photo). April – August.

Hostplant for Variable Checkerspot in Pinnacles National Monument (Paul Johnson).

Zones 7, 14-24.

Antirrhinum nuttallianum ssp. *nuttallianum* (aka *Sairocarpus nuttallianus*). **Nuttall's Snapdragon. Violet Snapdragon.** Plantaginaceae. May-July.

Noctuidae: Jennifer Bundy had eggs of Scribbled Sallow (*Sympistis perscripta* aka *Lepipolys perscripta*) some first instars of which fed upon offered flower buds of Nuttall's Snapdragon, though others did not; the survivors were transferred to Desert Ghost Flower (*Mohavea confertiflora*, Plantaginaceae).

Apiaceae. **Carrot Family.** Nectar: Anise Swallowtail, Lorquin's Admiral, Mylitta Crescent, Common Ringlet, Brown Elfin, Great Purple Hairstreak, Purplish Copper, Great Copper, Two-banded Checkered-Skipper. Many butterflies utilize the larger species of carrot family plants as nectar sources. Typically, Apiaceae pollen and nectar are accessible to and attract a wide range of insects – thus it is a "keystone" plant family for ecological restoration.

Most Apiaceae are larval hosts for Anise Swallowtail, many for Indra Swallowtail.

Aphid Honeydew. Food source for Mourning Cloak, Lorquin's Admiral, Weidemeyer's Admiral, Viceroy; more information at "Honeydew".

Aphyllon fasciculatum was *Orobanche fasciculata*. **Clustered Broomrape.** Orobanchaceae. April – July.

Clustered Broomrape is a Variable Checkerspot hostplant.

Apocynum spp. **Dogbanes.** Apocynaceae. Flower visitors: Two-tailed Swallowtail, Monarch, Gray Marble (Boisduval's Marble), Western Sulphur, Field Crescent, Northern Checkerspot, Variable Checkerspot, Lorquin's Admiral, Common Wood-Nymph, Great Basin Wood-Nymph, California Hairstreak, Sylvan Hairstreak, Thicket Hairstreak, Johnson's Hairstreak, Gray Hairstreak, Coral Hairstreak, Tailed Copper, Great Copper, Gorgon Copper, Silver-spotted Skipper, Northern Cloudywing (fq), Common Sootywing, Propertius Dusky-wing, Mournful Duskywing, Dodge's Skipper, Columbian Skipper, Lindsey's Skipper (fq), Rural Skipper, Umber Skipper, Woodland Skipper, Dun Skipper, and Tawny-edged Skipper.

Apocynum androsaemifolium. **Pink Dogbane** or **Spreading Dogbane.** Apocynaceae. Nectar: Pale Swallowtail (fq), Two-tailed Swallowtail, Western Tiger Swallowtail (fq), Indra Swallowtail, Anise Swallowtail, Clodius Parnassian, Rocky Mountain Parnassian, Cabbage White, Checkered White, Pine White, California Marble, Large Marble, Clouded Sulphur, Orange Sulphur, Queen Alexandra's Sulphur, Painted Lady, West Coast Lady, American Lady, Lorquin's Admiral, Red Admiral, Weidemeyer's Admiral, and Common Buckeye. Callippe Fritillary (fq), Great Basin Fritillary (David S. Horner), Great Spangled Fritillary [in Michigan], Hesperis Fritillary, Hydaspe Fritillary, Coronis Fritillary, Northwestern Fritillary, Pacific Fritillary, Variegated Fritillary, Zerene Fritillary. Anicia Checkerspot, Edith's Checkerspot, Leanira Checkerspot, Northern Checkerspot, Variable Checkerspot, Field Crescent, Mylitta Crescent, Pearl Crescent [Michigan], Monarch (fq), Queen, Hoary Comma, Common Wood-Nymph, Small Wood-Nymph, Milbert's Tortoiseshell, Mourning Cloak, Mormon Metalmark, Behr's Hairstreak, Bramble Green Hairstreak, California Hairstreak, Coral Hairstreak, Gold-hunter's Hairstreak, Gray Hairstreak, Hedgerow Hairstreak, Johnson's Hairstreak, Mountain Mahogany Hairstreak, Sylvan Hairstreak, Thicket Hairstreak, Western Sooty Hairstreak, Nelson's Hairstreak, Juniper Hairstreak, Leda Ministreak, Blue Copper, Gorgon Copper, Purplish Copper, Edith's Copper, Lilac-Bordered Copper, Ruddy Copper, Tailed Copper, Acmon Blue, Anna's Blue, Arctic Blue, Boisduval's Blue, Lupine Blue, Marine Blue, Melissa Blue, Silvery Blue, Western Tailed Blue, Echo Azure. Common Checkered-Skipper, Propertius Duskywing, Pacuvius Duskywing, Persius Duskywing (fq), Common Sootywing, Silver-spotted Skipper, Northern Cloudywing (fq), Common Branded Skipper, Dun Skipper, Juba Skipper, Lindsey's Skipper (fq), Nevada Skipper, Sachem, Sandhill Skipper, Sonora Skipper, Woodland Skipper, Western Branded Skipper, Sachem, Tawny-edged Skipper, and Common Roadside-Skipper. Arthur Shapiro says the Persius Dusky-wing (fq) is 'addicted' to pink dogbane nectar! He finds it one of the very best nectar sources in montane California.

Likely Lepidoptera pollinated: (Waddington, Keith D. "Pollination of *Apocynum Sibiricum* (Apocynaceae) by Lepidoptera." *The Southwestern Naturalist*, vol. 21, no. 1, 1976, pp. 31–35. *JSTOR*, www.jstor.org/stable/3670321).

Robert Pyle thinks Spreading Dogbane is California's best native butterfly nectar plant. On one large patch, he saw as many as fourteen species, hundreds of individual butterflies.

Some day-flying moths at Spreading Dogbane flowers are White-lined Sphinx (fq), Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), Red-shouldered Ctenucha (*Ctenucha rubroscapus*), Police Car

Moth (*Gnophaela vermiculata*, Arctiidae) (fq), Sierran Pericopid (*Gnophaela latipennis*) (Glenn Fine), Shadowy Arches (*Drasteria adumbrata*, Noctuidae) (Marilyn Lemmon), *Drasteria divergens* (Noctuidae) (Glenn Fine), Darker-spotted Straw Moth (*Heliothis phloxiphaga*, Noctuidae). Nocturnal noctuid moth visitors include Hooked Silver Y (*Syngrapha alias*) and Green-marked Looper (*Syngrapha viridisigma*). May - October.

Spreading Dogbane reported as a hostplant for the Monarch, doubtful.

Arctiidae: Dogbane Tiger Moth (*Cycnia tenera*). Oregon Cycnia (*Cycnia oregonensis*). Clio Tiger Moth (*Ectypia clio*).

Noctuidae: Mouse Moth (*Amphipyra tragopoginis*). Purple-lined Sallow (*Pyrrhia experimens*). *Trichordestra tacoma*.

Pyralidae: Dogbane Saucrobotys (*Saucrobotys futilalis*). Considered a possible hostplant for Dusky Saucrobotys (*Saucrobotys fumoferalis*).

Zones 1-3, 7.

Apocynum cannabinum. **Indian Hemp** or **Hemp Dogbane**. Apocynaceae. Nectar: Western Tiger Swallowtail, Pipevine Swallowtail, Clodius Parnassian. Cabbage White (fq), Checkered White, Clouded Sulphur, Orange Sulphur. Monarch (fq), Queen, Great Spangled Fritillary, Fritillaries, Variegated Fritillary, Mourning Cloak, Milbert's Tortoiseshell, Painted Lady (fq), American Lady, West Coast Lady, Red Admiral, Lorquin's Admiral, Edith's Checkerspot, Viceroy, Common Buckeye, Field Crescent, Pearl Crescent, Common Wood-Nymph. American Snout. Gray Hairstreak, Sylvan Hairstreak (fq), Hedgerow Hairstreak, California Hairstreak (fq), Mountain Mahogany Hairstreak, Great Purple Hairstreak (fq), Banded Hairstreak, Behr's Hairstreak, Brown Elfin, Great Copper (fq), Ruddy Copper, Echo Azure, Eastern Tailed Blue, Reakirt's Blue. Common Sootywing (fq), Northern White Skipper, Silver-spotted Skipper (fq), Afranius Duskywing, Dun Skipper, Sachem. Dogbane Tiger Moth (*Cycnia tenera*, Arctiidae) – a diurnal species. Also nocturnal moths such as Ipsilon Dart (*Agrotis ipsilon*, Noctuidae), Corn Earworm (*Helicoverpa zea*, Noctuidae).

Indian Hemp is a favorite nectar plant for the California Hairstreak, Great Purple Hairstreak, Sylvan Hairstreak & Great Copper.

Shapiro finds “basically all” butterflies come to the flowers of this plant. Pyle finds Indian Hemp much less attractive to butterflies than Spreading Dogbane. John Dennis back East listed of 38 butterfly species for Indian Hemp. April - October.

Indian Hemp formerly thought a Monarch larval host, but in a test its caterpillars would rather die than eat it!

Arctiidae: Dogbane Tiger Moth (*Cycnia tenera*). Clio Tiger Moth (*Ectypia clio*).

Noctuidae: Zebra Caterpillar (*Melanchnra picta*).

Sphingidae: Recorded for Snowberry Clearwing (*Hemaris diffinis*, Sphingidae), but Powell & Opler doubt it, noting snowberry (*Symphoricarpos*, Caprifoliaceae), a primary hostplant. Apocynum is toxic to most creatures.

Zones 1-3, 6-9, 14-21. Garden invasive – spreads readily by wide-ranging rhizomes, so that root containment of some sort (such as is sold for use with bamboos) might prove practical for some gardeners.

Aquilegia formosa. **Western Columbine**. Ranunculaceae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail (fq), Pale Swallowtail, Anise Swallowtail, California Dogface, Fritillaries, Silvery Blue, Acmon Blue, Common Ringlet, Common Wood-Nymph. Specific butterfly nectar records mostly from Oregon. In northern California Shapiro rarely sees a butterfly attempting to nectar on this good hummingbird plant. Online photographs show Western Tiger Swallowtail and Pale Swallowtail at nectar on western columbine in the southern Sierra Nevada. Alarcon et. al. indicate plenty of visits by Western Tiger Swallowtail and California Dogface in southern California mountains. Liam O'Brien finds Pipevine Swallowtail "all over it", liking red flowers.

Moths are flowers visitors, according to the Pollinator Partnership. The Jepson Manual says it is hummingbird pollinated, as is **Van Houtte's Columbine** (*Aquilegia eximia*) flowering later. April - September.

Noctuidae: "*Aquilegia*" among hostplants for Figwort Stem Borer (*Papaipema sauzalitae*), likely this one.

Zones 4-7, 14-24.

Aquilegia pubescens. **Sierra Columbine**. **Alpine Columbine**. Ranunculaceae. White-lined Sphinx (*Hyles lineata*, Sphingidae) seen visiting its flowers mid-day in Mono County. Possibly this or a hybrid with it is Moldenke's "*Aquilegia formosa pauciflora*" also visited by the Carolina Sphinx (*Manduca sexta*, Sphingidae). "Hawkmoth pollinated" according to the *Jepson Manual*. July - August.

Arabis spp. (many taxa formerly so designated now *Boechea*). **Rock Cresses**. Brassicaceae. Nectar: Desert Black Swallowtail, Large Marble, Thoosa Orange-tip, Stella's Orangetip, Becker's White, Spring White, Silvery Blue, and Mourning Cloak.

Likely, all native "*Arabis*" species are nectar plants and larval hosts for various white pierids.

Larval hosts of the Desert Marble.

Arabis aculeolata. **Waldo Rock Cress**. Brassicaceae. Nectar: California Marble aka Pearly Marble (Rob Santry). April – June.

Arabis blepharophylla 'Spring Charm'. **Pink Coast Rock Cress**. Brassicaceae. Nectar: Bramble Green Hairstreak, Cabbage White, Large Marble, Sara Orangetip. A secondary nectar source for the San Bruno Elfin (a segregate of Moss's Elfin). March - April.

Occasional larval host for the Large Marble (*A Flora of the San Bruno Mountains*).

Arabis breweri is now *Boechea breweri*. **Brewer's Rock Cress**.

Arabis divaricarpa is now *Boechea divaricarpa*. **Spreadingpod Rockcress**.

Arabis drummondii is now *Boechea stricta*. **Drummond's Rockcress**.

Arabis glabra is now *Turritis glabra*. **Tower Mustard**.

Arabis hirsuta is now *Arabis pycnocarpa*. **Hairy Rockcress**.

Arabis holboellii. Varieties under this name are now species in *Boechea*. “*Arabis holboellii*” proper is not found in California (misapplied names). **Holboell’s Rock Cress**.

Arabis holboellii var. *retrofracta* is now *Boechea retrofracta*. **Holboell’s Rock Cress**.

Arabis lyallii is now *Boechea lyallii*. **Lyall’s Rockcress**.

Arabis perennans is now *Boechea perennans*. **Nevada Rockcress**.

Arabis platysperma is now *Boechea platysperma*. **Pioneer Rockcress**.

Arabis pulchra var. *gracilis* is now *Boechea xylopoda*. **Beautiful Rock Cress**.

Arabis pycnocarpa was *Arabis hirsuta*. **Hairy Rockcress**. Brassicaceae. Scott notes two flower visits by Spring White. March – July.

Foodplant for the Large Marble.

Arabis sparsiflora is now *Boechea sparsiflora*. **Sicklepod Rockcress**.

Arabis sparsiflora var. *arcuata* is now *Boechea arcuata*. **Sicklepod Rockcress**.

Arabis sparsiflora var. *subvillosa* is now *Boechea pauciflora*. **Hairystem Rockcress**.

Arabis suffrutescens is now *Boechea suffrutescens*. **Woody Rockcress**.

Aralia californica. **Elk Clover** or **California Spikenard**. Araliaceae. Nectar: Western Tiger Swallowtail (Bay Natives Nursery, Pale Swallowtail (Hints), Marc Kummel), Monarch. “Excellent for hairstreaks” – Shapiro. Red-shouldered Ctenucha (*Ctenucha multifaria*). June - August.

Epermeniidae: *Epermenia californica*.

Elk Clover, a magnificent large perennial, under-used in cultivation. Zones 5, 7, 16-17.

Arbutus menziesii. **Madrone**. Ericaceae. Echo Azure visits the flowers (Link), Duskywing Moth (*Euclidia ardata*, Noctuidae). Hummingbirds. March - May.

Madrone is a larval host for the Brown Elfin and Echo Azure (Salix Associates).

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*). Silver-spotted Tiger Moth (*Lophocampa argentata*). Fall Webworm (*Hyphantria cunea*).

Copromorphidae: *Lotisma trigonana*.

Gelechiidae: *Gelechia panella*. *Pseudochelaria arbutina*.

Geometridae: Dark Marbled Carpet (*Dysstroma citrata*). Graef's Pug (*Eupithecia graefii*). *Eupithecia maestosa*. *Eupithecia sabulosata*. *Eupithecia subapicata*. Sulphur Wave (*Hesperumia sulphuraria*). Manzanita Highflier (*Hydriomena manzanita*). Emasculated Grey (*Iridopsis emasculatum*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Nealcis californiaria*). Rindge's Pero (*Pero mizon*). Morrison's Pero (*Pero morrisonaria*, Canada). Falcate Synaxis (*Tetracis cervinaria*).

Gracillariidae: Madrone Skin Miner (*Marmara arbutiella*). *Phyllonorycter arbutusella*.

Heliozelidae: a leaf miner: Madrone Shield-bearer (*Coptodisca arbutiella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Abagrotis apposita*. Rusty Shoulder Knot (*Aseptis binotata*). *Aseptis ethnica*. Luteous Dart (*Abagrotis trigona*). *Egira crucialis*. Three-spotted Sallow (*Eupsilia tristigmata*). *Orthosia mys*. *Orthosia pacifica*. *Orthosia pulchella*. Transparent Quaker (*Orthosia transparens*). Otter Spiramater (*Spiramater lutra*). *Xestia mustelina*.

Notodontidae: Morning-glory Prominent (*Schizura ipomoeae*).

Saturniidae: Mendocino Saturnia (*Saturnia mendocino*), a showy day-flying silk moth of fast erratic flight. Ceanothus Silkmoth (*Hyalophora euryalus*). Polyphemus Moth (*Antheraea polyphemus*). Walters' Saturnia Moth (*Saturnia walterorum*).

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*, Canada). Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia biangulana*. Variable Oak Leafroller (*Epinotia emarginana*). *Epinotia nigralbana*. *Epinotia terracoctana*.

Madrone, thought difficult to cultivate, nevertheless often attempted, a beautiful tree. Zone 5 seems most favorable.

Arceuthobium spp. **Dwarf Mistletoe**. Now assigned to the Santalaceae; formerly to the Viscaceae.

Parasitic on coniferous trees (firs, pines, Douglas fir, hemlocks, and rarely, spruces); caterpillar plants for Thicket Hairstreak, some for Johnson's Hairstreak. Johnson's Hairstreak in California develops on dwarf mistletoes growing on Brewer's spruce at high elevations in the Siskiyou Mountains. The Thicket Hairstreak develops on dwarf mistletoe growing on a variety of conifers in warmer, drier situations at lower elevations.

Lymantriidae: Gary Pearson reared a caterpillar of Douglas-fir Tussock Moth (*Orgyia pseudotsugata*) through on an "*Arceuthobium tsugense*" parasitic on a western hemlock, which mistletoe is now included in *Arceuthobium campylopodum*, **Western Dwarf Mistletoe**. Furthermore, the caterpillar, offered western hemlock foliage, ignored it in favor of the mistletoe! The caterpillar acquired as an early instar on the mistletoe.

Pyralidae: Dwarf Mistletoe Snout Moth (*Dasyphyga alternosquamella*).

Arctostaphylos spp. **Manzanitas**. Ericaceae. Manzanitas provide nectar for the California Tortoiseshell, Monarch, Edith's Checkerspot, Gray Hairstreak, Thicket Hairstreak, Johnson's Hairstreak and many moths. Shapiro notes the common diurnal noctuid moth, *Litocala sexsignata* is a specialist visitor to manzanita flowers, including *A. nevadensis*. In 38 years afield in northern California, he feels he has seen less than a dozen instances of butterflies at nectar on manzanita flowers or trying to ... the manzanita flower conformation is not oriented to butterflies. Some other observers find manzanitas important early nectar sources. They are more popular, it seems, at lower elevations, near the coast and towards the south. Las Pilitas Nursery (in a southern coastal area) says they have seen the California Tortoiseshell working the flowers of about 20 different kinds of manzanitas. Good for hummingbirds.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus* [Haggard]), Mendocino Saturnia Moth (*Saturnia mendocino* [Haggard]). Walters' Saturnia Moth (*Saturnia walterorum*) is associated with manzanitas, likely hostplants, in southern California mountains.

Copromorphidae: *Lotisma trigonana*.

Geometridae: Darwin's Green (*Nemoria darwiniata*).

Incurvariidae: *Tridentiforma fuscoleuca* (Powell & Opler).

Noctuidae: *Orthosia pacifica*.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Strawberry Leafroller (*Ancyliis comptana*). Fruit-tree Leafroller (*Archips argyrospila*). *Decodes helix*. *Epinotia arctostaphylana* (California). Variable Oak Leafroller (*Epinotia emarginana*). *Epinotia miscana* (California). *Epinotia nigralbana* (California). *Epinotia subplicana*. *Epinotia terracoctana* (California).

Arctostaphylos auriculata. **Mt. Diablo Manzanita**. Ericaceae. Nectar: Red Admiral, California Tortoiseshell. February – March.

Tortricidae: *Epinotia bigemina*.

Arctostaphylos **Baby Bear Manzanita**. Ericaceae. Nectar source for California Tortoiseshell, and Las Pilitas Nursery reports a Mourning Cloak working the flowers of this selection for days! A hummingbird favorite.

Arctostaphylos bakeri ssp. *bakeri* 'Louis Edmonds'. **Baker's Manzanita**. Ericaceae. On a 2 March 2007 visit to Yerba Buena Nursery in Woodside: a 'magnificent specimen' in their display garden was in flower, with 'buzzing bees in attendance' and 'even some blue butterflies', probably Echo Azure. February - April.

Arctostaphylos columbiana. **Hairy Manzanita**. Ericaceae. Edith's Checkerspot, Propertius Duskywing. March - May.

Geometridae: *Eupithecia gilvipennata*. Graef's Pug (*Eupithecia graefii*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Neocalcis californiaria*). Rindge's Pero (*Pero mizon*).

Noctuidae: *Aseptis ethnica*. Red Manzanita Sallow (*Mesogona rubra* – its only known hostplant), *Orthosia mys*.

Pterophoridae: *Trichoptilus* sp.

Copromorphidae: *Lotisma trigonana* (originally assigned to the Tortricidae).

Arctostaphylos confertiflora. **Santa Rosa Island Manzanita**. Ericaceae. February – March.

Tortricidae: *Decodes helix*.

Arctostaphylos densiflora ‘**Harmony**’. Ericaceae. Red Admiral and California Tortoiseshell at nectar on this selection in photographs of the Las Pilitas Nursery.

Arctostaphylos densiflora ‘Howard McMinn’. **Sonoma Manzanita**. Ericaceae. California Dogface (California Gardens). Painted Lady -- many at nectar on a mass of it in San Jose during the 2009 spring migration. Gray Hairstreak (Paul Furman). Monarch, California Tortoiseshell and Brown Elfin at flowers of ‘**Sentinel**’ cultivar at the Las Pilitas Nursery. March – April.

Arctostaphylos glandulosa subsp. *mollis*. **Eastwood’s Manzanita**. Ericaceae. Nectar: Sara Orangetip, California Tortoiseshell, Brown Elfin, Six-spotted Litocala (*Litocala sexsignata*, Noctuidae) (fq), *Annaphila diva*, Noctuidae, ID uncertain, Mark Kummel).

Arctostaphylos glandulosa ssp. *zacaensis* is now included in *Arctostaphylos glandulosa* ssp. *glandulosa*. **Zaca Manzanita**. Painted Lady – many seen by Nature Shutterbug at nectar on wild specimens in their 2009 migration. Treebeard photographed a Propertius Duskywing at nectar on 14 February 2012. January – April.

Zones 15-23.

Arctostaphylos glauca. **Bigberry Manzanita**. Ericaceae. Nectar: Red Admiral, Painted Lady, West Coast Lady, Common Buckeye, California Tortoiseshell, Brown Elfin, *Pyrausta dapalis* (Crambidae, a diurnal snout moth with red hindwings). Important winter food for Anna’s Hummingbird. December - March.

Foodplant for Brown Elfin.

Coleophoridae: *Coleophora glaucella*.

Ethmiidae: Yerba Santa Bird-dropping Moth (*Ethmia arctostaphylella*).

Geometridae: Wavy-lined Cochisea (*Cochisea sinuaria*). Sulphur Wave (*Hesperumia sulphuraria*).

Gracillariidae: *Phyllonorycter manzanita*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: *Aseptis fumeola*. *Aseptis perfumosa*. *Orthosia pacifica*. *Pleromella opter* – sole hostplant on HOSTS.

Notodontidae: An unidentified *Datana* species feeds on Bigberry Manzanita.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Ceanothus Silkmoth (*Hyalophora euryalus*). Mendocino Saturnia Moth (*Saturnia mendocino*).

Sphingidae: Elegant Sphinx, (*Sphinx perelegans*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*).

Arctostaphylos hooveri. **Hoover's Manzanita**. Ericaceae. February – April.

Tortricidae: *Epinotia arctostaphylana*. *Epinotia biangulana*. Variable Oak Leafroller (*Epinotia emarginana*). *Epinotia nigralbana*.

Arctostaphylos imbricata. **San Bruno Mountain Manzanita**. Ericaceae. January – March.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia arctostaphylana*. *Epinotia bigemina*.

Arctostaphylos insularis. **Island Manzanita**. January – March.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). *Decodes aneuretus*. *Decodes helix*. *Epinotia bigemina* (Powell & Opler, p. 139).

Arctostaphylos **Mama Bear**. A hybrid selection of *Arctostaphylos bakeri* 'Louis Edmunds' and *Arctostaphylos densiflora* 'Sentinel'. Flowers draw California Tortoiseshell and Painted Lady.

Arctostaphylos manzanita. **Common Manzanita**. Ericaceae. Nectar: *Annaphila baueri* (Noctuidae), a day-flying moth. February - May.

Noctuidae: *Orthosia mys*.

Tortricidae: Zapulata (*Choristoneura zapulata*). *Epinotia miscana*. *Epinotia nigralbana*. *Epinotia subplicana*.

Gracillariidae: *Phyllonorycter manzanita*.

Arctostaphylos manzanita ssp. *laevigata*. **Contra Costa Manzanita**. Ericaceae. Nectar: Margined White (Kevin Hints), Red Admiral (Mount Diablo Interpretive Association). February – May.

Arctostaphylos manzanita x *densiflora* '**Austin Griffiths**'. Nectar: Red Admiral (Las Pilitas Nursery video).

Arctostaphylos montana. **Mount Tamalpais Manzanita**. Ericaceae. February – April.

Tortricidae: *Epinotia nigralbana*. *Epinotia subplicana*.

Arctostaphylos montaraensis. **Montara Manzanita**. Ericaceae. January – March.

Tortricidae: *Epinotia arctostaphylana*. *Epinotia bigemina*.

Arctostaphylos montereyensis. **Toro Manzanita**. Ericaceae. January – March.

Tortricidae: *Epinotia bigemina*.

Arctostaphylos morroensis. **Morro Manzanita**. Ericaceae. Hartmut Wisch reports a Red Admiral spending some time at nectar on many of its flowers in January 2006 at the Rancho Santa Ana Botanic Garden. Jan – Mar.

Arctostaphylos nevadensis. **Pinemat Manzanita**. Ericaceae. Flower visitors: Pacific Fritillary, Johnson's Hairstreak (Shields), Litocala Moth (*Litocala sexsignata*, Noctuidae) (Shapiro). The Western Meadow Fritillary (aka Pacific Fritillary) noted abundantly "around" this plant in one Sierran study. May - July.

Saturniidae: Mendocino Saturnia Moth (*Saturnia mendocino*).

Arctostaphylos otayensis. **Otay Manzanita**. Ericaceae. Nectar: Thorne's Juniper Hairstreak. January - March.

Arctostaphylos pajaroensis. **Paradise Manzanita**. Ericaceae. Nectar: Brown Elfin. December - February.

Arctostaphylos patula. **Greenleaf Manzanita**. Ericaceae. A few adult butterflies and many adult moths found associated with the plant. Likely, several to many are flower visitors, such as the California Tortoiseshell, the butterfly judged commonly associated with it (Valenti, et.al.).

Adult moths commonly associated with Greenleaf Manzanita in northeastern California include Ceanothus Silkmoth (*Hyalophora euryalus*, Saturniidae), *Aseptis ethnica* (Noctuidae), and these tortricids: cf. Oblique-banded Leafroller (*Choristoneura rosaceana*), *Epinotia arctostaphylana*, *Epinotia miscana*, *Epinotia subplicana*, and *Epinotia terracoctana*.

Adults of the following species occasionally found associated with Greenleaf Manzanita:

Butterflies: Brown Elfin.

Moths: Mendocino Saturnia Moth (*Saturnia mendocino*, Saturniidae), Western Sheepmoth (*Hemileuca eglanterina*, Saturniidae), White-lined Sphinx (*Hyles lineata*, Sphingidae), Vashti Sphinx (*Sphinx vashti*, Sphingidae), Small-eyed Sphinx (*Paonias myops*, Sphingidae), Vestal Tiger Moth (*Spilosoma vestalis*, Arctiidae), *Phymatopus hectoides* (Hepialidae), *Hyaloscotes fumosa* (Psychidae), *Coleophora glaucella* (Coleophoridae), cf. *Gelechia panella* (Gelechiidae), *Pseudochelaria manzanitae* (Gelechiidae), Mountain Mahogany Looper (*Iridopsis clivinarina*, Geometridae), *Hesperumia fumosaria* (Geometridae), *Macaria quadrilinearis* (Geometridae), Darwin's Green (*Nemoria darwiniata*, Geometridae), *Nemoria glaucomarginaria* (Geometridae, an emerald), Falcate Synaxis (*Tetraxis cervinaria*, Geometridae), *Sympistis californiae* (Noctuidae), Western Tent Caterpillar (*Malacosoma californica*, Lasiocampidae), Pacific Tent Caterpillar (*Malacosoma constricta*), and Forest Tent Caterpillar (*Malacosoma disstria*, Lasiocampidae).

Valenti et.al. in their intensive study also found infrequently an unidentified skipper and, encountered rarely, these species of Lepidoptera adults associated with Greenleaf Manzanita:

Butterflies: Echo Azure. Moths: *Aethaloida packardaria* (Geometridae), Gray-banded Lilac Looper (*Apodrepanulatrix litaria*, Geometridae), *Chlorosea nevadaria* (Geometridae, an emerald), *Cyclophora dataria* (Geometridae), Spurred Wave (*Drepanulatrix unicalcararia*, Geometridae), *Eudrepanulatrix rectifascia* (Geometridae), *Eupithecia* sp. (Geometridae),

Macaria guenearia (Geometridae), Pale-marked Angle (*Macaria signaria*, Geometridae), Bowling Pin (*Sabulodes edwardsata*, Geometridae), Bordered Fawn (*Sericosema juturnaria*, Geometridae), *Sericosema wilsonensis* (Geometridae), Lappet Moth (*Phylodesma americana*, Lasiocampidae), *Orgyia cana* (Lymantriidae), Lost Dagger (*Acronicta perditia*, Noctuidae), Western Avocado Leafroller (*Amorbia cuneanum*, Tortricidae), and *Tulsa oregonella* (Pyralidae – a tentative identification).

A great diversity of other arthropods also found associated with it! April - June.

Greenleaf Manzanita is a known larval host for the Brown Elfin and Echo Azure.

Coleophoridae: *Coleophora glaucella*.

Gelechiidae: *Gelechia panella*. *Pseudochelaria manzanitae*.

Geometridae: *Aethaloida packardaria*. *Eupithecia gilvipennata*. *Eupithecia misturata*. *Hesperumia fumosaria* (a yellow species). Sulphur Wave (*Hesperumia sulphuraria*). Manzanita Highflier (*Hydriomena manzanita*). Mountain Mahogany Looper (*Iridopsis clivinaria*). Darwin's Green (*Nemoria darwiniata*). *Nemoria glaucomarginaria* (an emerald). Falcate Synaxis (*Tetracis cervinaria*) (see Valenti, 1997).

Lasiocampidae: Lappet Moth (*Phylodesma americana*). Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*). Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: California Tussock Moth (*Orgyia cana*).

Noctuidae: Lost Dagger (*Acronicta perditia*). *Aseptis ethnica* (fq). Brown Woodling (*Egira perlubens*). Garden Cutworm (*Fishia discors*). *Orthosia mys*. *Orthosia pulchella*. *Papestra invalida*. *Sympistis californiae*.

Psychidae: *Hyaloscotes fumosa*.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*) (fq). Mendocino Saturnia Moth (*Saturnia mendocino*). Western Sheepmoth (*Hemileuca eglanterina*).

Sphingidae: Vashti Sphinx (*Sphinx vashti*). Small-eyed Sphinx (*Paonias myops*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). cf. Oblique-banded Leafroller (*Choristoneura rosaceana*). *Epinotia arctostaphylana* (fq). *Epinotia miscana* (fq). *Epinotia nigralbana*. *Epinotia subplicana* (fq). *Epinotia terracoctana* (fq).

Arctostaphylos pumila. **Sandmat Manzanita**. Ericaceae. February – April.

Tortricidae: Sumac Leaf-tier (*Episimus argutana*).

Arctostaphylos pungens. **Pointleaf Manzanita**. **Mexican Manzanita**. Ericaceae. Nectar source for Cabbage White, Orange Sulphur, Sara Orangetip, Southwestern Orangetip, Painted Lady, Brown Elfin, Desert Elfin, Thicket Hairstreak, Juniper Hairstreak, Echo Azure, White-lined Sphinx.

In Arizona, 2011, Fred Heath: “Although the dry year has provided few nectar sources, the abundant Pointleaf Manzanita has been a butterfly magnet with at least 18 ... species ... seen using the plant for nectar.” He also saw two day-flying noctuid moths on it, cf. *Annaphila astrologa* and Six-spotted Litocala (*Litocala sexsignata*). SoWestLep #11045). February - March.

Pointleaf Manzanita aka Mexican Manzanita is a host plant for Brown Elfin.

Geometridae: Graef’s Pug (*Eupithecia graefii*). Sulphur Wave (*Hesperumia sulphuraria*). Manzanita Highflier (*Hydriomena manzanita*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). *Aseptis ethnica*. *Aseptis fumeola*.

Notodontidae: Yellowstriped Caterpillar (*Datana perspicua*).

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

Tortricidae: *Epinotia subplicana*.

Zones 7, 18.

Arctostaphylos purissima. **La Purissima Manzanita**. Ericaceae. Hartmut Wisch photograph on BugGuide shows a Lotus Hairstreak (aka Bramble Green Hairstreak) at nectar. January - March.

Hostplant for Brown Elfin: Alice Abela photographed mature larvae on it in Burton Mesa Ecological Reserve, Santa Barbara County (6 April 2015, Flickr).

Tridentiformidae: *Tridentiforma fuscoleuca* photographed ovipositing on its fruits (Alice Abela).

Arctostaphylos refugioensis. **Refugio Manzanita**. Ericaceae. Nectar: Monarch, Painted Lady, Skipper (Laura Camp, Tree of Life Nursery). December - February.

Arctostaphylos stanfordiana. **Stanford’s Manzanita**. Ericaceae. February – April.

Tortricidae: *Epinotia subplicana*. *Epinotia terracoctana*.

Arctostaphylos tomentosa. **Woollyleaf Manzanita**. Ericaceae. December - March.

Saturniidae: Hostplant for the large, conspicuous day-flying Mendocino Saturnia Moth (*Saturnia mendocino*).

Tortricidae: Variable Oak Leaf-roller (*Epinotia emarginana*).

Arctostaphylos uva-ursi. **Bearberry**. Ericaceae. Nectar: Painted Lady, Green Comma, Hoary Comma, Milbert’s Tortoiseshell, Brown Elfin (fq), Moss’s Elfin (fq) (Richard Guppy), Seaside Hoary Elfin (fq), Western Pine Elfin, Gray Hairstreak, Sheridan’s Hairstreak, Thicket Hairstreak, Echo Azure, Pacuvius Duskywing, Persius Duskywing, Sleepy Duskywing, and Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae). January - June.

[http://images.peabody.yale.edu/lepsoc/jls/1950s/1959/1959-13\(2\)101-Guppy.pdf](http://images.peabody.yale.edu/lepsoc/jls/1950s/1959/1959-13(2)101-Guppy.pdf)

Larval host for Brown Elfin and only known hostplant for Seaside Hoary Elfin.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Mendocino Saturnia Moth (*Saturnia mendocino*).

Geometridae: *Aethaloida packardaria*.

Tortricidae: *Epinotia arctostaphylana*.

Arctostaphylos virgata. **Marin Manzanita**. Ericaceae. December – February.

Tortricidae: *Decodes aneuretus*. *Epinotia arctostaphylana*. *Epinotia bigemina*. *Epinotia nigralbana*. *Epinotia subplicana*. *Epinotia terracoctana*.

Arctostaphylos viscida. **Sticky Whiteleaf Manzanita**. Ericaceae. February - April.

Coleophoridae: *Coleophora glaucella*.

Geometridae: Wavy-lined Cochisea (*Cochisea sinuaria*). Sulphur Wave (*Hesperumia sulphuraria*). Brown-lined Looper (*Nealcis californiaria*).

Noctuidae: *Aseptis ethnica*. *Orthosia mys*.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*).

Zones 7, 14.

Argemone munita. **Prickly Poppy**. Papaveraceae. Painted Lady. Nectar: Pine White, Cabbage White in Clark County, Nevada (Austins). Visited by nocturnal moths. August.

Geometridae: *Neoterpes ephelidaria*.

Zones 7, 9, 14, 18-21.

Aristida sp. **Three-awn**. Poaceae. Aristideae.

1992 Season Summary reports oviposition by Orange Skipperling on it, north end of the Dead Mountains, San Bernardino County (GB, JFE).

Aristolochia californica. **California Pipevine**. Aristolochiaceae. Fungus gnats pollinate its peculiar flowers, which do not attract Lepidoptera. January – April.

The prime larval host for Pipevine Swallowtail. In the Growing Native newsletter, butterfly gardener Jack Schifflin reports that though he had pipevines all over his property, they consistently laid eggs on but one plant – “This one is chewed to the nuggin. This one is covered with blooms, even though it lies entirely on the ground.”

Ironically, the single consistently eaten plant seemed to be stronger than the rest: "... by the end of the season there won't be a single leaf left on this. It grows better than any other pipevine we have. The eating seems to help it. We think there may be a symbiotic relationship. It may not be just a predator relationship, because each year it gets striped of all its leaves and then the next year it comes back, far more vigorous than before. The ones that aren't eaten just sort of eke out an existence." Maybe the frass fertilizes it.

Along a roadside, females seen ovipositing on leaves at the tips of the branches furthest from the mass of the plant.

Zones 7-9, 14-17, 18-23.

Armeria maritima. **Seathrift**. Plumbaginaceae. Nectar: Painted Lady, West Coast Lady, Common Buckeye, Taylor's Checkerspot (a segregate of Edith's Checkerspot), Silverspots including Behren's Silverspot (a segregate of Zerene Fritillary), Common Ringlet, Green Hairstreak, Silvery Blue, Blues, Skippers, moths. February - September.

Easy, and commonly cultivated! Zones 15-17, 21-24.

Arnica chamissonis. **Meadow Arnica**. Asteraceae. Madieae. Nectar: Hoary Comma, Edith's Copper. July - August.

Zones 4-7, 15-18.

Arnica cordifolia. **Heartleaf Arnica**. Asteraceae. Madieae. Nectar: Large Marble, Margined White, Mormon Fritillary, Painted Lady, Milbert's Tortoiseshell, Hoary Comma, Lustrous Copper, Ruddy Copper, Arctic Blue, Greenish Blue, Arctic Skipper. May - July.

Zones 1, 3-7, 15-17.

Arnica latifolia. **Broadleaf Arnica**. Asteraceae. Madieae. Nectar: Pine White, Great Arctic (Sighting 729313 on Butterflies and Moths of North America). Butterflies are common flower visitors to this "abundantly" nectarous plant and among its pollinators (Pojar, 1970). July - August.

Arnica longifolia was *Arnica longifolia* ssp. *myriadenia*. **Seep Spring Arnica**. Asteraceae. Madieae. Nectar: Mormon Fritillary, Rockslide Checkerspot, Milbert's Tortoiseshell, Arctic Blue, Nevada Cloudywing. May - July.

Zones 1, 6, 15-17.

Arnica mollis. **Hairy Arnica**. Asteraceae. Madieae. Nectar: West Coast Lady (Scott), Milbert's Tortoiseshell (fq) (Scott), Sagebrush Sooty Hairstreak (fq) (Scott), Western Branded Skipper (Scott). Butterflies commonly visit its flowers and among its pollinators (Pojar, 1970). July - September.

Arnica nevadensis. **Sierra Arnica**. Asteraceae. Madieae. Nectar: Sagebrush Checkerspot. July - August.

Arnica parryi ssp. *sonnei*. **Sonne's Nodding Arnica**. Asteraceae. Madieae. July - August.

Consistently a hostplant for Painted Lady in Inyo County in 1991, a major migration year.

Arthrocnemum subterminale was *Salicornia subterminalis*. **Parish's Pickleweed**. Chenopodiaceae.

Western Pygmy Blue hostplant -- Steiner considers it third in importance in the San Francisco Bay area.

Artemisia spp. **Sagebrush**. Asteraceae. Anthemideae. "Monarch". That this genus provides nectar seems to be a mistaken observation, likely of mere alighting, sunning or roosting misinterpreted, passed along by those who do not know better. Alternatively, a butterfly testing it for nectar, as they often do, mistaken for an observation of being at nectar. Shapiro says, "Artemisia are wind pollinated and do not produce nectar. What would a butterfly get?"

Various *Artemisia* species serve as larval hosts for the Painted Lady, American Lady and Baird's Swallowtail.

Geometridae: Wormwood Pug (*Eupithecia absinthiata*).

Noctuidae: *Polia nugatis*. Olive-shaded Bird Dropping Moth (*Ponometa candefacta*).

Artemisia californica. **California Sagebrush**. Asteraceae. Anthemideae.

Geometridae: *Eupithecia acutipennis*. McDunnough's Leafwing (*Pero macdunnoughi*). *Plataea californiaria*. *Plataea personaria*. Wavy-lined Emerald (*Synchlora aerata*). *Synchlora faseolaria*.

Lyonetiidae: *Bucculatrix koebelella*. Moths the color of the leaves, may be very abundant.

Noctuidae: *Aseptis susquesa*. *Miodera stigmata*. *Psammopolia ochracea*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Eucosma misturana*. *Eucosma pallidarcis*. *Pelochrista avalona*, a root borer.

Zones 14-24.

Artemisia cana ssp. *bolanderi*. **Silver Sagebrush**. Asteraceae. Anthemideae. Foodplant for Hera Buckmoth.

Zones 1-3, 15-17.

Artemisia douglasiana. **California Mugwort**. Asteraceae. Anthemideae.

Foodplant for American Lady, and served as a hostplant for the Painted Lady at Inverness Ridge, Marin County.

Bucculatricidae: *Bucculatrix transversata* (BugGuide).

Choreutidae: *Caloreas multimarginata*.

Cosmopterigidae: *Cosmopterix opulenta* is a leaf miner.

Gelechiidae: *Scrobipalpa arenaceariella*.

Noctuidae: Figwort Stem Borer (*Papaipema sauzalitae*).

Pterophoridae: Williams' Plume Moth (*Platyptilia williamsii*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Epiblema* sp. *Eucosma artemisiana*. *Eucosma scalana*. *Sparganothis senecionana*. *Sparganothis tunicana*.

Zones 4-9, 14-24.

Artemisia dracunculus. **Tarragon**. Asteraceae. Anthemideae.

Hostplant for Baird's Swallowtail, an Old World Swallowtail segregate, in the San Bernardino Mountains.

Bucculatricidae: *Bucculatrix leptalea*.

Noctuidae: *Euxoa plagigera*.

Tortricidae: *Epiblema benigatum*. *Phaneta argenticostana*. *Sparganothis striata*.

Zones 2, 5, 6, 7, 14-24.

Artemisia ludoviciana. **Silver Wormwood**. Asteraceae. Anthemideae.

Foodplant for Painted Lady and American Lady.

Ssp. *albula* most commonly cultivated; best in zones 4-10, 14-24.

Tortricidae: *Epiblema benignatum* (BugGuide). *Eucosma artemisiana*.

Artemisia nesiotica. **Island Sagebrush**. Asteraceae. Anthemideae.

Bucculatricidae: *Bucculatrix koebelella*. Moths the color of the leaves, may be very abundant.

Gelechiidae: *Chionodes nanodella* reared from Santa Barbara Island populations, where the moth is very abundant; eats decaying leaves at the base of the plant.

Artemisia nova. **Black Sagebrush**. Asteraceae. Anthemideae.

Noctuidae: Angled Gem (*Schinia acutilinea*), a pretty flower moth.

Zones 2, 3, 7, 15-21.

Artemisia rothrockii. **Rothrock's Sagebrush**. Asteraceae. Anthemideae.

Reported as a foodplant for Ruddy Copper.

Zones 1, 2, 7, 15-16.

Artemisia tridentata. **Big Sagebrush**. Asteraceae. Anthemideae.

Big Sagebrush is a hostplant for an obligate root parasite, Clustered Broomrape (*Aphyllon fasciculata*), which is among hostplants for the Variable Checkerspot.

Old flower stalks from the previous year a favored roost site for adult *Euphilotes intermedia comstocki* (Comstock's Blue, a segregate of the Square-spotted Blue), and for Lupine Blue, from late afternoon on (Gordon Pratt).

Honeydew of *Zyzaena crassa* (Homoptera), an aphid that feeds on Big Sagebrush, is an adult food for *Aseptis characta* (Noctuidae) and *Parabagrotis exsertistigma* (Noctuidae) [Johnson & Stafford, 1985].

Saturniidae: Hera Buckmoth (*Hemileuca hera*). Big Sagebrush is the favorite host for Hera Buckmoth; when populations increase it also employs *Lupinus* and *Eriogonum*.

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*).

Bucculatricidae: *Bucculatrix seorsa*. *Bucculatrix tridenticola*.

Gelechiidae: *Aroga trilineella*.

Geometridae: *Synchlora graefiaria* (an emerald species). *Speranza colata*.

Noctuidae: *Abagrotis duanca*. *Abagrotis nanalis*. *Aseptis characta*. Angled Gem (*Schinia acutilinea*).

Pterophoridae: *Oidaematophorus grisescens*.

Tortricidae: *Eucosma caniceps*, a root borer. *Eucosma misturana*. *Pelochrista optimana*, a root borer. *Phaneta salmicolorana*.

Zones 2, 3, 7-10, 14-16, 18-21.

Aruncus dioicus var. *acuminatus*. **Goatsbeard**. Rosaceae. Spiraeaceae. Johnson's Hairstreak, Spring Azure. Hummingbirds. June - September.

Zones 4-7, 15-17; garden invasive, best with ample room or confinement.

Asclepias spp. **Milkweeds**. Apocynaceae. Noted as using milkweeds as nectar (likely in California often Narrowleaf Milkweed): Monarch, Queen, Clodius Parnassian, Western Tiger Swallowtail, Two-tailed Swallowtail, Pipevine Swallowtail, California Dogface, Orange Sulphur, Cabbage White, Checkered White, Western White, Western Sulphur, Red Admiral, American Lady, Buckeye, Callippe Fritillary, Field Crescent, Mylitta Crescent, Northern Checkerspot, Variable Checkerspot, Edith's Checkerspot, Lorquin's Admiral, Great Basin Wood-Nymph. Brown Elfin (Hints), Western Pine Elfin, Gray Hairstreak, Great Purple Hairstreak, Sylvan Hairstreak, Thicket Hairstreak, Johnson's Hairstreak, California Hairstreak, Leda Ministreak, Boisduval's Blue, Acmon Blue, Echo Azure, Silver-spotted Skipper, Mournful Duskywing, Yuma Skipper, Dodge's Skipper, Columbian Skipper, Lindsey's Skipper, Dun Skipper, Umber Skipper. Achemon Sphinx (*Eumorphia achemon*), Elegant Sphinx (*Sphinx perelegans*), Western Snowberry Clearwing (*Hemaris thetis*) mentioned in 1951 Season Summary.

All *Asclepias* spp. are larval hosts for Monarch and Queen.

Arctiidae: Clio Tiger Moth (*Ectypia clio*).

Asclepias albicans. **Wax Milkweed. White-stemmed Milkweed.** Apocynaceae. Nectar: Queen, Monarch. Bumblebees. March - June.

Foodplant for Monarch and Queen.

Asclepias asperula ssp. *asperula*. **Antelope Horns.** Apocynaceae. Nectar: Monarch, Queen, Common Buckeye, Gray Hairstreak, Juniper Hairstreak, Silver-banded Hairstreak, Mormon Metalmark, Orange Skipperling, Sachem. At times very attractive to butterflies (DesertLeps #1888, Saba). Bumblebees. March - September.

Foodplant for Monarch and Queen.

Asclepias californica. **California Milkweed.** Apocynaceae. Nectar: Monarch, Gray Hairstreak, Sylvan Hairstreak, California Hairstreak, Hedgerow Hairstreak, Mountain Mahogany Hairstreak, Gold-hunter's Hairstreak. Bumblebees. April - July.

Hostplant for Monarch.

Arctiidae: Clio Tiger Moth (*Ectypia clio*).

Asclepias cordifolia. **Heartleaf Milkweed. Purple Milkweed.** Apocynaceae. Anise Swallowtail, Pale Swallowtail, Monarch, Juniper Hairstreak, "many butterflies", Clark's Day Sphinx, Sierran Pericopid (*Gnophaela latipennis*, Arctiidae – CalPhotos, Dee E. Warena), Police Car Moth (*Gnophaela vermiculata*, Arctiidae, Tanya Harvey). May - July.

Hostplant for the Monarch.

Asclepias cryptoceras. **Humboldt Mountains Milkweed.** Apocynaceae. Nectar: Unidentified lycaenid (Stephen P. Lynch photograph on Flickr). Bumblebees. April-June.

Hostplant for the Monarch (personal communication, John Emmel).

Asclepias eriocarpa. **Indian Milkweed. Kotolo.** Apocynaceae. Flower visitors: Western Tiger Swallowtail, Sara Orangetip, Monarch, Mourning Cloak, Variable Checkerspot, Painted Lady, Unsilvered Fritillary (rarely), Brown Elfin (David S. Horner), Great Copper, Hedgerow Hairstreak, California Hairstreak (fq), Gold-hunter's Hairstreak (fq), Nelson's Juniper Hairstreak, Echo Azure, Harbison's Dun Skipper. Bumblebees. May - October.

Larval host for the Monarch.

Arctiidae: Clio Tiger Moth (*Ectypia clio*) seen mating and laying eggs on it in Hartmut Wisch photographs.

Zones 7-9, 14, 15, and 18.

Asclepias erosa. **Desert Milkweed.** Apocynaceae. Nectar: Swallowtail (Leslie Saul), Monarch, Queen. Monroes: Ceraunus Blue. April - October.

Larval host for Monarch and Queen.

Arctiidae: “a lovely all-white tiger moth with pink on the underside of its head” (SoWestLep #2748, Allen).

Asclepias fascicularis. **Narrowleaf Milkweed**. Apocynaceae. Nectar: Western Tiger Swallowtail, Two-tailed Swallowtail, Pale Swallowtail, Anise Swallowtail. Becker’s White, Cabbage White, Western White (Jon Gittins), Orange Sulphur. Queen, Monarch (fq), Common Buckeye, Painted Lady, West Coast Lady, American Lady, Variable Checkerspot, Lorquin’s Admiral, Red Admiral, Callippe Fritillary, Mourning Cloak, Field Crescent, Mylitta Crescent, California Ringlet, Great Basin Wood-Nymph. Brown Elfin, Gray Hairstreak, Great Purple Hairstreak, California Hairstreak, Coral Hairstreak (Rob Santry), Gold-hunter’s Hairstreak, Hedgerow Hairstreak, Mountain Mahogany Hairstreak, Sylvan Hairstreak (fq) (David S. Horner), Thorne’s Hairstreak, Great Copper, Purplish Copper, Gorgon Copper, Tailed Copper (Rich Hoyer), Acmon Blue (fq) – one shot shows 13 on one flowering stem! (David Daniels). San Bernardino Blue (USFWS). Western Tailed Blue (Garden Natives photograph), Silver-spotted Skipper, Common Checkered-Skipper, Small Checkered-Skipper, Fiery Skipper, Harbison’s Dun Skipper (preferred over *Eriogonum fasciculatum*), Field Skipper (Sachem), Juba Skipper (Ray Bruun), Rural Skipper, Western Branded Skipper (Ray Bruun), Woodland Skipper. Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae) (fq) (Paul Johnson). Sycamore Borer (*Synanthedon resplendens*, Sesiidae) – a diurnal wasp mimic moth (Hartmut Wisch photograph, BugGuide), and a Paul Johnson photograph shows a Strawberry Crown Moth (*Synanthedon bibionipennis*, Sesiidae) on its flowers at Pinnacles National Monument. Excellent nectar source for Mt. Diablo butterflies. Twelve butterfly species collected on one large patch in the Central Valley; also attracts nocturnal moths. Bumblebees. May - October.

Narrowleaf Milkweed is a foodplant for caterpillars of the Monarch and the Queen.

Arctiidae: Clio Tiger Moth, *Ectypia clio*, an attractive species.

Zones 3, 7-9, 14, 15, 18.

Asclepias latifolia. **Broadleaf Milkweed. Corn Kernel Milkweed**. Apocynaceae. Bumblebees. May – June.

Hostplant for the Queen (Desert Survivors Nursery), a preferred Monarch hostplant in a Texas study (Calvert, 1999).

Asclepias linaria. **Pineleaf Milkweed**. Apocynaceae. Two-tailed Swallowtail, Orange Sulphur, Queen (fq), Monarch (fq), Gray Hairstreak, Great Purple Hairstreak, Leda Ministreak, Golden-headed Scalopwing, butterflies of all sizes. A Bob Beatson photograph shows dozens of Harlequin Webworm Moth (*Diathrausta harlequinialis*, Pyralidae) at nectar on it, in Molino Basin, Santa Catalina Mountains, Pima County, Arizona. On the Desert Butterfly Gardening booklet “most recommended” list. April - November.

Pineleaf Milkweed supports caterpillars of the Queen and the Monarch.

Asclepias nyctaginifolia. **Mojave Milkweed**. Apocynaceae. May - August.

Foodplant for the Monarch and Queen.

Asclepias solanoana. **Serpentine Milkweed**. Apocynaceae.

Hostplant for the Monarch.

Asclepias speciosa. **Showy Milkweed**. Apocynaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Baird's Old World Swallowtail, Anise Swallowtail. Cabbage White, Checkered White, Clouded Sulphur. Monarch, Queen, Common Buckeye, West Coast Lady, Painted Lady, American Lady, Red Admiral, Weidemeyer's Admiral, California Sister, Callippe Fritillary, Great Spangled Fritillary, Northwestern Fritillary, Mourning Cloak, Common Wood-Nymph. Gray Hairstreak, Behr's Hairstreak, California Hairstreak (fq), Coral Hairstreak (fq), Hedgerow Hairstreak, Juniper Hairstreak, Mountain Mahogany Hairstreak, Sylvan Hairstreak (fq), Blue Copper, Ruddy Copper, Tailed Copper, Acmon Blue, Echo Azure. Dun Skipper, Juba Skipper, Lindsey's Skipper, Sachem, Tawny-edged Skipper, Uncas Skipper, Western Branded Skipper, Woodland Skipper. White-lined Sphinx, Sequoia Sphinx (Edna Woodward), Western Snowberry Clearwing (*Hemaris thetis*). Bumblebees. May - September.

Larval host for Monarch and Queen (Todd Stout). Scott notes that larger Monarch larvae often chew the mid-vein to stop the flow of sap, which he believes may be semi-poisonous to them.

Zones 2, 3, 6-10, 14, 15, 18.

Asclepias subulata. **Rush Milkweed. Jumete**. Apocynaceae. Nectar: Desert Black Swallowtail, Dainty Sulphur (Roberta Gibson), Queen (fq), Monarch, California Patch (fq) (Roberta Gibson), Fiery Skipper (Liz Makings), skippers. Nectar --*The Butterfly Gardener's Guide*. Among the 'Most Recommended' by *Desert Butterfly Gardening*. Also gets Ornate Checkered Beetle (*Trichodes ornatus*), bumblebees and spider wasps. Flowers more or less all year.

Larval host for Queen and Monarch, one of the most preferred by the Monarch.

Asclepias vestita. **Woolly Milkweed**. Apocynaceae. Nectar: Boisduval's Blue (Hartmut Wisch photograph), Juniper Hairstreak (Hartmut Wisch photograph), Yuba Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Spingidae – shown in a photograph on BugGuide). April - July.

Larval host for Monarch.

Asteraceae. **Sunflower Family**. Nectar: Dodge's Skipper, Lindsey's Skipper, Hoary Comma, Pearly Marble, Dainty Sulphur, Yellow Sulphur, Green Comma, Great Basin Wood-Nymph; many other butterflies!

Geometridae: Asteraceae are larval hosts for Fortunate Idaea (*Idaea bonifata*).

Noctuidae: Collared Arches (*Lacinipolia strigicollis*) (PNW Moths).

Aster spp. **Asters**. Asteraceae. The traditional "Aster" genus recently subdivided into various other genera (*Eucephalus*, *Eurybia*, *Oreostemma*, and *Symphotrichum*) thus obscuring former common generalizations of lepidopterists! It proves best to be as specific as one possibly can when relating observations ... so doing can make it easier for your readers to know exactly what you were talking about some decades hence, as taxonomy evolves!

Nectar seekers at “asters” include Anise Swallowtail, Two-tailed Swallowtail, Clodius Parnassian, Cabbage White, Checkered White, Western White, Pine White, Orange Sulphur, West Coast Lady, Painted Lady, Variable Checkerspot, Northern Checkerspot, Gray Hairstreak, Common Buckeye, Green Comma, Zephyr Anglewing, Milbert’s Tortoiseshell, Coronis Fritillary, Mormon Fritillary, Lorquin’s Admiral, California Ringlet, Purplish Copper, Edith’s Copper, Lustrous Copper, Melissa Blue, Anna Blue, Western Pygmy Blue, Columbian Skipper, Sandhill Skipper, Yuma Skipper, Skippers. Shapiro finds them mostly excellent or very good butterfly nectar plants.

Geometridae: Wormwood Pug (*Eupithecia absinthiata*). Satyr Pug (*Eupithecia satyrata*). Confused Eusarca (*Eusarca confusaria*). Morrison’s Pero (*Pero morrisonaria*). Wavy-lined Emerald (*Synchlora aerata*).

Noctuidae: *Melanchra pulverulenta*. *Papestra invalida*. Darker-spotted Straw Moth (*Heliothis phloxiphaga*). V-lined Quaker (*Zosteropoda hirtipes*).

Aster spp. Asters. Asteraceae. Astereae.

Lepidoptera recorded as eating “Aster”:

Arctiidae: *Parasemia plantaginis*, Banded Woollybear (*Pyrrharctia isabella*).

Many of our Californian “Aster” have been re-assigned to *Symphotrichum*.

Aster alpigenus var. *andersonii* is now *Oreostemma alpigenum* var. *andersonii*. **Alpine Aster.**

Aster ascendens is now *Symphotrichum ascendens*. **Western Aster.**

Aster breweri is now *Eucephalus breweri*. **Brewer’s Golden Aster.**

Aster chilensis is now *Symphotrichum chilense*. **Pacific Aster.**

Aster engelmannii is now *Eucephalus engelmannii*. **Engelmann’s Aster.**

Aster foliaceus is now *Symphotrichum foliaceum*. **Leafy Aster.**

Aster greatae is now *Symphotrichum greatae*. **Greata’s Aster.**

Aster integrifolius is now *Eurybia integrifolia*. **Thickstem Aster.**

Aster lanceolatus is now *Symphotrichum lanceolatum*. **Panicled Aster.**

Aster ledophyllus is now *Eucephalus ledophyllus* var. *covillei*. **Cascade Aster.**

Aster occidentalis is now *Symphotrichum spathulatum*. **Western Aster.**

Aster radulinus is now *Eurybia radulina*. **Broad-leaved Aster.**

Aster subulatus is now *Symphotrichum subulatum* var. *parviflorum*. **Salt Marsh Aster.**

Astragalus spp. **Milkvetches**. Fabaceae. Galegeae. Nectar: Western Tiger Swallowtail, Cabbage White. There are many species, few able to identify them; likely much “unknown” in this genus, with many more observations yet to be made!

Larval hosts for Queen Alexandra’s Sulphur and several blues in the alpine and sub-alpine zones and a few elsewhere; a very large genus! Also Silver-spotted Skipper, Persius Duskywing, Northern Cloudywing.

Tortricidae: *Grapholita vitrana* (BugGuide).

Astragalus agrestis. **Field Milkvetch**. Fabaceae. Galegeae. Scott notes as flower visitors, likely most or all observations in Colorado: Black Swallowtail, Orange Sulphur, Field Crescent, Greenish Blue (fq), Melissa Blue, Silvery Blue, Pacuvius Duskywing, Persius Duskywing, Nevada Skipper (fq), Tawny-edged Skipper. May – August.

Astragalus bicristatus. **Crested Milkvetch**. Fabaceae. Galegeae. May – August.

Harford’s Sulphur reported ovipositing on it in Los Angeles County, 2001 Season Summary.

Astragalus calycosus var. *calycosus*. **Torrey’s Milkvetch**. Fabaceae. Galegeae. A primary nectar source for a rare Nevadan subspecies of the Shasta Blue (Mt. Charleston Blue), as well as its only known larval host. Likely, at least a good nectar plant in far eastern California where Torrey’s Milkvetch co-occurs with the Shasta Blue. April - July.

Astragalus canadensis. **Canadian Milkvetch**. Fabaceae. Galegeae. June- September.

Larval host for Alexandra Sulphur. Larval host for Melissa Blue (Forister, Matthew L., Chris C. Nice, James A. Fordyce, and Zachariah Gompert. "Host Range Evolution Is Not Driven by the Optimization of Larval Performance: The Case of Lycaeides Melissa (Lepidoptera: Lycaenidae) and the Colonization of Alfalfa." *Oecologia* 160, no. 3 (2009): 551-61. <http://www.jstor.org/stable/40310101>.)

Astragalus crotalarie. **Desert Rattleweed. Salton Milkvetch**. Fabaceae. Galegeae. January - April.

Larval host for Orange Sulphur and Ceraunus Blue (Monroes).

Noctuidae: Alfalfa Semilooper (*Autographa californica*) (HOSTS). *Euxoa declarata*.

Astragalus curvicaarpus var. *curvicaarpus*. **Sickle Milkvetch**. Fabaceae. Galegeae. April – July.

1997 Season Summary reports it as a hostplant for Silvery Blue.

Astragalus douglasii var. *douglasii*. **Jacumba Milkvetch**. Fabaceae. Galegeae. April - July.

Larval host for Harford’s Sulphur.

Tortricidae: *Grapholita vitrana*.

Astragalus douglasii var. *parishii*. **Parish Locoweed**. Fabaceae. Galegeae. Nectar plant and larval host for Harford's Sulphur in Anza-Borrego Desert State Park (Monroes). May - August.

A foodplant for Harford's Sulphur, Ceraunus Blue, Western Tailed Blue, Silvery Blue and Melissa Blue (Monroes).

Astragalus filipes. **Basalt Milkvetch**. Fabaceae. Galegeae. May – July.

1997 Season Summary reports as a hostplant for Silvery Blue.

Astragalus jaegerianus. **Lane Mountain Milkvetch**. Fabaceae. Galegeae. The White-lined Sphinx moth is an occasional flower visitor of this rare endemic species of the Mojave Desert. April - June.

Astragalus kentrophyta var. *tegetarius*. **Mat Milkvetch**. Fabaceae. Galegeae. Moldenke captured the Nevada Cloudywing (a segregate of the Mexican Cloudywing) on its flowers. June - September.

Likely larval host for Nevada Cloudywing (a segregate of Mexican Cloudywing).

Astragalus lentiginosus. **Freckled Milkvetch**. Fabaceae. Galegeae. Nectar: Desert Black Swallowtail, Becker's White, Checkered White, Painted Lady, Alexandra Sulphur, Acmon Blue, Silvery Blue. Flowers attract butterflies in the Mojave Desert – also hummingbirds and 19 species of solitary bees (Leslie Saul). May - July.

Silvery Blue ova found on it in San Bernardino County by John F. Emmel (1984 Season Summary). He reported ova and larvae on it in 1988 Season Summary.

Astragalus lentiginosus var. *fremontii*. **Fremont's Milkvetch**. Fabaceae. Galegeae. April - July (to October at lower elevations).

Hostplant for Alexandra Sulphur and likely for Silvery Blue in Clark County, Nevada.

Astragalus lentiginosus var. *salinus*. **Sagebrush Milkvetch**. Fabaceae. Galegeae. April - June.

Larval host for Alexandra Sulphur.

Astragalus miguelensis. **San Miguel Island Milkvetch**. Fabaceae. Galegeae. Three to four Western Tailed Blues, two a mating pair, seen in a planting of San Miguel Island Milkvetch in the Fullerton Arboretum, Channel Islands Garden, on a 28 January 2012 visit by Rich Schilk. March – July.

Likely hostplant for Western Tailed Blue.

Astragalus nuttallianus. **Nuttall Locoweed**. Fabaceae. Galegeae. Varieties flowering in the range of December - May

Larval host for the Northern Cloudywing.

Astragalus nuttallii var. *nuttallii*. **Ocean Bluff Milkvetch**. Fabaceae. Galegeae. Flowers all year.

Host for Western Tailed Blue (Alice Abela photographs, Santa Barbara County, 16 March 2012, Flickr). A further series of photographs taken in early April 2016 show its caterpillars on this plant, tended by ants, both *Camponotus vicinus* and *Formica lasioides*, in Santa Barbara County. Noted as a host in the 1976 Season Summary, San Luis Obispo County, with caterpillars on seeds in the pods.

Astragalus palmeri. **Palmer's Locoweed**. Fabaceae. Galegeae. December - June.

Foodplant for Harford's Sulphur, Ceraunus Blue, and Western Tailed Blue (Monroes).

Astragalus serenoii var. *shockleyi*. **Shockley's Milkvetch**. Fabaceae. Galegeae. BugGuide photographs show the White-lined Sphinx feeding at its flowers (Aaron Schusteff). May – June.

Astragalus tener var. *ferrisiae*. **Ferris' Milkvetch**. Fabaceae. Galegeae Its floral morphology indicates butterfly pollination. March - June.

Astragalus trichopodus. **Santa Barbara Milk Vetch**. Fabaceae. Galegeae. March – June.

Larval host for Silvery Blue, Western Tailed Blue, Gray Hairstreak.

Astragalus trichopodus var. *lonchus*. **Ocean Locoweed**. Fabaceae. Galegeae. February - June.

Larval host for rare Palos Verde Blue.

Astragalus trichopodus var. *phoxus*. **Antisell Milkvetch**. Fabaceae. Galegeae. Treebeard (Marc Kummel) photographed Pale Swallowtail, Becker's White and Propertius Duskywing at nectar on it. February – June.

Astragalus whitneyi. **Balloon Milkvetch**. Fabaceae. Galegeae.

Shasta Blue oviposits on it, sometimes on the same plants about three weeks after the Western Tailed Blue: Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." *The Great Basin Naturalist* 37 (4): 443-52. <http://www.jstor.org/stable/41711594>.

Oviposition reported for Melissa Blue (*inyoensis*) in 1974 Season Summary by Arthur Shapiro. Also Orange Sulphur.

Astragalus whitneyi ssp. *siskiyouensis*. **Siskiyou Milkvetch**. Fabaceae. Galegeae. June - August.

Larval host for Orange Sulphur and for Western Tailed Blue (its caterpillar eats the green seeds).

Asyneuma prenanthoides was formerly *Campanula prenanthoides*. **Harebell**. Campanulaceae. Nectar: Woodland Skipper. June – September.

Athymanus pusillus. **Common Sandweed**. Brassicaceae. February - June.

Larval host for Sara Orangetip and Western White.

Atrichoseris platyphylla. **Gravel Ghost**. Asteraceae. Cichorieae. Nectar: Pale Swallowtail, California Dogface. February - May.

Atriplex spp. **Saltbush**. Chenopodiaceae.

Fat hen (*Atriplex patula*), quail bush (*Atriplex lentiformis*) and others are foodplants for the Western Pygmy Blue.

Atriplex argentea. **Silverscale**. Chenopodiaceae.

Foodplant for the Saltbush Sootywing.

Atriplex canescens. **Fourwing Saltbush**. Chenopodiaceae.

Foodplant for the Western Pygmy Blue, San Emigdio Blue, Mojave Sootywing (fq), and Saltbush Sootywing (fq). Atypically, a Marine Blue oviposited on male flowers of it at Weldon, Kern County, 19 April 1989 (Season Summary).

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Gelechiidae: *Chionodes pinguicula*.

Geometridae: *Glaucina ochrofuscaria*. *Perizoma custodiata*. Meske's Pero (*Pero meskaria*).

Noctuidae: *Anarta antica*.

Atriplex confertifolia. **Spiny Saltbush**. Chenopodiaceae.

Scott (1986) notes Mojave Sootywing associated with Spiny Saltbush, a possible host. Butterflies of America web site shows a last instar larva of *Hesperopsis libya confertiblanca* Scott, 1981 on it, which seems to confirm it as the host. Plant may not host it in California; the segregate that uses it described from Colorado (Scott, 1992, p. 173).

Gelechiidae: *Chionodes fructuaria*.

Tortricidae: *Eucosma misturana*.

Atriplex cordulata. **Heartscale**. Chenopodiaceae.

Foodplant for the Western Pygmy Blue.

Atriplex coronata. **Crownscale**. Chenopodiaceae.

Foodplant for the Western Pygmy Blue.

Atriplex dioica was *Atriplex subspicata*. **Spike Saltbush**. Chenopodiaceae.

Foodplant for Western Pygmy Blue.

Atriplex coulteri. **Coulter's Salt Bush**. Chenopodiaceae.

Foodplant for the Western Pygmy Blue.

Atriplex hymenolytra. **Desert Holly**.

Larval host for Western Pygmy Blue.

Atriplex lentiformis. **Quail Bush**. Chenopodiaceae.

Larval host for Western Pygmy Blue, Saltbush Sootywing, and MacNeill's Sootywing.

Atriplex leucophylla. **Beach Saltbush**. Chenopodiaceae.

Foodplant for Western Pygmy Blue.

Arctiidae: An unpreferred larval plant for the polyphagus Ranchman's Tiger Moth (*Arctia virginalis*).

Noctuidae: Edwards' Beach Moth (*Anarta edwardsii*). Edwards' Beach Moth is a rare and little-known species with a disjunct distribution: southern Canada and southern California.

Atriplex patula var. *hastata* is now *Atriplex prostrata* (*Atriplex patula* var. *triangularis*). Now not thought to be a native species, though formerly considered so to be, my reason for including it here. **Fat Hen. Triangle Orach**. Chenopodiaceae.

Larval host for Western Pygmy Blue. Steiner considers it second in importance only to the non-native Australian Saltbush in the San Francisco Bay Region. Shapiro considers it is the major host in salt marshes throughout its range. Shapiro found it the prime host in 2017 at Suisun Marsh.

Gelechiidae: Goosefoot Groundling Moth (*Euscrobipalpa atriplicella*).

Pterophoridae: Morning Glory Plume Moth (*Emmelina monodactyla*).

Atriplex polycarpa. **Allscale Saltbush**. July - October.

1997 Season Summary reports as a hostplant for San Emigdio Blue.

Atriplex serenana. **Bractscale**. Chenopodiaceae.

Foodplant for Western Pygmy Blue.

Atriplex subspicata is now *Atriplex dioica*. **Spike Saltbush**.

Baccharis sp. **Baccharis**. Asteraceae. Astereae. Nectar: Orange Sulphur, Monarch, Queen, Red Admiral, Painted Lady, West Coast Lady, Common Buckeye, Sagebrush Checkerspot, Bordered Patch, California Patch. American Snout. Mormon Metalmark, Palmer's Metalmark, Fatal Metalmark. Juniper Hairstreak, Great Purple Hairstreak, Gray Hairstreak, Purplish Copper, Western Pygmy Blue, Marine Blue. Mojave Sootywing, Sandhill Skipper, Fiery Skipper. Almost all of these observed by the Austins in Clark County, Nevada, where Mule Fat, Emory's Baccharis, Shortleaf Baccharis, Indian Broom and Desert Baccharis are native.

Tortricidae: *Baccharis* are among Light Brown Apple Moth (*Epiphyas postvittana*) hosts.

Baccharis brachyphylla. **Shortleaf Baccharis**. Asteraceae. Astereae. American Snout (Liz Makings, others), Great Purple Hairstreak, Gray Hairsteak (Liz Makings), Ceraunus Blue (Liz Makings), *Digrammia* sp. (Geometridae) (Liz Makings) visit flowers. Desert Survivors Nursery lists it as a butterfly nectar plant. In addition, tarantula hawk wasps. July - August.

Larvae of Neumogen's Sagebrush Checkerspot reported found on it in the 1992 Season Summary (Dead Mountains, San Bernardino County).

Baccharis douglasii is now *Baccharis glutinosa*. **Marsh Baccharis**.

Baccharis emoryi is now *Baccharis salicina*. **Emory's Baccharis**.

Baccharis glutinosa was *Baccharis douglasii* (and *Baccharis glutinosa* misapplied to *Baccharis salicifolia*). **Marsh Baccharis**. Asteraceae. Astereae. Nectar: Monarch, American Lady, West Coast Lady, Common Buckeye (fq), California Sister, Satyr Comma. Gray Hairstreak (fq), Tailed Copper, Acmon Blue (fq), Mournful Duskywing. Unidentified orange skipper, unidentified day-flying moths; "generally attractive, especially to coppers, blues, hairstreaks and buckeyes" (Shapiro). Moldenke captured 120 species of flower-visiting insects on it! July - October.

Often used in riparian restoration projects, Marsh Baccharis spreads readily by rhizomes. Well-confined beds or large containers may prove useful for garden deployment. An irrigated area surrounded by un-irrigated soil is another way to create a defined patch of it.

Baccharis pilularis subsp. *consanguinea*. **Coyotebrush**. Asteraceae. Astereae. Shapiro: Coyotebrush provides nectar for "all fall butterflies". Anise Swallowtail. Cabbage White, American Lady, Painted Lady, West Coast Lady, Common Buckeye (fq), Mylitta Crescent, California Sister (fq), Monarch. Common Ringlet (fq). Behr's Metalmark, Mormon Metalmark, Fatal Metalmark. Gray Hairstreak, Great Purple Hairstreak, Purplish Copper (fq), Western Pygmy Blue (fq), Acmon Blue, Marine Blue. Northern White-Skipper, Common Checkered-Skipper, Umber Skipper, Woodland Skipper (fq), Sachem, skippers. Moths. *Pyrallis insequalis*. Powell & Opler found *Arotrura longissima* (Scythrididae) nocturnally at nectar on it in September on San Clemente Island (p. 79). Marc Kummel photographed *Lycomorpha fulgens* or *L. regulus* – a showy tiger moth -- at nectar on one, an unknown smaller drab moth on another. "Male plants are more attractive than females to butterflies" (Shapiro). Shapiro finds it the most visited species of the genus in garden settings in the Sacramento Valley area. July - December.

Coyotebrush is a hostplant for Canyon Dodder (*Cuscuta subinclusa*), also a butterfly nectar plant.

Coleophoridae: *Coleophora lynsoriidella*. *Coleophora viscidiflorella*.

Gelechiidae: *Aristotelia argentifera*. Coyote Brush Twig Borer Moth (*Coleotechnites bacchariella*). Coyote Brush Gall Moth (*Gnorimoschema baccharisella*).

Geometridae: *Eupithecia misturata*. *Letispe metanemaria*. Rindge's Pero (*Pero mizon*). *Prochoerodes truxaliata*. *Synchlora faseolaria* (J.W. Tilden). Omnivorous Looper (*Sabulodes aegrotata*) (J.W. Tilden). *Macaria marcescaria* is strongly associated with Coyotebrush, the likely hostplant. *Tetracis fuscata* (?) (J.W. Tilden, ID uncertain, perhaps confused with a similar *Tetracis*).

Gracillariidae: *Cremastobombycia solidaginis* (Tilden & Wikipedia).

Hepialidae: Lupine Ghost Moth (*Phymatopus californicus*). *Phymatopus hectoides*.

Lyonetiidae: *Bucculatrix dominatrix*. *Bucculatrix separabilis*. *Bucculatrix variabilis*.

Noctuidae: *Adelphagrotis indeterminata*. *Dryotype opina* (J.W. Tilden). Variegated Cutworm (*Peridroma saucia*) (J.W. Tilden). *Tricholita chipeta endiva* Smith? (J.W. Tilden).

Pterophoridae: *Hellinsia confusus*. Coyote Brush Borer Plume Moth (*Hellinsia grandis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Pelochrista eburata*. Omnivorous Leafroller (*Platynota stultana*). *Saphenista saxicolana*.

Zones 5, 14-17, 19-24.

Baccharis pilularis ssp. *pilularis* 'Pigeon Point'. **Dwarf Coyotebrush**. Asteraceae. Astereae. 'Small butterflies'. July - December.

As a hostplant likely serves the same suite of moths as ssp. *consanguinea*.

Baccharis plummerae ssp. *glabrata*. **San Simeon Baccharis**. Asteraceae. Astereae. Nectar: Harford's Sulphur, Gabb's Checkerspot (fq), Behr's Metalmark, Acmon Blue, Tailed Copper, Gray Hairstreak. June - September.

San Simeon Baccharis is a larval host for Gabb's Checkerspot (Langston).

Baccharis salicifolia formerly mistakenly known as *Baccharis glutinosa*. **Mule Fat. Seep Willow**. Asteraceae. Astereae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail. Harford's Sulphur, Cloudless Sulphur (fq), Orange Sulphur. Monarch (fq), Queen (fq), Tiny Checkerspot, Variable Checkerspot, Gabb's Checkerspot, Edith's Checkerspot including Quino Checkerspot, Leanira Checkerspot, Painted Lady, Common Buckeye (fq), Bordered Patch (fq), Field Crescent, Mylitta Crescent, Texan Crescent, Lorquin's Admiral, California Sister, Gulf Fritillary, California Ringlet. American Snout (fq). Fatal Metalmark, Palmer's Metalmark. Brown Elfin, Bramble Green Hairstreak, Great Purple Hairstreak, Gray Hairstreak, Juniper Hairstreak, Leda Ministreak, Hedgerow Hairstreak (fq), Purplish Copper, Acmon Blue (fq), Echo Azure (David S. Horner), Lupine Blue (*monticola*) (David S. Horner), Marine Blue, Reakirt's Blue, Western Pygmy Blue, Silvery Blue. Sleepy Duskywing, Northern White-Skipper, Propertius Duskywing, Fiery Skipper, Hammock Skipper (Robert Behrstock), Veined Ctenucha (*Ctenucha venosa*) (Ned Harris). One of our best butterfly nectar plants. Counter-intuitively, female plants are more attractive than males. Flowers all year.

A hostplant for Echo Azure (Monroes) and for interior populations of Fatal Metalmark (Garth & Tilden).

Geometridae: *Chlorochlamys appellaria*, an emerald.

Used in riparian restoration projects.

Baccharis salicina was *Baccharis emoryi*. **Emory's Baccharis**. Asteraceae. Astereae. Painted Lady, Great Purple Hairstreak (Liz Makings). May - November.

Baccharis sarothroides. **Indian Broom. Desert Broom.** Asteraceae. Astereae. Nectar: Pipevine Swallowtail, Black Swallowtail, Orange Sulphur, Southern Dogface, Cloudless Sulphur, Mexican Yellow, Sleepy Orange, American Snout, Monarch (fq), Queen (fq), American Lady, Painted Lady (Anne Reeves), Red Admiral, Common Buckeye, Variegated Fritillary, Gulf Fritillary, Bordered Patch, Palmer's Metalmark, Great Purple Hairstreak (fq), Leda Ministreak, Spring Azure (Liz Makings), Reakirt's Blue, Western Pygmy Blue, Fiery Skipper. In *Chasing Monarchs* Robert Michael Pyle, he encountered twenty species of butterflies on one flowering specimen! August - November.

Geometridae: *Letispe metanemaria*.

Baccharis sergiloides. **Desert Baccharis.** Asteraceae. Astereae. Nectar: American Snout. Most likely many of the butterflies listed under "*Baccharis* sp." visit Desert Baccharis for nectar. July – October.

Geometridae: *Letispe metanemaria*.

Noctuidae: *Schinia oculata*.

Zones 7-14, 19-24.

Bahia dissecta is now *Amauriopsis dissecta*. **Yellow Ragleaf.**

Bahiopsis laciniata was *Viguiera laciniata*. **San Diego Sunflower.** Asteraceae. Heliantheae. Nectar: Mylitta Crescent, Bramble Green Hairstreak, California Hairstreak, Juba Skipper. This may be the plant in a butterfly garden attracting Afranius Duskywing (SoWestLep #1869). February – August, October – December.

Bahiopsis parishii was *Viguiera parishii*. **Goldeneye.** Asteraceae. Heliantheae. Nectar: Becker's White (Laura Camp), Checkered White, Sleepy Orange, American Lady, Painted Lady, Tiny Checkerspot (fq), Henne's Variable Checkerspot (?), California Patch, Monarch, Queen, Loki Juniper Hairstreak (?), Marine Blue, Silvery Blue, Sonoran Blue (?), Funereal Duskywing, Fiery Skipper, Yuba Skipper, Orange Skipperling and cf. Ridings' Forester Moth (*Alypia ridingsii*, Noctuidae). February – June, September – October.

Larval host for California Patch and sometimes Bordered Patch.

Noctuidae: Alfalfa Semilooper (*Autographa californica*).

Baileya multiradiata. **Desert Marigold.** Asteraceae. Helenieae. Nectar: Checkered White, Desert Marble, Orange Sulphur, Texan Crescent, Painted Lady, West Coast Lady, Sagebrush Checkerspot, Leanira Checkerspot, Variable Checkerspot, Bordered Patch, Fatal Metalmark (Christopher Christie), Mormon Metalmark (fq), Gray Hairstreak (Liz Makings), Leda Ministreak, Western Pygmy Blue, Marine Blue, Reakirt's Blue (Liz Makings), Common Checkered-Skipper, Small Checkered-Skipper, Northern White-Skipper, Alpheus Sootywing, Fiery Skipper, Orange Skipperling. April - July, October.

Noctuidae: Desert Marigold Moth (*Schinia miniana*).

Zones 10-13, 18-21.

Baileya pauciradiata. **Colorado Desert Marigold. Laxflower.** Asteraceae. Helenieae. December - June, October.

Noctuidae: Desert Marigold Moth (*Schinia miniana*).

Baileya pleniradiata. **Woolly Desert Marigold**. Asteraceae. Helenieae. Nectar: Two-tailed Swallowtail (Chris Kline). Checkered White, Mormon Metalmark, Western Pygmy Blue, Reakirt's Blue, Gray Hairstreak, Sagebrush Checkerspot, Bordered Patch, Common Checkered-Skipper, and Mojave Sootywing in Clark County, Nevada. A major Painted Lady nectar source in 1991 migration in Inyo County. March - June, October - November.

Consistently a hostplant for Painted Lady in Inyo County in the 1991 migration year.

Noctuidae: Desert Marigold Moth (*Schinia miniana*).

Balsamorhiza. **Balsamroot**. Asteraceae. Heliantheae. Nectar: Callippe Fritillary.

Noctuidae: *Balsamorhiza* species are among the hostplants of Darker-spotted Straw Moth (*Heliothis phloxiphaga*).

Pterophoridae: *Oidaematophorus balsamorrhizae*.

Balsamorhiza deltoidea. **Deltoid Balsamroot**. Asteraceae. Heliantheae. Important Anise Swallowtail nectar source in Oregon prairie remnants, with slight usage by Field Crescent. Paul Severns finds it serves Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Clodius Parnassian, Variable Checkerspot (fq), Edith's Checkerspot (fq), Mylitta Crescent (fq), Field Crescent (fq), Boisduval's Blue, Acmon Blue, Greenish Blue, Western Tailed Blue, and Eastern Tailed Blue, Propertius Duskywing (Tim Ennis, Ann Potter). April - July.

Balsamorhiza hookeri. **Hooker's Balsamroot**. Asteraceae. Heliantheae. Noted in an Idaho study as a nectar plant for Queen, Alexandra's Sulphur and Boisduval's Blue. May - July.

Balsamorhiza macrolepis. **California Balsamroot**. Asteraceae. Heliantheae. Nectar: Anise Swallowtail. March - July.

Balsamorhiza sagittata. **Arrowleaf Balsamroot**. Asteraceae. Heliantheae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail (fq), Indra Swallowtail, Clodius Parnassian, Becker's White, a Lady, Variable Checkerspot (fq), Edith's Checkerspot (fq), Mylitta Crescent (fq), Field Crescent (fq), Thicket Hairstreak (M. Kuhlman), Boisduval's Blue, Acmon Blue, Greenish Blue, Western Tailed Blue, Eastern Tailed Blue, Persius Duskywing, Juba Skipper (fq), Lindsey's Skipper, Duskywing Moth (*Euclidia ardata*) (Tim Ennis). Bumblebees. May - August.

Choreutidae: *Tebenna gemmalis* (Powell & Opler, p. 122).

Depressariidae: *Exaeretia umbraticostella* (Powell & Opler, p. 66).

Noctuidae: Army Cutworm (*Euxoa auxiliaris*).

Pterophoridae: Western Plume Moth (*Oidaematophorus occidentalis*).

Tortricidae: *Sparganothis senecionana*. *Sparganothis tunicana*.

Barbarea orthoceras. **American Yellowrocket** or **American Wintercress**. Brassicaceae. Nectar: Large Marble, Sara Orangetip (fq), Cabbage White, Gray-veined White (Margined White), Checkered White, Orange Sulphur, Clouded Sulphur. Painted Lady, American Lady, Edith's Checkerspot (David Horner), Coronis Fritillary, Field Crescent, Mylitta Crescent, Milbert's Tortoiseshell (Scott), Green Comma, Hoary Comma, Satyr Comma, Common Ringlet. Brown Elfin, Western Pine Elfin (fq), Bramble Green Hairstreak, Gray Hairstreak, Lustrous Copper, Acmon Blue, Echo Azure, Eastern Tailed Blue, Arrowhead Blue, Greenish Blue, Melissa Blue, Silvery Blue. Northern Cloudywing, Common Checkered-Skipper, Silver-spotted Skipper, Persius Duskywing, Juba Skipper. Many from Scott, who rates it generally "popular". Popular nectar source with the Laguna Mountains Skipper, a Two-banded Checkered-Skipper segregate (SoWestLep #7642). The best of the mustards for observing butterflies at nectar on Mt. Diablo (Hints). March - July.

American Wintercress: "for about two months in spring, the Wintercress plants are a show-stopper in our garden" (Bruce Newhouse, Eugene, Or, NorWestLeps #3745).

Hostplant for Sara Orangetip, Large Marble, Checkered White, Margined White and Cabbage White.

Tortricidae: *Sparganothis senecionana*.

Batis maritima. **Saltwort, Beachwort**. Bataceae. Nectar: Western Pygmy Blue. April - September.

Foodplant for Western Pygmy Blue.

Bee Hives. Some moths feed in bee hives (others suspected for ant nests).

Pyalidae: Greater Wax Moth (*Galleria mellonella*) caterpillars eat bee wax/frass/exuviae (Powell & Opler, p. 186).

Bebbia juncea var. *aspera*. **Sweetbush. Chuckwalla's Delight**. Asteraceae. Millerieae. Nectar: Pipevine Swallowtail, Desert Black Swallowtail. Checkered White (Liz Makings, others), Orange Sulphur, Cloudless Sulphur, Harford's Sulphur, Dainty Sulphur, Sleepy Orange (Christopher Christie), Mexican Yellow, California Dogface (Brett Badeaux), and Southern Dogface (Christopher Christie). Monarch (fq), Queen, Painted Lady, West Coast Lady, Common Buckeye, Tropical Buckeye (Christopher Christie), Bordered Patch, California Patch (Liz Makings, others), Tiny Checkerspot, Sagebrush Checkerspot, Texan Crescent (Christopher Christie), Gulf Fritillary. American Snout. Desert Mexican Metalmark (David S. Horner), Wright's Metalmark (fq), Fatal Metalmark, Mormon Metalmark. Gray Hairstreak, Great Purple Hairstreak, Leda Ministreak, Mallow Scrub-Hairstreak, Acmon Blue, Ceraunus Blue, Marine Blue, Reakirt's Blue, Western Pygmy Blue. Mojave Sootywing, Common Checkered-Skipper, White Checkered-Skipper, Erichson's White Skipper, Northern White-Skipper, Funereal Duskywing, Mournful Duskywing (Anne Reeves photograph), Eufala Skipper (Liz Makings, others), Fiery Skipper, Orange Skipperling, Arizona Powdered-Skipper, Golden-headed Scallopwing, Hammock Skipper. Cabbage Looper. "One of the best butterfly plants in the Sonoran Desert" (*Sonoran Desert Lepidoptera* web page). Usually flowers about April - July.

Sweetbush is a larval host for Wright's Metalmark, which is very closely associated with it.

Tortricidae: *Phalonidia plicana*.

The Chuckwalla is a large herbivorous desert lizard that likes to eat yellow flowers.

Zones 12, 13.

Berberis aquifolium. **Oregon Grape**. Berberidaceae. Nectar: Margined White, Painted Lady, Edith's Checkerspot, Green Comma, Satyr Comma, Brown Elfin, Thicket Hairstreak, Johnson's Hairstreak, Echo Azure (fq), Litocala (*Litocala sexsignata*, Noctuidae). Can be significant for spring butterflies. March-June.

Geometridae: Barberry Geometer (*Coryphista meadii*).

Zones 4-7, 14-17, 19-24.

Berberis aquifolium var. *repens*. **Dwarf Mahonia**. Berberidaceae. April – June. Flowers occasionally visited by a variety of butterflies; California Tortoiseshell. Scott notes (likely mostly Colorado observations): Large Marble, Painted Lady, Callippe Fritillary, Hoary Comma, Satyr Comma, Gray Hairstreak, Coastal Green Hairstreak aka Bramble Green Hairstreak, Brown Elfin, Western Pine Elfin, Nelson's Hairstreak, Sheridan's Hairstreak, Silvery Blue, and Persius Duskywing (Scott for many of these). April – June.

Berberis fremontii. **Fremont Barberrry**. Berberidaceae.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Zones 7-10, 14-16, 18-24.

Berberis nervosa. **Dwarf Oregon Grape**. Berberidaceae. Nectar: Painted Lady, Brown Elfin (Plants in the Pollinator Pathway) and Johnson's Hairstreak. March-June.

Ypsolophidae: *Ypsolopha rubrella* [Wikipedia].

Zones 4-7, 14-17.

Berberis nevinii. **Nevin's Barberrry**. Berberidaceae. Monarch. March - May.

Widely cultivated.

Berberis pinnata. **California Holly Grape**. Berberidaceae. Nectar: Red Admiral. February-May.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leaf-tier (*Cnephasia longana*).

Copromorphidae: *Ellabella bayensis* (Powell & Opler).

Zones 7-9, 14-24.

Bernardia myricifolia. **Bernardia**. Euphorbiaceae. April-May, October-November.

The Alea Hairstreak, aka Lacey's Scrub-Hairstreak (*Strymon alea*, Lycaenidae) is specific to this desert shrub. It is known from southern Baja California and southern Texas. The butterfly not known in California, but the plant is ... has anyone has been looking for the butterfly in California on *Bernardia*?

Considered worth cultivating.

Berula erecta. **Water Parsnip**. Apiaceae. Oenantheae. July – August.

Hostplant for Black Swallowtail.

Betula spp. **Birch**. Betulaceae. Hostplants for:

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Infant (*Archiearis infans*). Dark-bordered Granite (*Digrammia neptaria*). Linden Looper (*Erannis tiliaria*). Chevron (*Eulithis testata*). Northwest Phoenix (*Eulithis xylina*, Canada). Sharp-angled Carpet (*Euphyia intermedia*). Columbia Pug (*Eupithecia columbiata*). *Eupithecia perfusca*. July Highflier (*Hydriomena furcata*).

Noctuidae: *Brachylomia algens*. American Angle Shades (*Euplexia benesimilis*). the Soothsayer (*Graphiphora augur*). Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*). *Papestra cristifera*. *Parastichtis suspecta*. The Herald (*Scoliopteryx libatrix*). Otter Spiramater (*Spiramater lutra*). *Trichordestra tacoma*. Western Swordgrass Moth (*Xylena thoracia*). Colorful Zale (*Zale minerea*).

Notodontidae: Rough Prominent (*Nadata gibbosa*).

Tortricidae: *Acleris senescens*. Sallow Apotomis (*Apotomis capreana*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Diamondback Epinotia (*Epinotia lindana*). Poplar Branchlet Borer (*Epinotia nisella*). Birch Leafroller (*Epinotia solandriana*). *Oreana unicolora* (BugGuide). Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Pandemis limitata*). Poplar Leafroller (*Pseudosciaphila duplex*). Black-and-Gray Banded Leafroller (*Syndemis afflictana*). *Thyraylia nana* (BugGuide; feeds on catkins).

Betula occidentalis. **Water Birch**. Betulaceae.

Popular with Red-naped Sapsucker; sap from Sapsucker wounds, draws sap-feeding Lepidoptera.

Foodplant for caterpillars of the Western Tiger Swallowtail.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Geometridae: Dark Marbled Carpet (*Dysstroma citrata*). *Eupithecia perfusca*. Speckled Granite (*Macaria exauspicata*).

Coleophoridae: Cherry Casebearer (*Coleophora pruniella*).

Bidens cernua. **Nodding Burmarigold**. Asteraceae. Coreopsidae. Nectar: Cabbage White, Checkered White (fq), Clouded Sulphur (fq), Orange Sulphur, Monarch (fq), Red Admiral, American Lady, Viceroy,

Field Crescent, Pearl Crescent, Variegated Fritillary, Gray Hairstreak, Purplish Copper, Dun Skipper, Fiery Skipper, Sachem, Tawny-edged Skipper, Yellow-collared Scape Moth, Bent-line Dart (*Feltia jaculifera*, Noctuidae), Celery Moth, Corn Earworm and likely others. July - October.

Armitage considers it a choice species for cultivation in flower gardens.

Bidens frondosa. **Sticktight**. Asteraceae. Coreopsidae. Nectar: Cabbage White, Checkered White, Orange Sulphur, Dainty Sulphur (fq), Purplish Copper (fq). June – October.

Larval host for Dainty Sulphur – a favorite along lakeshores and creeks in Colorado, according to James A. Scott.

Bidens laevis. **Smooth Burmarigold. Joaquin Daisy**. Asteraceae. Coreopsidae. Nectar: Sleepy Orange, Orange Sulphur, Clouded Sulphur (fq), California Dogface (Las Pilitas Nursery), Cabbage White, Monarch (fq), Viceroy, Painted Lady (fq), American Lady, Red Admiral, Common Buckeye, Pearl Crescent, Mormon Metalmark, Hairstreaks, blues. Mournful Duskywing, Long-tailed Skipper, Common Checkered-Skipper, Sandhill Skipper, Fiery Skipper, Umber Skipper, Sachem. The day-flying Yellow-collared Scape Moth (*Cisseps fulvicollis*, Arctiidae), and other moths such as these Noctuidae: Celery Moth (*Anagrapha falcifera*), Bent-line Dart (*Feltia jaculifera*), Corn Earworm (*Helicoverpa zea*), and Darker-spotted Straw Moth (*Heliothis phloxiphaga*).

In the artificial rearing of the rare Lange's Metalmark, Smooth Burmarigold serves as a surrogate nectar source for the adult butterflies. Pete Veilleux finds it a "butterfly magnet" – "flowers for a very long time and is by far the most popular flower for butterflies in containers" in his Oakland nursery. Smooth Burmarigold is fragrant and a great nectar plant for insects in general; popular with bumblebees. August - November.

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Zones 8, 9, 12, 14-16, 18-24.

Bidens nudata. **Yellow Laguna Bur Marigold. Baja Tickseed**. Asteraceae. Coreopsidae. Native to Baja California, a 3 - 4' "mound of lush green finely cut foliage" (Wildscaping). Said to be of very easy culture, long flowering, and attracts butterflies. November – March.

Bistorta bistortoides was *Polygonum bistortoides*. **Western Bistort**. Polygonaceae. Nectar: Anise Swallowtail, Clodius Parnassian, Rocky Mountain Parnassian, Pine White, West Coast Lady, Pacific Fritillary, California Crescent, Mylitta Crescent, Milbert's Tortoiseshell, Nelson's Hairstreak, Thicket Hairstreak, Echo Azure, Anna's Blue, Boisduval's Blue, Greenish Blue, Sierra Nevada Blue (*Plebejus podarce*) (fq), 'Sierra' Arctic Blue, Juba Skipper. Day-flying moths also, the White-spotted Midget (*Eutricopis nexilis*, Noctuidae) and Sierran Pericopid (*Gnophaela latipennis*, Arctiidae). Army Cutworm (*Euxoa axillaris*, Noctuidae). Moldenke captured two diurnal moth species and two nocturnal moth species on its flowers. July – September.

Zones 1-6; garden invasive.

Blennosperma bakeri. **Sonoma Sunshine**. Asteraceae. Senecioneae. Flowers visited by Three-striped Longhorn (*Adela trigratha*); but mostly native bees and flies. February - April.

Cultivated.

Bloomeria clevelandii was *Muilla clevelandii*. **San Diego Goldenstar**. Themidaceae. The Flame Longhorn (*Adela flammeusella*) visits its flowers. May.

Bloomeria crocea. **Common Goldenstar**. Themidaceae. ‘Great’ for butterflies – Las Pilitas Nursery. April - June.

Cultivated.

Boechea spp. Brassicaceae. Brassicaceae. Nectar: Stella Orange-tip (Shapiro).

Stella Orange-tip (Shapiro). Foodplant for the Gray Marble (HOSTS). Documented as a larval host genus in Nevada for Spring White, Large Marble, Pearly Marble and Thoosa Orange-tip as well and as a nectar plant for them, too.

Regarding *Arabis holboellii*: varieties under this name are now species in *Boechea*. Note that “*Arabis holboellii*” proper not actually found in California (misapplied names); commonly known as **Holboell’s Rock Cress**.

Boechea arcuata was *Arabis sparsiflora* var. *arcuata*. **Arching Rockcress**. Brassicaceae. March - June.

Hostplant for the Sara Orangetip and Boisduval’s Marble in Ventura County (Opler).

Boechea breweri was *Arabis breweri*. **Brewer’s Rock Cress**. Brassicaceae. March - July.

Larval host for Western White.

Zones 4-7, 14-17, 22-24.

Boechea divaricarpa was *Arabis divaricarpa*. **Spreadingpod Rockcress**. Brassicaceae. Nectar: Large Marble, Silvery Blue (Idaho observations), Uncas Skipper (Scott). May - July. Likely larval host for Large Marble.

Boechea lyallii was *Arabis lyallii*. **Lyall’s Rockcress**. Brassicaceae. June - August.

Foodplant for Sara Orangetip and Large Marble.

Boechea pauciflora was *Arabis sparsiflora* var. *subvillosa*. **Hairystem Rockcress**. Brassicaceae. Serves as a nectar plant and larval host for the Spring White, at least in Utah. May - June.

Boechea perennans was *Arabis perennans*. **Nevada Rockcress**. Brassicaceae. Nectar: Spring White, Southwestern Orangetip, likely others for which it is a host and possibly others. February - May.

Caterpillar food plant for “Desert Edge’ Gray Marble (Monroes) and Pearly Marble (*lotta*) (Todd Stout). A larval host for Spring White and Southwestern Orangetip [*thoosa* segregate of Sara Orangetip], at least in Utah. Large Marble (Todd Stout). Foodplant for Sara Orangetip, says HOSTS (observation SoWestLep #11040).

Nevada Rockcress considered attractive enough to be worth cultivating.

Boechea pinetorum. **Woodland Rockcress**. Brassicaceae.

Foodplant for Western White: Shapiro, Arthur M. "THE ALPINE BUTTERFLIES OF CASTLE PEAK, NEVADA COUNTY, CALIFORNIA." *The Great Basin Naturalist* 37, no. 4 (1977): 443-52.
<http://www.jstor.org/stable/41711594>.

Boechea platysperma was *Arabis platysperma*. **Pioneer Rockcress**. Brassicaceae. June - August.
Foodplant for Sara Orangetip and Western White.

Boechea platysperma was *Arabis platysperma*. **Pioneer Rockcress**. Brassicaceae. July – August.

Sara Orangetip. Foodplant for Western White: Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." *The Great Basin Naturalist* 37 (4): 443-52.
<http://www.jstor.org/stable/41711594>.

Boechea pratincola. **Meadow Rockcress**. Brassicaceae. Nectar plant for Sara Orangetip. June – August.

Hostplant for Sara Orangetip in southern Oregon (Tanya Harvey).

Boechea retrofracta was *Arabis holboellii* var. *retrofracta*. **Holboell's Rock Cress**. Brassicaceae. April - August.

Foodplant for Boisduval's Marble in the Trinity Alps area. A foodplant for Western White: (Shapiro, 1977).

Boechea sparsiflora was *Arabis sparsiflora*. **Sicklepod Rockcress**. Brassicaceae. April - June.

Larval host for 'Grinnell's Gray Marble (Monroes) and Sara Orangetip, Large Marble, Gray Marble, Checkered White (Todd Stout), Spring White.

Boechea stricta was *Arabis drummondii*. **Drummond's Rockcress**. Brassicaceae. Scott notes flower visits by Large Marble and Greenish Blue. May – August.

Hostplant for Gray Marble, Large Marble, Checkered White, Gray-veined White (Margined White), Spring White (Todd Stout) and Western White.

Boechea suffrutescens was *Arabis suffrutescens*. **Woody Rockcress**. Brassicaceae. June - August.

Foodplant for Sara Orangetip and Large Marble.

Boerhavia coccinea. **Scarlet Spiderling**. Nyctaginaceae. Nectar: Reakirt's Blue (Anne Reeves), *Embola powellii* (Helioidinidae), a plume moth (Anne Reeves). April - July.

Larval host for Variegated Fritillary.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Zones 8, 9, 13.

Boerhavia triquetra var. *intermedia*. **Fivewing Spiderling**. Nyctaginaceae. August - October.

Foodplant for Variegated Fritillary.

Boerhavia wrightii. **Wright's Spiderling**. Nyctaginaceae. Nectar: California Patch (Anne Reeves).
Marine Blue (Anne Reeves). August – December.

Bolboschoenus fluviatilis was *Scirpus fluviatilis*. **River Bulrush**. Cyperaceae.

Hostplant for *Bactra maiorina* (Tortricidae).

Bolboschoenus maritimus spp. *paludosus* was *Scirpus maritimus*. **Alkali Bulrush**. Cyperaceae.
Arctiidae: Alkali Bulrush, and likely many other Cyperaceae species, is a larval host for the Yellow-collared Scape Moth (*Cisseps fulvicollis*). The caterpillars may eat a large portion of the “standing crop”!

Elachistidae: *Elachista salinaris*.

Bothriochloa barbinodis. **Cane Beardgrass**. Poaceae. Andropogoneae.

Noctuidae: Paradoxical Grass Moth (*Heliocheilus paradoxus*).

Bouteloua curtipendula. **Side-oats Grama**. Poaceae. Chlorideae.

Foodplant for Orange Skipperling.

Saturniidae: Hualapai Buckmoth (*Hemileuca hualapai*).

Bouteloua gracilis. **Blue Grama**. Poaceae. Chlorideae.

Foodplant for Ridings' Satyr, Uncas Skipper and Pahaska Skipper.

Bowlesia incana. **Bowlesia**. Apiaceae. Azorelloideae. March – April.

Prodoxidae: *Greya powelli*, caterpillars feed on the developing seeds.

Brassicaceae. Mustard Family. Adult Pierids are frequent visitors to flowers of their hostplants in the mustard family.

Various Brassicaceae are larval hosts for Becker's White, Checkered White, Cabbage White, Boisduval's Marble, Large Marble, Pearly Marble, Sara Orangetip, and Western White.

Noctuidae: larval hosts of the polyphagous Rufous Quaker (*Protorthodes rufula*).

Brickellia californica. **California Brickelbush**. Asteraceae. Eupatorieae. Scott records Cabbage White as a flower visitor. Shapiro finds it gets some butterflies; most often Gray Hairstreak. Las Pilitas Nursery says, “pay attention and you find butterflies on the Brickellia” and displays photographs of flower visits by Acmon Blue and Funereal Duskywing. Eufala Skipper (John Heyse), Woodland Skipper (Shapiro). Intensely fragrant at evening, drawing moths. July - December.

Noctuidae: Likely host for *Hexorthodes nipana*. *Schinia buta*. *Schinia oleagina*.

Zones 7, 14-16, 18-24.

Brickellia grandiflora. **Tasselflower Brickellbush. Golden Sashay**. Asteraceae. Eupatorieae. July – October.

Hostplant for Bordered Patch in its Arizona range.

Brodiaea spp. **Cluster Lilies**. Themidaceae. Nectar: Swallowtails, Painted Lady, Unsilvered Fritillary and other butterflies. Butterworth: Sonoran Blue, Large Marble, Sara Orangetip, and the Northern Cloudywing among its flower visitors. ‘All are good’ nectar plants – Shapiro. *Dichelostemma* and *Triteleia*, once known as *Brodiaea*, are included in the generalization “*Brodiaea* spp.” in older works.

Tortricidae: *Sparganothis senecionana*.

Brodiaea appendiculata. **Hoover's Brodiaea**. Themidaceae. A showy species, butterflies associated with it (CalFlora). April – May.

Brodiaea californica. **California Brodiaea**. Themidaceae. Butterflies (CalFlora). May-July.

Brodiaea coronaria. **Crown Brodiaea**. Themidaceae. Butterflies (Calflora). May – June.

Brodiaea elegans subsp. *elegans*. **Harvest Brodiaea**. Themidaceae. Nectar: Pipevine Swallowtail, Anise Swallowtail, Western Tiger Swallowtail, Variable Checkerspot, Lindsey’s Skipper (fq), Dun Skipper, spring skippers. April - August.

Zones 4, 5, 7, 15-17.

Brodiaea filifolia. **Threadleaf Brodiaea**. Themidaceae. Butterflies (Calflora). March – June.

Brodiaea insignis. **Kahweh Brodiaea**. Themidaceae. Endangered plant. Flower visitors: Sara Orangetip, California Ringlet, *Adela trigrapha*, *Adela* sp., *Schinia* spp. May - June.

Cultivated.

Brodiaea jolonensis. **Chaparral Brodiaea**. Themidaceae. Butterflies (Calflora). April – June.

Brodiaea kinkiensis. **San Clemente Island Brodiaea**. Themidaceae. Butterflies (Calflora). May – June.

Brodiaea terrestris. **Dwarf Brodiaea**. Themidaceae. Nectar: Bay Checkerspot (a segregate of Edith’s Checkerspot), Skippers, Umber Skipper. April - July.

Zones 15-17.

Bromus spp. **Bromeagrasses**. Poaceae. Bromeae.

Larval host for Oregon Skipper (Garth & Tilden). Likely serves several other grass feeding butterfly species; specific and precise larval host information for grass and sedge feeders is scarce!

Arctiidae: Yellow-collared Scape Moth (*Cisseps fulvicollis*).

Noctuidae: *Leucania insueta*. Phragmites Wainscot (*Leucania phragmitidicola*).

Bromus carinatus. **California Brome**. Poaceae. Bromeae.

Foodplant for the Umber Skipper: various field observations of oviposition and mature larvae (Barbehenn, 1994); observed in Scotts Valley, Santa Cruz County (1979 Season Summary). Considered a likely foodplant for the Common Wood-Nymph and Juba Skipper.

Buddleja utahensis. **Panamint Butterfly Bush**. Scrophulariaceae. Likely a good Lepidoptera nectar plant, but I was unable to get any specific information. Flowers May - October.

Bursera microphylla. **Elephant Tree**. Burseraceae. May - June.

Foodplant for the Electra Buckmoth (*Hemileuca electra*).

Cacaliopsis nardosmia formerly *Luina nardosmia*. **Silvercrown**. Asteraceae. Senecioneae. Nectar for Painted Lady (fq) (Yake, NorWestLeps #2031). April – July.

Calamagrostis canadensis var. *canadensis*. **Bluejoint Reed Grass**. Poaceae. Poaeae.

Possible host for the Arctic Skipper (The Butterflies of Massachusetts web site).

Calamagrostis nutkaensis. **Pacific Reedgrass**. Poaceae. Poaeae.

Noctuidae: Large Cutworm (*Apamea maxima*) – thought to specialize in eating this grass (PNW Moths).

Calamagrostis purpurascens. **Purple Reedgrass**. Poaceae. Poaeae.

Foodplant for Arctic Skipper (Garth & Tilden).

Calandrinia menziesii. **Red Maids**. Montiaceae. Nectar: Orange Sulphur, Cabbage White, Common Buckeye, Gray Hairstreak. Acmon Blue (photo by LightofMorn), Common Sootywing, Common Flower Moth (*Schinia pulchripennis*) (Jerry Ting).. February - May.

Zones 7-12, 14-24.

Calliandra californica. **Baja Fairy Duster**. Fabaceae. Ingeae. Nectar: Cloudless Sulphur, Southern Dogface, Monarch (fq), Queen (Anne Reeves), Tiny Checkerspot, Palmer's Metalmark, Ceraunus Blue, Marine Blue (fq). Zebra Longwing (not likely to be seen in California) nectar on this showy flowering shrub! Hummingbirds. Baja Fairy Duster is among 'Most Recommended' by *Desert Butterfly Gardening*. Flowering continuous in Zone 13, nearly so in Zone 12, during warmer parts of the year in other zones. Native to Baja California.

Hostplant for Ceraunus Blue and Marine Blue. A favorite larval plant for the Marine Blue.

Zones 10 – 24.

Calliandra eriophylla. **Fairyduster**. Fabaceae. Ingeae. Nectar – *The Butterfly Gardener's Guide*, others. Swallowtails, large butterflies, Tiny Checkerspot (B.J. Stacey), Mormon Metalmark (B.J. Stacey), Fiery Skipper, Orange Skipperling (Liz Makings). Attracts, pollinated by, many owl and inchworm moths. Hummingbirds. Flowers February - April and after September or October rains.

Nature's Archive Blog says Fairyduster is a larval host for the Ceraunus Blue and Marine Blue. Echo Azure oviposited on Fairyduster flower buds (SoWestLep #11040). Jim Brock confirms it as a hostplant.

Noctuidae: Merry Melipotis (*Melipotis jucunda* Huebner) in the Organ Pipe National Monument, Arizona.

Cultivated in Zones 10 - 24.

Callitropsis nootkatensis was *Chamaecyparis nootkatensis* and *Cupressus nootkatensis*. **Alaska Yellow Cedar**. Cupressaceae.

Alaska Yellow Cedar is a foodplant for the Cedar Hairstreak.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*, Canada).

Geometridae: Packard's Girdle (*Enypia packardata*, Canada). *Eupithecia unicolor*.

Calocedrus decurrens. **Incense Cedar**. Cupressaceae.

Foodplant for Nelson's Hairstreak. Supports Juniper Mistletoe (*Phoradendron juniperinum*), a hostplant for Great Purple Hairstreak.

Cosmopterigidae: *Periploca dentella*.

Geometridae: Burney Granite Moth (*Digrammia burneyata*). *Eupithecia placidata*. *Eupithecia sabulosata*. Brownlined Looper (*Neocalcis californiaria*).

Noctuidae: Cedar Pinion (*Lithophane gausapata*).

Tineidae: *Nemapogon oregonella* eats a conk that grows on Incense Cedar, *Oligoporus amarus*.

Tortricidae: *Cydia cupressana*.

Yponomeutidae: *Argyresthia arceuthobiella*. *Argyresthia libocedrella*.

Zones 2-9, 14-24.

Calochortus catalinae. **Catalina Mariposa Lily**. Liliaceae. March – May.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Calochortus clavatus ssp. *pallidus*. **Pale Yellow Mariposa Lily**. Liliaceae. Nectar: Variable Checkerspot (Nature Shutterbug). April - July.

Considered difficult to cultivate.

Calochortus coeruleus. **Blue Star Tulip**. Liliaceae. Nectar: Glenn Fine notes 1 species of Lepidoptera as a flower visitor in his Siskiyou County study. May – June.

Calochortus invenustus. **Plain Mariposa Lily**. Liliaceae. Nectar: Western Branded Skipper (Monroes). May - August.

Considered difficult to cultivate.

Calochortus leichtlinii. **Sego Lily**. Liliaceae. Clodius Parnassian at nectar in an online photograph. Paul Johnson got a photograph of Nelson's Hairstreak at King's Canyon National Park at nectar on what appears to be this species. June - August.

Considered difficult to cultivate.

Calochortus luteus. **Yellow Mariposa Lily**. Liliaceae. Nectar: Common Buckeye, Variable Checkerspot, California Ringlet, California Hairstreak (J. Maughn), Acmon Blue. Shapiro finds *Calochortus* spp. rarely visited by butterflies. Moldenke records a *Schinia* sp. for *C. luteus*, the same moth also visits *Plectritis macrocera*. April - June.

Zones 7, 8, 14-17, 19-24.

Calochortus macrocarpus. **Sagebrush Mariposa Lily**. Liliaceae. Nectar: Behr's Hairstreak. July – August.

Calochortus monophyllus. **Yellow Star Tulip**. Liliaceae. Nectar: Mylitta Crescent, Nelson's Hairstreak, Persius Duskywing, Dreamy Duskywing, Northern Cloudywing – photographs and observations in Shasta County in June 2011 by Ray Bruun. April - May.

Best in Zone 7; considered difficult.

Calochortus nudus. **Naked Mariposa Lily**. Liliaceae. Nectar: Glenn Fine notes 4 species of Lepidoptera visiting its flowers in his Siskiyou County study.

Calochortus obispoensis. **San Luis Mariposa Lily**. Liliaceae. Nectar: *Schinia* sp. E (Moldenke). May - June.

Calochortus splendens. **Splendid Mariposa Lily**. Liliaceae. Butterflies (*Pollinator Partnership*). May - July.

Zone 7.

Calochortus striatus. **Adobe Lily**. Liliaceae. Nectar: Western Pygmy Blue (online photograph). Butterflies – *Pollinator Partnership*. April - June.

Calochortus superbus. **Yellow Mariposa Lily**. Liliaceae. An online photograph taken in El Dorado County shows a Common Ringlet at nectar on what appears to be this species. May - July.

Calochortus tolmei. **Tolmei's Star-tulip**. Liliaceae. Nectar: Western Tiger Swallowtail, Anise Swallowtail, Boisduval's Blue, Western Tailed Blue, and Eastern Tailed Blue; and rarely, by the Common Ringlet (Paul Severns). A top nectar plant for Fender's Blue (a segregate of Boisduval's Blue) in Oregon. Secondary nectar source for Taylor's Checkerspot (a segregate of Edith's Checkerspot) in western Oregon (Severns & Warren, B. Newhouse). Common Checkered-Skipper. April - July.

Zone 7.

Calochortus uniflorus. **Large Flowered Star Tulip**. Liliaceae. Nectar: Melissa Blue. April – June.

Calochortus venustus. **Butterfly Mariposa Lily**. Liliaceae. Moldenke records a *Schinia* sp. associated with its flowers. May - July.

Calycadenia multiglandulosa. **Rosin Weed**. Asteraceae. Madieae. *Heliothodes diminutiva*, a small fast-flying diurnal owl moth, visits the flowers (Aaron Schusteff). May – October.

Calycadenia villosa. **Dwarf Western Rosinweed**. Asteraceae. Madieae. Nectar: *Schinia* sp. (Noctuidae). May - September.

Calycanthus occidentalis. **Western Spicebush**. Calycanthaceae. Nectar: Silver-spotted Skipper. Observed by Robert Michael Pyle ... but probably didn't get much nectar; the pollinator, one of very few usual visitors, seems to be a 3 mm beetle, *Colopterus truncatus* (Nitidulidae) (Grant, Verne. "The Pollination of *Calycanthus Occidentalis*." *American Journal of Botany* 37, no. 4 (1950): 294-97. <http://www.jstor.org/stable/2437849>.) March – August.

Limacodidae: Saddleback Caterpillar (*Acharia stimulea*) – a polyphagus mostly eastern species, strikingly colored caterpillar able to deliver a nasty sting. Moth Photographer's Group shows three records from California.

Tortricidae: *Argyrotaenia* sp. Oblique-banded Leafroller (*Choristoneura rosaceana*).

Calyptridium monospermum. **One Seeded Pussypaws**. Montiaceae. Nectar: Pacific Fritillary, Lustrous Copper (Cal French), Arctic Skipper (Aaron Schusteff photographs on BugGuide), Sandhill Skipper (Ron Wolf). In his Siskiyou County study Glenn Fine notes 18 species of Lepidoptera visiting its flowers. April – September.

Calyptridium umbellatum is also widely known as *Cistanthe umbellata* var. *umbellata*, which see for the account. **Pussypaws**.

Calystegia sp. **Morning Glory**. Convolvulaceae. Flower visitors: Cloudless Sulphur (Butterworth), California Dogface (B.J. Stacey), Umber Skipper, Woodland Skipper.

Calystegia collina subsp. *oxyphylla*. **Mount Saint Helena Morning Glory**. Convolvulaceae. Nectar: Rural Skipper (<https://www.inaturalist.org/observations/12909567>).

Calystegia longipes. **Piute Morning Glory**. Convolvulaceae. Nectar: Cloudless Sulphur (Liz Makings). May - July.

Calystegia macrostegia. **Island Morning Glory**. Convolvulaceae. Nectar: Anise Swallowtail (Tom Barnes). White-lined Sphinx. Many subspecies with flowering times as early as February to as late as August.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*) and for subcategory *insulana*.

Calystegia macrostegia subsp. *tenuifolia*. **Island False Bindweed**. Convolvulaceae. Nectar: Harbison's Dun Skipper. May.

Calystegia occidentalis. **Western Morning Glory**. Convolvulaceae. Nectar: Rural Skipper. May – July.

Calystegia purpurata. **Purple Western Morning Glory**. Convolvulaceae. Nectar: Western Tiger Swallowtail (T. J. Gehling photograph), Anise Swallowtail (T. J. Gehling).

Calystegia soldanella. **Beach Morning Glory**. Convolvulaceae. April - August.

Arctiidae: an unpreferred host for the polyphagus Ranchman's Tiger Moth (*Arctia virginialis*).

Zones 17, 24.

Camassia leichtlinii subsp. *suksdorfii*. **Suksdorf's Large Camas. Great Camas**. Agavaceae. Nectar: Anise Swallowtail, Silvery Blue, Propertius Duskywing (fq). May – August.

Camassia quamash ssp. *breviflora*. **Small Camas**. Agavaceae. Flower visitors: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Cabbage White, Painted Lady, Edith's Checkerspot (a preferred nectar source in Washington for the Taylor's Checkerspot segregate), Juniper Hairstreak, Silvery Blue, Echo Azure, and Propertius Duskywing (fq). Also a nectar plant for the Fender's Blue in Oregon. Clark's Day Sphinx (*Proserpinus clarkiae*, Sphingidae). May - July.

Zones 1, 4-6.

Camissonia boothii is now *Eremothera boothii*. **Booth's Evening Primrose**.

Camissonia californica is now *Eulobus californicus*. **California Suncup**.

Camissonia campestris. **Mojave Suncup**. Onagraceae. March - May.

Sphingidae: Kern Primrose Sphinx (*Euproserpinus euterpe*), Carrizo Plain (southeastern San Luis Obispo County) and a for an undescribed *Euproserpinus* sp. (Paul Johnson). Pacific Green Sphinx (*Proserpinus lucidus*) (HOSTS).

Camissonia claviformis is now *Chylismia claviformis*. **Browneyes**.

Camissonia contorta. **Plains Evening Primrose**. Onagraceae. May - June.

Noctuidae: an *Alypia* sp. (Forester) [Paul Johnson].

Sphingidae: Kern Primrose Sphinx (*Euproserpinus euterpe*) (observed in Walker Basin), and an undescribed *Euproserpinus* sp. which also feeds on *Camissonia campestris* [Paul Johnson], Pacific Green Sphinx (*Proserpinus lucidus*).

Camissonia strigulosa was *Oenothera contorta* var. *epilobioides*. **Sandy-soil Suncup**. Onagraceae. Nectar: Quino Checkerspot (a segregate of Edith's Checkerspot). March - May.

Sphingidae: Larval host for rare and endangered Kern Primrose Sphinx Moth (*Euproserpinus euterpe*). It also lays its eggs on *Erodium cicutarium*, red-stem filaree, a common non-native range plant that unfortunately fails to provide proper nutrition for the caterpillars, which die on it.

Camissoniopsis bistorta. **Southern Suncup**. Onagraceae. Nectar: West Coast Lady, Gulf Fritillary, and Quino Checkerspot (a segregate of Edith's Checkerspot). March - June.

Noctuidae: Ridings' Forester (*Alypia ridingsii*), a showy day-flying moth.

Sphingidae: Phaeton Primrose Sphinx (*Euproserpinus phaeton*), a showy day-flying hawkmoth.

Camissoniopsis cheiranthifolia subsp. *cheiranthifolia*. **Beach Evening Primrose**. Onagraceae. April - August.

Arctiidae: A secondary hostplant for the Ranchman's Tiger Moth (*Arctia virginalis*).

Camissoniopsis micrantha was *Camissonia micrantha*. **Spencer Primrose. Miniature Sun Cup**. Onagraceae. March - May.

Sphingidae: A hostplant for the White-lined Sphinx (*Hyles lineata*) in Pinnacles (Paul Johnson). *Campanula rotundifolia*. **Harebell**. Campanulaceae. Swallowtails (Link). July - September.

Camissoniopsis pallida. **Pale Yellow Suncup**. Onagraceae. March - August.

Sphingidae: Phaeton Primrose Sphinx (*Euproserpinus phaeton*). (Monroes).

Noctuidae: Riding's Forester (*Alypia ridingsii*). Monroes report it using this plant in Anza-Borrego area.

Cardamine angulata. **Seaside Bittercress**. Brassicaceae. Nectar for Margined White. April - June.

Hostplant for Margined White and Sara Orangetip (Salix Associates).

Cardamine breweri. **Brewer's Bittercress**. Brassicaceae. June-July.

Jonathan Pelham reports it is a larval host for the Margined White.

Cardamine californica was *Dentaria californica*. **Milkmaids**. Brassicaceae. Nectar: Sara Orangetip, Gray-veined White (Margined White), Sonoran Blue, Two-banded Checkered Skipper, *Annaphila depicta* (Noctuidae), *Annaphila diva* (Kummel, ID uncertain), *Epirrhoe plebeculata* (Geometridae) (Paul Johnson, J. Maughn), likely others. *Growing Native*: A "good butterfly nectar plant". January - May.

Larval host for the Sara Orangetip and Gray-veined White (Margined White).

Tortricidae: *Clepsis fucana* (Copp, 1993).

Cardamine cordifolia. **Heartleaf Bittercress**. Brassicaceae. Nectar: Large Marble, Margined White, Zerene Fritillary. May - August.

Foodplant for Gray-veined White (Margined White).

Cardamine nuttallii. **Nuttall's Toothwort**. Brassicaceae. Early nectar source. March – May.

Hostplant for Margined White (Salix Associates).

Cardamine oligosperma. **Western Bittercress**. Brassicaceae. March – July.

Jeremy Tatum found that caterpillars of Sara Orangetip would accept this plant as food.

Carex spp. **Sedges**. Cyperaceae.

Todd Stout says almost any species of sedge will work as a lab rearing plant for Sonora Skipper (*utahensis* segregate) or Dun Skipper.

Elachistidae: *Elachista cucullata*, feeds on narrow-leaved species (BugGuide).

Noctuidae: American Ear Moth (*Amphipoea americana*). *Apamea digitula* – probably a grass-feeding generalist (PNW Moths), but Powell & Opler note it found rarely on sedges (p. 295). Dark-winged Quaker (*Eremobina claudens*). *Eremobina uncinata* – probably eats sedges (PNW Moths). Reniform Celaena (*Helotropha reniformis*) (PNW Moths). *Hypocoena inquinata* (PNW Moths). *Hypocoena rufostriata* (PNW Moths). Phragmites Wainscot (*Leucania phragmitidicola*). Lesser Wainscot (*Mythimna oxygala*).

Tortricidae: *Bactra miwok* developed on a non-native *Carex* sp. in a laboratory test.

Carex filifolia. **Threadleaf Sedge**. Cyperaceae.
A foodplant for the Dun Skipper (James & Nunnallee).

Noctuidae: *Sympistis kelloggii*.

Carex geyeri. **Geyer's Sedge**. Cyperaceae. May – August.

Hostplant for Chryxus Arctic (Todd Stout).

Todd Stout: Works as a lab rearing plant for Sonora Skipper (*utahensis* segregate) and Dun Skipper.

Carex hoodii. **Hood's Sedge**. Cyperaceae. June – September.

Todd Stout: “Great lab host plant for many sedge-feedings skippers and satyrs” including Dun Skipper, Sonora Skipper (*utahensis*) and Chryxus Arctic.

Carex inops. **Long Stolon Sedge**. Cyperaceae.

Foodplant for Dun Skipper (HOSTS). Oviposition on it by female Western Branded Skipper.

Carex nebrascensis. **Nebraska Sedge**. Cyperaceae. June – September.

Todd Stout: Works as a lab rearing plant for Sonora Skipper (*utahensis* segregate) and Dun Skipper.

Carex spectabilis. **Showy Sedge**. Cyperaceae.

Foodplant for Chryxus Arctic (HOSTS).

Considered worthy of cultivation.

Carex spissa. **San Diego Sedge**. Cyperaceae.

Foodplant for the Dun Skipper (Harbison's Dun Skipper) and Umber Skipper (HOSTS). 1984 Season Summary notes Eufala Skipper larvae on a cultivated specimen in Riverside County (John F. Emmel).

Carnegiea gigantea. **Saguaro**. Cactaceae. Flowers occasionally attract butterflies. Much more conspicuously the major pollinators: Lesser Long-nosed Bat, doves, and bees. May – June.

Carrion (juices of freshly dead or long decaying vertebrates). An adult food resource, especially for males. Pipevine Swallowtail, Pale Swallowtail, Indra Swallowtail, Two-tailed Swallowtail, Western Tiger Swallowtail, Anise Swallowtail. Small Wood-Nymph, Common Ringlet, American Lady, Weidemeyer's Admiral, Viceroy, Zerene Fritillary, Callippe Fritillary, Variable Checkerspot, Sagebrush Checkerspot, Pearl Crescent [including dead frogs – Michigan], Texan Crescent, Bordered Patch, Milbert's Tortoiseshell, Mourning Cloak [as on dead frogs in Michigan], Green Comma, Oreas Comma (fq), Hackberry Emperor. Coral Hairstreak, Acmon Blue. Dun Skipper, Silver-spotted Skipper, Woodland Skipper. Common Gray (*Anavitrinella pampinaria*, Geometridae). Grape Leafroller (*Desmia funeralis*, Pyralidae). Large Pale Clothes Moth (*Tinea pallescentella*, Tineidae), and other moths.

Hackberry Emperor strongly attracted to runny juices of advanced decay of such creatures as snakes, dogs, or pigs, feeding upon them to stupefaction (Payne & King, 1969).

Clark, about 80 or so years ago: "Most of our woodland butterflies are readily secured by baiting them with carrion. Dead snakes suspended about 5 feet above the ground in an open glade or clearing make, perhaps, the most effective bait." (p. 59).

David James reports butterflies feeding on freshly dead tadpoles in drying ephemeral ponds in Columbia County, Washington: 20 - 30 male swallowtails: Pale Swallowtail, Indra Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Anise Swallowtail; and a few Sagebrush Checkerspot (NorWestLeps #4881).

Carrion, including hair and feathers, is food for some moth caterpillars:

Oecophoridae: White-shouldered House Moth (*Endrosis sarcitrella*) – eats plant and animal debris, including insect specimens.

Tineidae: Bird Nest Moth (*Monopis crocicapitella*) – has been found eating a dead rat, among other animal waste; found in refuse in bird nests, owl pellets, mammal burrows, bat guano. *Tinea*

niveocapitella, a common Californian moth, eats feathers, among other things. Webbing Clothes Moth (*Tineola bisselliella*) eats such things as wool, dead insects, feathers, and hair (BugGuide). Western Clothes Moth (*Tinea occidentella*) – frequent in owl pellets on Santa Barbara Island (Powell & Opler). Large Pale Clothes Moth (*Tinea pallescentella*) – eats hair, wool, fur, feathers according to Wikipedia.

Cassiope mertensiana. **White Heather**. Ericaceae. Flowers said to be attractive to Heather Blue and two or three other blues as well (SoWestLep #1505, Royer). July - August.

White Heather is the foodplant for Heather Blue caterpillars.

Castela emoryi. **Crucifixion Thorn**. Simaroubaceae. Nectar: Marine Blue (Liz Makings). June - July.

Castilleja sp. **Indian Paintbrush**. Orobanchaceae. Flower visitors include Edwards's Swallowtail, hummingbirds.

Shapiro finds *Castilleja*, *Orthocarpus* and *Pedicularis* spp. are not butterfly nectar sources, but larval hosts for some populations of Edith's Checkerspot and Leanira Checkerspot. Anicia Checkerspot, Variable Checkerspot (HOSTS). Most species will work as a lab host for Leanira Checkerspot (*alma* and *wrighti* segregates) (Todd Stout).

Arctiidae: California Tiger Moth (*Leptarctia californiae*).

Gelechiidae: *Scrobipalpula lutescella*, feeds on immature seeds.

Geometridae: *Eupithecia nimbicolor*.

Incurvariidae: Some annual species are Flame Longhorn (*Adela flammeusella*) hostplants.

Noctuidae: Oregon Gem (*Heliothis oregonica*). *Heliothis proruptus*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leaf-tier (*Cnephasia longana*). Verbena Bud Moth (*Endothenia hebesana*). *Sparganothis tunicana*.

Castilleja affinis. **Indian Paintbrush**. Orobanchaceae. March - June.

Foodplant for Variable Checkerspot, Edith's Checkerspot, Northern Checkerspot and Leanira Checkerspot.

Gelechiidae: *Scrobipalpula lutescella* feeds on immature seeds.

Schreckensteiniidae: *Schreckensteinia felicella*, a bristle-legged moth whose caterpillars eat the flowers.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Verbena Bud Moth (*Endothenia hebesana*).

Castilleja angustifolia is now *Castilleja chromosa*. **Desert Indian Paintbrush**.

Castilleja applegatei. **Wavy-leaved Paintbrush**. Orobanchaceae. June - August (most subspecies).

Foodplant for Variable Checkerspot, Edith's Checkerspot, Leanira Checkerspot.

Noctuidae: Oregon Gem (*Heliothis oregonica*).

Castilleja applegatei ssp. *martini*. **Martin's Paintbrush**. Orobanchaceae. April – June.

Larval host for Leanira Checkerspot.

Castilleja attenuata. **Valley Tassels**. Orobanchaceae. Nectar: Brown long-horned moth (*Adela* sp.) (photograph by Mark Egger in Idaho). Flame Longhorn (*Adela flammeusella* females, Al Ludtke). March – May.

Adelidae: *Adela flammeusella* group suspected; ovipositional behavior (Al Ludtke).

Castilleja chromosa was *Castilleja angustifolia*. **Desert Indian Paintbrush**. Orobanchaceae. Nectar: Indra Swallowtail (Utah). May - September.

Larval foodplant for Anicia Checkerspot, Leanira Checkerspot, Variable Checkerspot, Edith's Checkerspot.

Pterophoridae: Snapdragon Plume Moth (*Amblyptilia pica*).

Castilleja densiflora. **Owl's Clover**. Orobanchaceae. The Bay Checkerspot (a segregate of Edith's Checkerspot) and Flame Longhorn (*Adela flammeusella*, Incurvariidae) are seen at its flowers. March - May.

Larval host for Edith's Checkerspot.

Castilleja exserta. **Purple Owl's Clover**. Orobanchaceae. The Bay Checkerspot and Quino Checkerspot (segregates of Edith's Checkerspot) visit its flowers. March - May.

A larval host for the Common Buckeye, Tropical Buckeye, Variable Checkerspot, and Quino Checkerspot.

Noctuidae: Common Flower Moth, *Schinia pulchripennis* (*Moths of Western North America*). *Schinia cupes*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Castilleja foliolosa. **Woolly Paintbrush**. Orobanchaceae. Nectar: California Dogface. March - June (but also found in flower in the winter months).

Foodplant for Variable Checkerspot, Edith's Checkerspot and especially Leanira Checkerspot.

Gelechiidae: *Scrobipalpula lutescella* feeds on immature seeds.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Castilleja lacera. **Cut-leaved Owl's Clover**. Orobanchaceae. April - July.

Foodplant for Common Buckeye.

Adelidae: cf. Flame Longhorn (*Adela flammeusella*, unspotted) (Al Ludtke) – ovipositional behavior.

Castilleja latifolia. **Monterey Indian Paintbrush**. Orobanchaceae. March - September.

Foodplant for Variable Checkerspot.

Pterophoridae: Snapdragon Plume Moth (*Amblyptilia pica*).

Tortricidae: Verbena Bud Moth (*Endothenia hebesana*).

Castilleja lemmonii. **Lemmon's Paintbrush**. Orobanchaceae. July - August.

Foodplant for Edith's Checkerspot.

Castilleja linearifolia. **Desert Paintbrush**. Orobanchaceae. June - September.

Foodplant for Anicia Checkerspot and Edith's Checkerspot.

Castilleja miniata. **Great Red Paintbrush**. Orobanchaceae. Nectar: Pale Swallowtail (J. Maughn). May – September.

Foodplant for Anicia Checkerspot.

Castilleja nana. **Dwarf Alpine Paintbrush**. Orobanchaceae. July - August.

Larval host for Edith's Checkerspot.

Castilleja parviflora is now *Castilleja peirsonii*. **Peirson's Paintbrush**.

Castilleja peirsonii was *Castilleja parviflora*. **Peirson's Paintbrush**. Orobanchaceae. July - August.

Foodplant for Variable Checkerspot.

Castilleja pilosa. **Parrothead Indian Paintbrush**. Orobanchaceae. June - August.

Hostplant for Edith's Checkerspot.

Castilleja plagiotoma. **Mojave Indian Paintbrush**. Orobanchaceae. April - June.

Edith's Checkerspot hostplant on the desert slope of the Transverse Ranges, San Bernardino, Los Angeles counties.

Castilleja subinclusa subsp. *franciscana*. **Longleaf Indian Paintbrush**. Orobanchaceae. Nectar: Pipevine Swallowtail. March – July.

Castilleja wightii. **Wight's Paintbrush**. Orobanchaceae. March – August.

Gelechiidae: *Scrobipalpus lutescella* feeds on immature seeds.

Schreckensteiniidae: *Schreckensteinia felicella*, a bristle-legged moth whose caterpillars eat the inflorescences.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Verbena Bud Moth (*Endothenia hebesana*).

Caulanthus amplexicaulis. **Clasping-leaved Caulanthus**. Brassicaceae. April - August.

Hostplant for Pearly Marble (HOSTS).

Caulanthus cooperi. **Cooper's Caulanthus**. Brassicaceae. March - April.

Foodplant for the Desert Orangetip, Cabbage White (Monroes).

Caulanthus coulteri. **Coulter's Jewelflower**. Brassicaceae. March - July.

Foodplant for the Desert Orangetip and Spring White (HOSTS).

Caulanthus crassicaulis. **Thick-stemmed Caulanthus**. Brassicaceae. April - July.

Foodplant for the Pearly Marble (HOSTS).

Caulanthus hallii. **Hall's Caulanthus**. Brassicaceae. April - May.

Foodplant for the Sara Orangetip (Monroes).

Caulanthus inflatus. **Desert Candle**. Brassicaceae. March - May.

Foodplant for the Pearly Marble and Desert Orangetip including Pima Orangetip.

Caulanthus lasiophyllus was *Guillenia lasiophylla* (and, before that, *Thelypodium lasiophyllum*). **California Mustard**. Brassicaceae. Likely nectar plant for species that employ it as a hostplant and others. Previously far more common; Shapiro thinks it the major historic hostplant for Large Marble. March – June.

Larval host of Large Marble, Pearly Marble [Desert Marble], Sara Orangetip, Desert Orangetip, Western White, Checkered White.

Caulanthus major. **Slender Wild Cabbage**. Brassicaceae. May - July.

Foodplant for the California Marble (*Euchloe hyantis andrewi*), 1978 Season Summary, John F. Emmel.

Caulanthus simulans. **Payson's Jewelflower**. Brassicaceae. March - June.

Foodplant for the Spring White, Desert Orangetip, and Sara Orangetip (Monroes). The 1991 Season Summary reports Checkered White larvae on it (JFE) and Gray Marble (1991 Season Summary, Riverside County, JFE).

Ceanothus spp. and vars. **Wild Lilac**. Rhamnaceae. Divided into two subgenera, *Ceanothus* and *Cerastes*.

Especially the white-flowered forms attract butterflies. Nectar: Pipevine Swallowtail, Two-tailed Swallowtail, Giant Swallowtail, California Tortoiseshell, Painted Lady, Common Buckeye, Gabb's Checkerspot, Pacific Fritillary [especially white-flowered sorts], Coronis Fritillary, Western Pine Elfin, Gray Hairstreak, Gold-hunter's Hairstreak, Mountain Mahogany Hairstreak, Hedgerow Hairstreak (fq), Thicket Hairstreak (fq), Johnson's Hairstreak, Nelson's Hairstreak, Echo Azure, Pacuvius Duskywing, Propertius Duskywing. Shapiro: "Blue-flowered ones, too. Nearly all very good."

Scott notes 53 butterfly species visiting *Ceanothus fendleri* in his Colorado-centric compilation of nectar records. The Red-winged Wave (*Dasyfidonia avuncularia*, Geometridae), an attractive mostly reddish diurnal moth of open conifer forest and sagebrush habitats, seeks nectar at *Ceanothus* flowers (Powell & Opler).

Growing Native suggests for the butterfly garden: get a long succession of wild lilac blossoms by planting early, mid-season and late flowering local varieties. Other species and cultivars not listed here are no doubt of value!

Many wild lilacs are hostplants for such butterflies as the Pale Swallowtail, California Tortoiseshell, Echo Azure, Hedgerow Hairstreak, Bramble Hairstreak, and Pacuvius Duskywing. Todd Stout finds any species of this genus a suitable lab host for California Tortoiseshell.

Acanthopteroctidae: *Acanthopteroctetes unifascia*, a leaf miner.

Geometridae: Ceanothus Looper (*Drepanulatrix carnearia*). *Drepanulatrix falcataria*. Yellow-banded Looper (*Drepanulatrix foeminaria*). Hulst's Wave (*Drepanulatrix hulstii*). *Drepanulatrix quadraria*. Blotch-line Looper (*Drepanulatrix secundaria*). Spurred Wave (*Drepanulatrix unicalcararia*). *Eupithecia bivittata*. Columbia Pug (*Eupithecia columbiata*). *Eupithecia lachrymosa*. *Eupithecia maestosa*. *Eupithecia misturata*. Sulphur Wave (*Hesperumia sulphuraria*). Citrus Looper (*Iridopsis fragilaria*). Darwin's Green (*Nemoria darwiniata*) in southern California (Powell & Hogue). Pink-margined Green (*Nemoria leptalea*) at Inverness Ridge (J. A. Powell). Bordered Fawn (*Sericosema juturnaria*). *Sericosema simularia* – suspected [Seven Backyards web site].

Noctuidae: *Orthosia pacifica*.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Ceanothus Silkmoth (*Hyalophora euryalus*). White-streaked Saturnia Moth (*Saturnia albofasciata* [Haggard]).

Tischeriidae: *Tischeria ceanothi*, a leaf miner.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Zapulata (*Choristoneura zapulata*). *Epinotia kasloana*. *Epinotia signiferana*. Light Brown Apple Moth (*Epiphyas postvittana*).

Ceanothus arboreus. **Catalina Ceanothus**. Rhamnaceae (Ceanothus). February - May.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Tischeriidae: A leaf miner, *Tischeria bifurcata*.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia* sp. *Saphenista* sp.

Zones 14-17, 19-24.

Ceanothus cordulatus. **Mountain Whitethorn**. Rhamnaceae (Ceanothus). Nectar: California Sister (<https://www.inaturalist.org/observations/13115679>), Great Arctic, Pacific Fritillary, Coronis Fritillary (David S. Horner), Quino Checkerspot (segregate of Edith's Checkerspot) – noted as a major attraction in the San Bernardino Mountains by the Grinnells in 1907. Johnson's Hairstreak (fq), Nelson's Hairstreak, Thicket Hairstreak. Ron Wolf photographed a White-banded Black Moth, *Rheumaptera subhastata* (Geometridae) on it. A Marcel Holyoak photograph indicates Clark's Day Sphinx (*Proserpinus clarkiae*, Sphingidae) at nectar on it. May - July.

Larval host for the Pale Swallowtail, California Tortoiseshell, and Pacuvius Duskywing.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*, [Haggard]). Ceanothus Silkmoth (*Hyalophora euryalus*). White-streaked Saturnia Moth (*Saturnia albofasciata*).

Geometridae: Ceanothus Looper (*Drepanulatrix carnearia*). Yellow-banded Looper (*Drepanulatrix foeminaria*). Nevada Drepanulatrix (*Drepanulatrix nevadaria*). *Drepanulatrix quadraria*. Darwin's Green (*Nemoria darwiniata punctularia*). Bordered Fawn (*Sericosema juturnaria*). Falcate Synaxis (*Tetracis cervinaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Ceanothus Nola (*Nola minna*).

Ceanothus crassifolius. **Hoary-leaved Ceanothus**. Rhamnaceae (Cerastes). Nectar: Painted Lady (David Horner), Edith's Checkerspot (David Horner), California Tortoiseshell (David Horner), Brown Elfin (Kummel), Juniper Hairstreak (nr. *chalcosiva*) (David S. Horner). January - April.

Lymantriidae: *Orgyia cana*.

Tischeriidae: *Tischeria ceanothi*, a leaf miner.

Zones 7, 18-24.

Ceanothus cuneatus (*Ceanothus ramulosus*). **Buckbrush**. Rhamnaceae (Cerastes). Nectar: Variable Checkerspot, California Tortoiseshell, Pacific Fritillary, Acmon Blue, Brown Elfin, Pacuvius Duskywing, *Annaphila divinula* (Noctuidae) (J. Maughn), *Pyrausta dapalis* (Kummel). February - May.

Buckbrush is caterpillar food for Pale Swallowtail, California Tortoiseshell, Brown Elfin, Lustrous Copper, California Hairstreak and especially the Hedgerow Hairstreak (Garth & Tilden). Kojiro Shiraiwa found Bramble Green Hairstreak larvae collected from Deerweed accepted it as food, so it is a possible larval host for it as well. California Tortoiseshell stripped occasional specimens of leaves in Mariposa County (1987 Season Summary).

Gelechiidae: *Aristotelia adceanotha*. *Chionodes obelus*.

Geometridae: *Aethaloida packardaria*. Common Gray (*Anavitrinella pampinaria*). Gray-banded Lilac Looper (*Apodrepanulatrix litaria*). *Digrammia delectata*. *Drepanulatrix falcata*. Yellow-banded Looper (*Drepanulatrix foeminaria*). *Drepanulatrix monicaria*. Spurred Wave (*Drepanulatrix unicalcararia*). *Eupithecia maestosa*. *Eupithecia misturata*. *Hesperumia latipennis*. Sulphur Wave (*Hesperumia sulphuraria*). Mountain Mahogany Looper (*Iridopsis clivinaria*). *Macaria quadrilinearia*. Darwin's Green (*Nemoria darwiniata*). Bordered Fawn (*Sericosema juturnaria*). October Thorn (*Tetracis jubararia*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Nepticulidae: *Acalyptis punctulata*.

Noctuidae: Lost Dagger (*Acronicta perdita*). Rusty Shoulder Knot (*Aseptis binotata*). Ceanothus Nola (*Nola minna*). Otter Spiramater (*Spiramater lutra*).

Saturniidae: White-streaked Saturnia Moth (*Saturnia albofasciata*). Mendocino Saturnia Moth (*Saturnia mendocino*). Walters' Saturnia Moth (*Saturnia walterorum*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Pandemis Leafroller (*Pandemis pyrusana*).

Var. *cuneatus*: Zones 7-9, 14-16, 18-24.

Var. *fascicularis*: Zones 7-9, 14-17, 19-24.

Var. *rigidus*: Zones 14-17, 22-24.

Ceanothus cyaneus. **San Diego Buckbrush**. Rhamnaceae (Ceanothus). Nectar: Checkered White, Painted Lady, Brown Elfin, Echo Azure. In a pollination study, 2% of its flower visitors were Lepidoptera. April - June.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Ceanothus diversifolius. **Pinemat**. Rhamnaceae (Ceanothus). April - June.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Zones 7, 15-17.

Ceanothus foliosus var. *medius*. **La Cuesta Ceanothus**. Rhamnaceae (Ceanothus). Nectar: John Lane finds John Muir's Hairstreak [a Juniper Hairstreak segregate] at nectar on it in the Sargent Cypress colony at Cuesta Pass. March - June.

Hedgerow Hairstreak caterpillars on this taxon, on the foliage near the flower clusters seen in Alice Abela photographs taken on Cuesta Ridge, San Luis Obispo County (April 5, 2015 Flickr).

Ceanothus greggii is now *Ceanothus vestitus*. **Cupleaf Ceanothus**.

Ceanothus griseus is now *Ceanothus thyrsiflorus* var. *griseus*. **Carmel Ceanothus**.

Ceanothus impressus. **Santa Barbara Ceanothus**. Rhamnaceae (Ceanothus). A showy species. April - May.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*) – caterpillar on it photographed by Alice Abela.

Sesiidae: Ceanothus Borer (*Synanthedon mellinipennis*) – a likely hostplant for it; Alice Abela notes this species is associated with the plant in Santa Barbara County.

Ceanothus incanus. **Coast Whitethorn**. Rhamnaceae (Ceanothus). One of the best as a butterfly nectar plant, intensely fragrant white flowers. April - June.

Coast Whitethorn is a foodplant for the California Tortoiseshell, Echo Azure, and Hedgerow Hairstreak.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Tischeriidae: *Tischeria ceanothi*.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Ceanothus integerrimus. **Deerbrush**. Rhamnaceae (Ceanothus). Nectar: Pine White, Nelson's Hairstreak (fq), skipper. "Echo azure and other adult butterflies" seek nectar (Link). May - July.

Larval host for the Pale swallowtail, California Tortoiseshell, Brown Elfin, Echo Azure, and Hedgerow Hairstreak. John Emmel reports finding Lorquin's Admiral larvae on it in Butte County and rearing them on its leaves to normal-sized adults (SoWestLep 13712). Some *Pacuvius* Duskywing populations associated with it in Oregon (Warren).

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Geometridae: *Aethaloida packardaria*. Common Gray (*Anavitrinella pampinaria*). *Drepanulatrix falcataria*. Yellow-banded Looper (*Drepanulatrix foeminaria*). *Drepanulatrix monicaria*. Spurred Wave (*Drepanulatrix unicalcararia*). Small Engrailed (*Ectropis crepuscularia*). *Eudrepanulatrix rectifascia*. *Eupithecia misturata*. Sulphur Wave (*Hesperumia sulphuraria*). Emascuated Grey (*Iridopsis emasculatum*). *Macaria quadrilinearis*. Horned Spanworm (*Nematocampa resistaria*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Neolcis californiaria*). Rindge's Pero (*Pero mizon*). Bordered Fawn (*Sericosema juturnaria*). Wavy-lined Emerald (*Synchlora aerata*). Falcate Synaxis (*Tetracis cervinaria*). October Thorn (*Tetracis jubararia*).

Gracillariidae: *Phyllonorycter insignis*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Lappet Moth (*Phyllodesma americana*).

Noctuidae: *Adelphagrotis indeterminata*. *Aseptis fumosa*. Brown Woodling (*Egira perlubens*). Western Woodling (*Egira rubrica*). Ceanothus Nola (*Nola minna*). Speckled Green Cutworm (*Orthosia hibisci*). Protector Quaker (*Orthosia praeses*). Otter Spiramater (*Spiramater lutra*). Colorful Zale (*Zale minerea*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Ceanothus Silkmoth (*Hyalophora euryalus*). White-streaked Saturnia Moth (*Saturnia albofasciata*).

Tischeriidae: *Tischeria ceanothi*, a leaf miner.

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*).

Deciduous. Grows best in Zones 7, 15-16.

Ceanothus jepsonii. **Musk Brush**. Rhamnaceae. Nectar: Muir's Hairstreak (iNaturalist). March – April.

Ceanothus lemmonii. **Lemmon's Ceanothus**. Rhamnaceae (Ceanothus). April - May.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Zone 7.

Ceanothus leucodermis. **Chaparral Whitethorn**. Rhamnaceae (Ceanothus). Nectar source and caterpillar foodplant for California Tortoiseshell (David S. Horner, Solar Darkroom Blog, May 5, 2011; also John F. Emmel, 1988 Season Summary), Brown Elfin, Echo Azure, and Hedgerow Hairstreak. April - June.

Hostplant for California Tortoiseshell (David S. Horner), Brown Elfin, Echo Azure, and Hedgerow Hairstreak. In the San Francisco Bay area Shapiro finds *Pacuvius duskywing* associated with it.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Lymantriidae: *Orgyia cana*.

Saturniidae: White-streaked Saturnia Moth (*Saturnia albofasciata*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*).

Zones 7, 18.

Ceanothus megacarpus. **Big-pod Ceanothus**. Rhamnaceae (Cerastes). Nectar: Echo Azure (Marc Kummel). Flowers very early, even before Christmas. The sweet-smelling flowers striking in close-up photographs. Var. *insularis*: February-March. Var. *megacarpus*: December - March.

Larval host for the Hedgerow Hairstreak.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Geometridae: *Drepanulatrix monicaria*. Sulphur Wave (*Hesperumia sulphuraria*, nice photographs of a caterpillar and adult reared from Big-pod Ceanothus on the Natural History of Orange County web site).

Lasiocampidae: *Tolype lowriei* – or similar species.

Noctuidae: Ceanothus Nola Moth (*Nola minna*).

Tortricidae: *Epinotia signifera* (ID uncertain).

Var. *insularis*: Zones 14-17, 19-24. Var. *megacarpus*: Zones 14-24.

Ceanothus oliganthus. **Jimbrush**. Rhamnaceae (Ceanothus). Nectar: Pacuvius Duskywing, Afranius Duskywing, Oceanspray Fairy Moth (*Adela septentrionella*), doubtless others; Moldenke captured 65 insect species on its flowers. Var. *oliganthus*: December-June. Var. *orcuttii*: February-June. Var. *sorediatus*: January-May.

Hostplant for California Tortoiseshell, Pacuvius Duskywing (San Francisco Bay area), and Afranius Duskywing.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Gelechiidae: *Chionodes occidentella*. *Recurvaria francisca*. *Xenolechia ceanothiella*.

Geometridae: *Drepanulatrix monicaria*. *Tetracis mosesiani* (accepted by captive larvae).

Nepticulidae: *Stigmella ceanothi*.

Noctuidae: Ceanothus Nola (*Nola minna*) -- caterpillar photographed on a flower cluster (var. *sorediatus*) by Marc Kummel, 30 April 2018 (<https://www.flickr.com/photos/treebeard/40916635045/in/contacts/>).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Tischeriidae: *Tischeria ambigua* and *Tischeria ceanothi*.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia kasloana* reported for var. *sorediatus*.

Var. *oliganthus*: Zones 14-17, 19-24. Var. *orcuttii*: Zones possibly as var. *oliganthus*. Var. *sorediatus*: Zones 14-17, 19-24.

Ceanothus palmeri. **Palmer Ceanothus**. Rhamnaceae (Ceanothus). Echo Azure (Lynn Watson photograph). February - June.

Foodplant for Echo Azure.

Saturniidae: A Natural History of Orange County web site photograph shows a Western Sheepmoth (*Hemileuca eglanterina*) ovipositing and a caterpillar feeding on Palmer Ceanothus.

Zones 7, 18.

Ceanothus papillosus. **Wartleaf Ceanothus**. Rhamnaceae. March – May.

Tortricidae: *Ancylis simuloides*. *Sparganothis senecionana*.

Ceanothus parryi. **Parry's Ceanothus**. Rhamnaceae. Variable Checkerspot butterflies seen visiting its flowers on a CalFlora Nursery web site photograph. April – May.

Zones 7, 15, 16.

Ceanothus prostratus. **Mahala Mat**. Rhamnaceae. Nelson's Hairstreak and Two-banded Checkered-Skipper visit its flowers (photographs by Ray Bruun). Also a nectar plant for Western Pine Elfin and the rare Johnson's Hairstreak. April - June.

Mahala Mat is a foodplant for the Pale Swallowtail.

Tortricidae: *Ancylis pacificana*. Powell & Opler note an adult association with it, perhaps a host? (p. 140-141).

Ceanothus ramulosus is now included in *Ceanothus cuneatus*. **Blue Buck Brush**. Rhamnaceae.

Foodplant for California Tortoiseshell.

Ceanothus 'Remote Blue' (Possibly *Ceanothus oliganthus* var. *sorediatus* x *Ceanothus griseus*; nursery hybrid). Rhamnaceae. Nectar: Especially attractive to Hedgerow Hairstreak (Las Pilitas Nursery) and an unknown checkerspot (shown in photograph).

Ceanothus sanguineus. **Redstem Ceanothus**. **Oregon Tea Tree**. Rhamnaceae. April - June.

Foodplant for Pale Swallowtail, California Tortoiseshell, and Hedgerow Hairstreak.

Gelechiidae: *Chionodes ceanothiella*. *Gelechia monella*.

Geometridae: Common Gray (*Anavitrinella pampinaria*). *Drepanulatrix falcataria*. Yellow-banded Looper (*Drepanulatrix foeminaria*). Blotch-lined Looper (*Drepanulatrix secundaria*). *Eudrepanulatrix rectifascia*. *Eupithecia misturata*. *Hesperumia latipennis*. Sulphur Wave (*Hesperumia sulphuraria*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Nealcis californiaria*). Rindge's Pero (*Pero mizon*). Bordered Fawn (*Sericosema juturnaria*). *Sericosema wilsonensis*.

Noctuidae: *Abagrotis apposita*. Rusty Shoulder Knot (*Aseptis binotata*).

Saturniidae: *Ceanothus* Silkmoth (*Hyalophora euryalus*). Western Sheepmoth (*Hemileuca eglanterina*).

Deciduous.

Ceanothus spinosus. **Greenbark Ceanothus**. Rhamnaceae. January - May.

Marc Kummel photograph (Flickr, 28 March 2015) shows what appears to be a Brown Elfin caterpillar (possibly California Hairstreak, but seems less likely) on it; one caterpillar being tended by a putative California Velvety Tree Ant (*Liometopum occidentale*). He found six other caterpillars on the same plant. He photographed another caterpillar on 2 May 2017 identified by Alice Abela as a Hedgerow Hairstreak.

Cosmopterigidae: *Ceanothus* Stem Gall Moth (*Periploca ceanothiella*) (gall photograph by Marc Kummel).

Geometridae: *Drepanulatrix monicaria*. Sulphur Wave (*Hesperumia sulphuraria*). *Hulstina grossbecki* [Seven Backyards web site]. Wright's *Hulstina* (*Hulstina wrightiaria*). Darwin's Green (*Nemoria darwiniata punctularia*). Sharp-lined Yellow (*Sicya macularia lewisi*).

Noctuidae: February Miller (*Feralia februalis*). Ceanothus Nola Moth (*Nola minna*) (fq).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*) near Santa Barbara. Saturnia Moth (*Saturnia albofasciata*). Western Sheepmoth (*Hemileuca eglanterina*).

Zones 14-17, 19-24.

Ceanothus thyrsiflorus var. *repens* is now included in var. *thyrsiflorus*. **Low Blue Blossom**. March - June.

Las Pilitas Nursery notes it is among larval hosts for California Tortoiseshell.

Ceanothus thyrsiflorus var. *griseus* was *Ceanothus griseus*. **Carmel Ceanothus**. Rhamnaceae. Nectar for Cabbage White, Painted Lady. Bumblebees. February - June.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*) (fq).

Tischeriidae: *Tischeria ceanothi*. A leaf miner.

Zones 14-17, 19-24.

Ceanothus thyrsiflorus var. *thyrsiflorus*. **Blueblossom**. Rhamnaceae. Nectar: “Pale Swallowtail, Echo Blue [Echo Azure], Common Buckeye, California Tortoiseshell, Brown Elfin (other *Ceanothus* attract these, also)” – Yerba Buena Nursery. Also Variable Checkerspot, Muir’s Hairstreak. March - June.

California Tortoiseshell host at Inverness Ridge (J.A. Powell) and in the San Bruno Mountains. A larval host for the Hedgerow Hairstreak (*A Flora of the San Bruno Mountains*) – and for the Western Brown Elfin and Echo Azure.

Acanthopteroctetidae: *Acanthopteroctetes unifascia*.

Bucculatricidae: *Bucculatrix ceanothiella*.

Cosmopterigidae: Ceanothus Stem Gall Moth (*Periploca ceanothiella*).

Gelechiidae: *Chionodes ceanothiella*. *Chionodes occidentella*. *Recurvaria francisca*. *Xenolechia ceanothiella*.

Geometridae: Banks’ Emerald (*Chlorosea banksaria*). *Drepanulatrix baueraria*. *Drepanulatrix monicaria*. Blotchline Looper (*Drepanulatrix secundaria* [Tatum]). *Eupithecia misturata*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*). Forest Tent Caterpillar (*Malacosoma disstria*).

Nepticulidae: *Stigmella ceanothi*.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*). Western Sheepmoth (*Hemileuca eglanterina*).

Sesiidae: Ceanothus Borer (*Synanthedon mellinipennis*).

Tischeriidae: the leaf miner *Tischeria ceanothi* (fq).

Tortricidae: *Acleris hastiana*. Orange Tortrix (*Argyrotaenia franciscana*). *Ancylis simuloides*. Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia johnsonana*. *Epinotia kasloana*. *Saphenista saxicolana*.

Zones 14-17, 20-24.

Ceanothus tomentosus. **Ramona Lilac**. Rhamnaceae. Favorite nectar plant for first brood of the rare Thorne's Hairstreak (stands near Tecate Cypress, the host plant) (*Butterflies of America* web site). Bumblebees. February - May.

Zones 14-16, 20-24.

Ceanothus velutinus. **Snowbrush. Mountain Balm**. Rhamnaceae (*Ceanothus*). Nectar: Pale Swallowtail, Western Tiger Swallowtail (Scott), California Tortoiseshell, Milbert's Tortoiseshell, Zerene Fritillary, Great Arctic, Brown Elfin, Hedgerow Hairstreak, Thicket Hairstreak, Johnson's Hairstreak, Echo Azure, Pacuvius Duskywing. Snowbrush one of the more attractive nectar species of the genus, according to Pyle and James. April - July.

Foodplant for Pale Swallowtail, Lorquin's Admiral, California Tortoiseshell, Brown Elfin, Hedgerow Hairstreak (fq), California Hairstreak, Echo Azure, and Pacuvius Duskywing. Todd Stout checks it frequently, never seeing hostplant evidence for Lorquin's Admiral, so that it may serve only atypically or someone noted it by mistake (perhaps it was serving as a nectar plant, mistakenly noted as a hostplant). In addition, atypically, reported in the 1994 Season Summary to have supported Variable Checkerspot in Humboldt County – many reared to adults on it (SN).

1980 Season Summary reports thousands of these plants completely defoliated by larvae of California Tortoiseshell on the south slope of Mt. Shasta, resulting, in that case, in the death of millions of larvae; no mass flight from there that year!

Gelechiidae: *Chionodes* sp.

Geometridae: *Aethaloida packardaria*. Gray-banded Lilac Looper (*Apodrepanulatrix litaria*). *Ceanothus* Looper (*Drepanulatrix carnearia*). *Drepanulatrix falcataria* (fq). Yellow-banded Looper (*Drepanulatrix foeminaria*). *Drepanulatrix monicaria*. *Drepanulatrix quadraria*. Blotch-lined Looper (*Drepanulatrix secundaria*). Spurred Wave (*Drepanulatrix unicalcararia*). *Eudrepanulatrix rectifascia*. *Eupithecia misturata*. *Eupithecia nevadata*. Sulphur Wave (*Hesperumia sulphuraria*). *Macaria quadrilinearia*. Horned Spanworm (*Nematocampa resistaria*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Neolcis californiaria*). Rindge's Pero (*Pero mizon*). Bordered Fawn (*Sericosema juturnaria*). Falcate Synaxis (*Tetracis cervinaria*).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*). Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Lost Dagger (*Acronicta perditia*). *Adelphagrotis indeterminata*. *Adelphagrotis stellaris*. *Andropolia theodori*. Rusty Shoulder Knot (*Aseptis binotata*). *Egira crucialis*. Brown Woodling (*Egira perlubens*). Western Woodling (*Egira rubrica*). Garden Cutworm (*Fishia discors*). Toothed Snout Moth (*Hypena bijugalis*). *Mesogona olivata*. *Ceanothus* Nola (*Nola minna*). Speckled Green Cutworm (*Orthosia hibisci*). *Orthosia pacifica*. Otter Spiramater (*Spiramater lutra*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*) (fq).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*) (fq). Western Sheepmoth (*Hemileuca eglanterina*).

Tischeriidae: a leaf miner, *Tischeria ceanothi*.

Tortricidae: *Choristoneura* sp.

Var. *hookeri*: Zones 6-7, 15-17.

Ceanothus verrucosus. **Barranca Bush**. Rhamnaceae. January - April.

Lasiocampidae: *Gloveria medusa*.

Ceanothus vestitus was *Ceanothus greggii*. **Cupleaf Ceanothus. Desert Wild Lilac. Mojave Ceanothus.** Rhamnaceae. Nectar: Pearly Marble (Monroes), Painted Lady, Common Buckeye, Bordered Patch, Northern Cloudywing (Monroes). Its flowers attract many species of Lepidoptera. March - May.

In the Laguna Mountains Kojiro Shiraiwa observed Bramble Green Hairstreak ovipositing on growing tips of this species, a likely host. Caterpillars and eggs he collected from Deerweed (*Acmispon glaber*) accepted and grew on Cupleaf Ceanothus. Listed as a foodplant for Hedgerow Hairstreak, Brown Elfin, and Pacuvius Duskywing, also.

Geometridae: Banks' Emerald (*Chlorosea banksaria*).

Saturniidae: White-streaked Saturnia Moth (*Saturnia albofasciata*).

Zones 7, 19-21.

Ceanothus '**Wheeler Canyon**'. Rhamnaceae. Anise Swallowtail and Echo Azure visit its flowers. A "handsome, versatile selection" at its best along the coast or in cooler areas of California, according to David Fross.

Celtis reticulata. **Netleaf Hackberry**. Cannabaceae.

Foodplant for Mourning Cloak (Todd Stout), Satyr Comma, Hackberry Emperor and American Snout.

Noctuidae: *Egira curialis*.

Centaurium venustum is now *Zeltnera venusta*. **Canchalagua**.

Centromadia fitchii. **Spikeweed**. Asteraceae. Madieae. Nectar: skipper.

Centromadia parryi. **Pappose Tarweed**. Asteraceae. Madieae. Nectar for West Coast Lady. June – October.

Centromadia parryi ssp. *australis* was *Hemizonia parryi* ssp. *australis*. **Parry's Spikeweed**. Asteraceae. Madieae. Woodland Skipper, *Schinia* sp. June – October.

Centromadia pungens was *Hemizonia pungens*. **Common Spikeweed**. Asteraceae. Madieae. Nectar: Orange Sulphur, Cabbage White. California Ringlet, Monarch, Painted Lady, West Coast Lady, American Lady, Common Buckeye, Field Crescent, Mylitta Crescent. Great Purple Hairstreak, Purplish Copper (fq), Acmon Blue, Western Pygmy Blue (fq), Eastern Tailed Blue. Common Sootywing, Common Checkered-Skipper, Field Skipper (Sachem), Woodland Skipper, Sandhill Skipper, Eufala Skipper. A newly described day-flying moth, *Platphalonia magdalenae* (Tortricidae) (fq) (Metzler). April-November.

Used in revegetation. On a revegetation planting at the southern tip of the San Francisco Bay, Purplish Copper, formerly undetected, suddenly became evident on the site, visiting its flowers. Previously Common Spikeweed had been close to extirpation from the vicinity.

Spikeweed also serves as a caterpillar plant for the Painted Lady.

Cephalanthus occidentalis. **Buttonbush** or **Button Willow**. Rubiaceae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail (favorite nectar source in the Great Valley), Anise Swallowtail, Black Swallowtail (fq), Giant Swallowtail (fq). Checkered White (fq), Cabbage White, Southern Dogface, Clouded Sulphur, Cloudless Sulphur, Large Orange Sulphur, Sleepy Orange (Liz Makings). Monarch (fq), Queen (fq), Common Wood-Nymph, American Lady, Painted Lady, Red Admiral (fq), Lorquin's Admiral, Viceroy, Gulf Fritillary, Pearl Crescent (fq), California Patch (Liz Makings). American Snout. Fatal Metalmark. Gray Hairstreak, Juniper Hairstreak, Eastern Tailed Blue. Funereal Duskywing, Mournful Duskywing, Northern Cloudywing (fq), Silver-spotted Skipper (fq), White Checkered-Skipper (Liz Makings), Orange Skipperling (Liz Makings), Fiery Skipper (Liz Makings), Sachem, Dun Skipper (fq), Long-tailed Skipper, Tawny-edged Skipper (fq). Yellow-Collared Scape Moth (*Cisseps fulvicollis*, Arctiidae). Veined Ctenucha (*Ctenucha venosa*, Arctiidae). Corn Earworm (*Helicoverpa zea*, Noctuidae). White-lined Sphinx (*Hyles lineata*, Sphingidae). Bumblebees. Excellent! May - September.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Salt Marsh Moth (*Estigmene acrea*).

Cosmopterigidae: Buttonbush Leafminer (*Mompha cephalonthiella*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Cerastium sp. **Chickweed**. Caryophyllaceae.

Noctuidae: Capsule Moth (*Hadena capsularis*).

Cerastium arvense subsp. *strictum*. **Field Chickweed**. Caryophyllaceae. Nectar: Large Marble (fq), Spring White, Dainty Sulphur, Common Ringlet (fq), Pacific Fritillary, Field Crescent, Brown Elfin, Moss's Elfin, Sheridan's Hairstreak, Lupine Blue, Silvery Blue, Western Tailed Blue, Dreamy Duskywing, Pacuvius Duskywing, Persius Duskywing, Sleepy Duskywing, Woodland Skipper. Scott rates it "moderately popular".

Noctuidae: Likely a larval host for the Capsule Moth (*Hadena capsularis*).

Closely related is **Western Mouse-ear Chickweed** (*Cerastium viride*) which tends to be a larger plant with larger flowers. Spring.

Cercidium floridum is now *Parkinsonia florida*. **Blue Palo Verde**.

Cercidium microphyllum is now *Parkinsonia microphylla*. **Foothills Palo Verde**.

Cercis occidentalis. **Western Redbud**. Fabaceae. Cercideae. Nectar: Pale Swallowtail, Pipevine Swallowtail, Western Tiger Swallowtail, Mormon Metalmark, Western Brown Elfin, Muir's Hairstreak, Johnson's Hairstreak (Scott – rarely), Echo Azure, Sleepy Duskywing, Meridian Duskywing, Mournful Duskywing, Propertius Duskywing (Rob Santry), and Litocala Moth (*Litocala sexsignata*, Noctuidae – a diurnal species). Good early nectar source. March - May.

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Cercocarpus spp. **Mountain Mahogany**. Rosaceae. Dryadeae.

Depressariidae: *Ethmia semitenebrella* (Powell & Opler, p. 69).

Geometridae: *Drepanulatrix bifilata*. Sulphur Wave (*Hesperumia sulphuraria*). Citrus Looper (*Iridopsis fragilaria*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Cercocarpus betuloides. **Mountain Mahogany**. Rosaceae. Dryadeae. Observations of *Annaphila decia* (Noctuidae), a diurnal moth, apparently at nectar on the flowers. March - May.

Mountain Mahogany is a foodplant for the Mountain Mahogany Hairstreak and for the California Hairstreak. Alice Abela photographed a Mountain Mahogany Hairstreak larva tended by an acrobat ant (*Crematogaster marioni*).

Ethmiidae: Mountain-mahogany Moth (*Ethmia discostrigella* ssp. *subcaerulea*). *Ethmia semitenebrella*.

Geometridae: Banks' Emerald (*Chlorosea banksaria*). Wavy-lined Cochisea (*Cochisea sinuaria*, readily accepted by captive larvae). *Drepanulatrix bifilata*. Oblique Looper (*Iridopsis obliquaria*) [Seven Backyards web site]. *Macaria extemporata* – its caterpillars are common on this plant and superb mimics of its smaller gray twiglets (MacFarland, 1975). *Stamnodes annellata*. *Stamnodes animata* (Powell & Opler, p. 226). *Stamnodes coenonymphata*. *Stamnodes marinata* – caterpillars abundant on its young leaves in May in Josephine County, Oregon (MacFarland, 1975). *Stamnodes marmorata* – strong association (Powell & Opler, p. 226). Falcate Synaxis (*Tetracis cervinaria*). *Tetracis hirsutaria*.

Heliozelidae: Curl-leaf Mountain Mahogany Leafminer (*Coptodisca cercocarpella*) – photographed by Alice Abela in association with this species, with leaf mines present, seems to be another host.

Lasiocampidae: Yarn Moth (*Tolype distincta*). Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: February Miller (*Feralia februalis*). *Sympistis astrigata*. MacFarland (1975) obtained *Sympistis astrigata* caterpillars by beating the plants in May.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*). Western Sheepmoth (*Hemileuca eglanterina*). Nuttall's Sheep Moth (*Hemileuca nuttalli*). White-streaked Saturnia Moth (*Saturnia albofasciata*) (fq).

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

Tortricidae: *Acleris foliana*. Fruit-tree Leafroller (*Archips argyrospila*). *Epinotia cercocarpana*.

Cercocarpus ledifolius. **Curl-leaf Mountain Mahogany**. Rosaceae. Dryadeae. April - August.

Foodplant for Mountain-Mahogany Hairstreak. California Hairstreak hostplant at Shapiro's Sierra Valley site on the eastern slopes of the Sierra Nevada Mountains – "a large, dark, and strongly marked ecotype".

Geometridae: Mountain Mahogany Looper (*Iridopsis clivinaria*). Falcate Synaxis (*Tetraxis cervinaria*).

Ethmiidae: Mountain-mahogany Moth (*Ethmia discostrigella* ssp. *discostrigella*).

Heliozelidae: Curl-leaf Mountain Mahogany Leafminer (*Coptodisca cercocarpella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Tortricidae: *Acleris foliana*. *Epinotia cercocarpana*.

Cercocarpus minutiflorus. **Smooth Mountain Mahogany**. Rosaceae. Dryadeae. March – May.

Ethmiidae: Mountain-mahogany Moth (*Ethmia discostrigella* ssp. *subcaerulea*).

Saturniidae: Ceanothus Silk Moth (*Hyalophora euryalus*) – cocoon with eclosed moth found on it, very likely host. <http://www.inaturalist.org/observations/5286792>

Chaenactis sp. **Pincushions** or **Dustymaidens**. Asteraceae. Chaenactideae. Nectar: Variable Checkerspot, Edith's Checkerspot (a favorite for it), Tiny Checkerspot. Northern White-Skipper in southernmost Nevada and likely elsewhere.

Chaenactis artemesiifolia. **White Pincushion**. Asteraceae. Chaenactideae. Nectar plant. April - July.

Chaenactis douglasii. **Douglas' Dustymaiden**. Asteraceae. Chaenactideae. Nectar: Becker's White (fq), Alexandra's Sulphur, Dainty Sulphur. Queen, Leanira Checkerspot, Small Wood-Nymph. Gray Hairstreak, Behr's Hairstreak, Boisduval's Blue. Harpalus Skipper. May - September.

Adult Dainty Sulphur found associated with it – a possible hostplant for it.

Noctuidae: Darker-spotted Straw Moth (*Heliothis phloxiphaga*), a day-flying species.

Chaenactis douglasii var. *alpina* was *Chaenactis alpina*. **Alpine Dustymaiden**. Asteraceae. Chaenactideae. Scott: Variegated Fritillary visits flowers. July – September.

Chaenactis fremontii. **Desert Pincushion**. Asteraceae. Chaenactideae. Nectar: Spring White, Checkered White, Cabbage White, Sara Orangetip, Dainty Sulphur. Painted Lady, West Coast Lady, Sagebrush Checkerspot (Ron Wolf), Tiny Checkerspot (fq), California Patch (David Horner), Leanira Checkerspot. Mormon Metalmark. Marine Blue, Ceraunus Blue, Sonoran Blue, Western Pygmy-Blue (David Horner). Common Checkered-Skipper. In the Anza Borrego area, the Monroes note eight species on it and the Austins noted several species in Clark County Nevada. February - May.

Noctuidae: *Schinia graefiana*. *Schinia triolata*.

Chaenactis glabriuscula. **Yellow Pincushion**. Asteraceae. Chaenactideae. Nectar: Edith's Checkerspot, Gabb's Checkerspot, Leanira Checkerspot, Northern Checkerspot (<https://www.inaturalist.org/observations/12063390>), Variable Checkerspot, Common Buckeye, Lorquin's Admiral, California Ringlet. Boisduval's Blue. Northern White-Skipper (fq), Sleepy Duskywing (Hartmut Wisch). Three-striped Longhorn (*Adela trigrapha*, Incurvariidae), *Nannobotys commortalis* (Crambidae), *Schinia graefiana* and cf. *Schinia suetus* (Hartmut Wisch). Shapiro finds Edith's Checkerspot is "insanely devoted" to Yellow Pincushion flowers, visiting nothing else when it is in flower. February - July.

Noctuidae: *Schinia graefiana*.

Chaenactis glabriuscula var. *orcuttiana*. Asteraceae. Chaenactideae. Nectar: *Lithariapteryx abroniaeella* (Heliodinidae).

Chaenactis santolinoides. **Santolina Pincushion**. Asteraceae. Chaenactideae. Nectar: Melissa Blue (Hartmut Wisch photograph). May – August.

Chaenactis stevioides. **Esteve Pincushion**. Asteraceae. Chaenactideae. Painted Lady (Hartmut Wisch). Desert Botanical Garden recommends for butterflies. Its white flowers likely visited by moths at night. February - June.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Common Pug (*Eupithecia miserulata*).

Lymantriidae: Pine Tussock Moth (*Dasychira griseifacta*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Variegated Cutworm (*Peridroma saucia*). Cabbage Looper (*Trichoplusia ni*).

Chaenactis xantiana. **Mojave Pincushion**. Asteraceae. Chaenactideae. CalFlora reports butterflies associated with it. March - July.

Noctuidae: *Schinia graefiana*.

Chaetopappa ericoides. **Rose-heath**. Asteraceae. Astereae. Dainty Sulphur. April – September.

Chamaebatia foliolosa. **Mountain Misery**. Rosaceae. Dryadeae. Many Painted Lady seen at nectar on Mountain Misery in Mariposa County during a migration event. Popular with Nelson's Hairstreak. May - July.

Chamaebatiaria millefolium. **Fernbush or Desert Sweet**. Rosaceae. Dryadeae. As a nectar plant, Shapiro finds only that fritillaries attempt to nectar on Fernbush – do not get anything – and leave. Ron Wolf photographed a Painted Lady at nectar on it. Shields observed Nelson's Hairstreak at nectar on Fernbush. Christopher Christie (CalPhotos) photographed a Tailed Copper at nectar on it. Apparently low value for butterflies. June - August.

Foodplant for Echo Azure.

Saturniidae: Nuttall's Sheepmoth (*Hemileuca nuttalli*).

Chamaecyparis lawsoniana was *Cupressus lawsoniana*. **Port Orford Cedar**. Cupressaceae.
Geometridae: Brown-lined Looper (*Neocalcis californiaria*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Light Brown Apple Moth (*Epiphyas postvittana*).

Chamaecyparis nootkaensis is now *Callitropsis nootkaensis*. **Alaska Yellow Cedar**.

Chamaesaracha coronopus. **Greenleaf Five Eyes**. Solanaceae. May – July.

Sesiidae: This plant, found in the New York Mountains in the eastern California desert, is a foodplant for *Carmenta mimuli*, a moth known from Arizona; may occur unreported where the plant is native in California.

Chamaesyce transferred to *Euphorbia* in the current online version of the flora. **Spurges**.

Chamaesyce albomarginata is now *Euphorbia albomarginata*. **Rattlesnake Weed**. Euphorbiaceae.
Nectar: Dainty Sulphur (Dennis Walker, SoCal Butterflies) April – November.

Geometridae: Rattlesnake Weed is a larval host for the Straight-lined Wave (*Lobocleta plemyraria*), an inchworm; its caterpillars closely resemble the stems of the plant (McFarland, 1975).

Chamaesyce hooveri is now *Euphorbia hooveri*. **Hoover's Spurge**. Euphorbiaceae. Unspecified butterflies seen visiting it in a Sacramento Prairie restoration project. July - September.

A vernal pool species threatened by habitat loss.

Chamaesyce melanadenia is now *Euphorbia melanadenia*. **Squaw Spurge**. Euphorbiaceae. Nectar: A photograph shows this or a similar spurge with a Dainty Sulphur at nectar. Sonoran Blue in the Anza-Borrego Desert (Heath). December - May.

Chamaesyce polycarpa is now *Euphorbia polycarpa*. **Desert Sandmat**. Euphorbiaceae. Nectar: Bramble Green Hairstreak (Monroes). All year.

Chamerion angustifolium subsp. *circumvagum* was *Epilobium angustifolium*. **Fireweed**. Onagraceae.
Nectar: Western Tiger Swallowtail (SW Oregon plus Seattle), Anise Swallowtail, Orange Sulphur, Cabbage White, Western White, West Coast Lady, Great Spangled Fritillary [Michigan], Echo Azure (Stewart Wechsler), Dun Skipper, Woodland Skipper. "Moths only", primarily – *Butterfly Gardening*.

Leverson says that in England and Scotland, white butterflies, *Pieris*, visit it. He finds extensive stands in midsummer flower, especially along railroad tracks which frequently burned in previous times, very attractive to moths, especially in the hour after dusk; a great variety of noctuids and geometrids.

Californian moths known to visit Fireweed flowers include these noctuids: *Autographa pseudogamma*. Large Looper (*Autographa ampla*), Hooked Silver Y (*Syngrapha alias*), and the Inscribed Looper (*Syngrapha epigaea*). July - September.

Cosmopterigidae: *Mompha unifasciella*.

Geometridae: Black-banded Carpet (*Antepirrhoe semiatrata*). The Small Phoenix (*Ecliptopera silaceata*). Satyr Pug (*Eupithecia satyrata*). Grey Pug (*Eupithecia subfuscata*). Double-banded Carpet (*Spargania magnoliata*).

Noctuidae: Langton's Forester (*Alypia langtoni*) (fq). MacCulloch's Forester (*Androloma maccullochii*). Variegated Cutworm (*Peridroma saucia*).

Scythrididae: *Landryia matutella*.

Sesiidae: Fireweed Clearwing (*Albuna pyramidalis*) – a day-flying wasp mimic.

Sphingidae: White-lined Sphinx (*Hyles lineata*). Bedstraw Hawkmoth (*Hyles gallii*). Yellow-banded Day Sphinx (*Proserpinus flavofasciata*) a Humboldt County day-flying moth that looks and acts like a bumblebee! Clark's Day Sphinx (*Proserpinus clarkiae* [Haggard]).

Chenopodium sp. **Goosefoot**. Amaranthaceae.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Stem-galling Moth (*Epiblema strenuana*). Omnivorous Leafroller (*Platynota stultana*).

Chenopodium berlandieri. **Pitseed Goosefoot**. Amaranthaceae. Pitseed Goosefoot is a nectar plant for the Western Pygmy Blue. July - September.

Oviposition observed by Western Pygmy Blue. Hostplant for Common Sootywing and Golden-headed Scallopwing.

Chenopodium californicum. **California Goosefoot**. Amaranthaceae. March - September.

Larval host for Western Pygmy Blue and Common Sootywing.

Chenopodium fremontii. **Fremont's Goosefoot**. Amaranthaceae. June - October.

Larval host for the Common Sootywing and Golden-headed Scallopwing.

Chenopodium leptophyllum. **Thin-leaved Goosefoot**. Amaranthaceae. July - September.

Foodplant for Western Pygmy Blue.

Chilopsis linearis. **Desert Willow**. Bignoniaceae. Nectar: Pipevine Swallowtail; eight seen at nectar late in the day by Mary Klinkel, at the Empire Ranch Cienega in Arizona. In New Mexico, David Ferguson sees Two-tailed Swallowtail often, Monarch and Queen less frequently, Cloudless Sulphur occasionally. White-lined Sphinx (*Hyles lineata*), Achemon Sphinx (*Eumorphia achemon*), other long-tongued moths. May - September.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Geometridae: Desert Willow Looper (*Eucaterva variaria*) and Wavy-lined Emerald (*Synchlora aerata*).

Pyralidae: *Satole ligniperdalis*.

Sphingidae: a favorite larval host of the Rustic Sphinx (*Manduca rustica*) (Powell & Opler).

Chimaphila umbellata. **Pipsissewa**. Ericaceae. June – August.

Notodontidae: Unicorn Caterpillar (*Schizura unicornis*).

Chloracantha spinosa var. *spinosa*. **Spiny Aster**. Asteraceae. Astereae. Nectar: Dainty Sulphur, Cabbage Looper (*Trichoplusia ni*, Noctuidae). May – December.

Chlorogalum angustifolium. **Narrowleaf Soap Plant**. Agavaceae. Said to be moth-pollinated. April - July.

Chlorogalum pomeridianum. **Soap Lily**. Agavaceae. Attracts hawkmoths (California Horticultural Society). Greg Kareofelas sees White-lined Sphinx at nectar. Many Sequoia Sphinx seen visiting its flowers near Mather in the Sierra Nevada. Moldenke captured 10 species of unidentified nocturnal moths at its flowers.

The white flowers audibly pop open in late afternoon, often getting immediate attention from bumblebees. A field study concluded its prime pollinators are various bees, not moths, as some had guessed. An owner of an oak savannah remnant reports considerable interest by sweat bees. May - August.

Soap Lily is a major larval host for the Brown Elfin in the San Francisco Bay Region (Shapiro).

Tortricidae: *Sparganothis senecionana*.

Chlorogalum purpureum var. *purpureum*. **Purple Amole**. Agavaceae. Lycaenid butterflies and sweat bees are conspicuous visitors to its lovely purple flowers, according to Dieter Wilken. May - June.

Chloropyron maritimum subsp. *maritimum* was *Cordylanthus maritimus*. **Saltmarsh Bird's Beak**. Orobanchaceae. The Salt Marsh Snout Moth (*Lipographis fenestrella*) is among its flower visitors in San Diego. May - October.

Chloropyron molle was *Cordylanthus mollis*. **Soft Bird's Beak**. Orobanchaceae.

Pyralidae: Caterpillars of *Lipographis fenestrella* found feeding upon it (Powell & Opler, p. 193).

Chloropyron palmatum. **Palmate-bracted Bird's Beak**. Orobanchaceae. *Lipographis umbrella* (Pyralidae) found diurnally associated with this plant in September in Alameda County (Powell & Opler, p. 193)

Chorizanthe sp. **Spineflower**. Polygonaceae.

Gelechiidae: *Aroga xyloglypta* adults found associated with it; possible larval host.

Chorizanthe douglasii. **Douglas' Spineflower**. Polygonaceae. Lupine Blue seen at nectar in photograph on iNaturalist.

Chorizanthe membranacea. **Pink Spineflower**. Polygonaceae. An Acmon Blue seen at nectar in a photograph of Pink Spineflower taken on Mount Diablo. April - July.
Strongly suspected larval host for the Small Blue (*Philotiella speciosa bohartorum* Tilden 1969).

Chorizanthe parryi var. *fernandina*. **San Fernando Valley Spineflower**. Polygonaceae. Considerably less than 1% of the flower visitors were butterflies, metalmark and skipper families (3 species). (Jones, C. Eugene, Frances M. Shropshire, Laura L. Taylor-Taft, Sean E. Walker, Leo C. Song, Youssef C. Atallah, Robert L. Allen, Darren R. Sandquist, Jim Luttrell, and Jack H. Burk. 2009. "Reproductive biology of the San Fernando Valley Spineflower, *Chorizanthe parryi* var. *fernandina* (Polygonaceae)." *Madroño* 56 (1): 23-42. <http://www.jstor.org/stable/41425796>.)

Chorizanthe pungens var. *hartwegiana*. **Ben Lomond Spineflower**. Polygonaceae. Northern Checkerspot (J. Maughn), California Ringlet (J. Maughn). April – June.

Chorizanthe rigida. **Spiny Herb**. Polygonaceae. February - June.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Chorizanthe robusta. **Robust Spineflower**. Polygonaceae. The flowers of the Robust Spineflower attract “at least six species of butterflies” according to Randy Morgan. Presumably *C. r.* var. *hartwegii*, Scott's Valley Spineflower. April - July.

Chorizanthe staticoides. **Turkish Rugging**. Polygonaceae. Mountain Mahogany Hairstreak. Also seen in photographs on it an apparent Gorgon Copper (Kummel), a sulphur and a Funereal Duskywing (Pete Veilleux). April - July.

Chorizanthe xanti var. *xanti*. **Pinyon Spineflower**. Polygonaceae. Nectar plant for Hedgerow Hairstreak (Aaron Schusteff photograph on BugGuide). April – July.

Chrysolepis chrysophylla. **Giant Chinquapin**. Fagaceae. Nectar: Pine White, Lorquin's Admiral, California Sister, Hydaspe Fritillary, Common Wood-Nymph, Hedgerow Hairstreak, Golden Hairstreak and small skippers. The Golden Hairstreak observed and photographed at mid-day at nectar on this species, a larval host for it, in Jefferson County, Oregon by a vacationing lepidopterist. There are no observations of some California populations at nectar on anything. June - September.

Foodplant for caterpillars of the Golden Hairstreak and the California Sister.

Geometridae: *Cyclophora dataria*. Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Neocalcis californiaria*). Pearsall's Carpet (*Venusia pearsalli*).

Gracillariidae: *Acrocercops insulariella*.

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Noctuidae: Large Gray Pinion (*Lithophane georgii*). Six-spotted Litocala (*Litocala sexsignata*). Angulate Oak Quaker (*Perigonica angulata*). Pectinate Oak Quaker (*Perigonica pectinata*). Terminal Oak Zale (*Zale termina*).

Notodontidae: California Oakworm (*Phryganidia californica*).

Tortricidae: Giant Chinquapin acorns are food for the Filbertworm (*Cydia latiferreana*).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Giant Chinquapin considered difficult to cultivate.

Chrysolepis sempervirens. **Bush Chinquapin**. An unidentified fritillary photographed at nectar on Bush Chinquapin (Marc Kummel). Another photograph, likely this plant, shows a Comma of some sort at nectar. July - August.

Notodontidae: California Oakworm (*Phryganidia californica*).

Geometridae: Falcate Synaxis (*Tetraxis cervinaria*) (Valenti, 1997, feeding test).

Gracillariidae: *Acrocercops insulariella*.

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Pyralidae: *Acrobasis comptella*.

Chrysothamnus spp. **Rabbitbrush**. Note: much of this old genus designation re-assigned to *Ericameria*. Asteraceae. Nectar records of "Chrysothamnus" from Clark County, Nevada: Desert Black Swallowtail. Checkered White, Orange Sulphur. California Sister, Red Admiral, American Lady, Painted Lady, West Coast Lady, Satyr Comma, Hoary Comma, Sagebrush Checkerspot, Monarch, Queen. American Snout. Mormon Metalmark. Gray Hairstreak, Sheridan's Hairstreak, Western Pygmy Blue, Cinereous Blue (Austins). Noted from British Columbia: Canada: Juba Skipper (fq). Shapiro says Rabbitbrush is "an irresistible lure in fall" to the Thicket Hairstreak. Indomitable Melipotis (*Melipotis indomita*, Noctuidae) is a moth attracted to its flowers. Also *Schinia walsinghami* (Noctuidae).

Geometridae: Shaded Granite, *Digrammia curvata*, an attractive geometrid. *Digrammia nubiculata* (BugGuide). *Digrammia pertinata* is considered a likely juniper feeder (BugGuide).

Noctuidae: *Cucullia similaris* (PNW Moths). Garden Cutworm (*Fishia discors*). Corn Earworm (*Helicoverpa zea*). *Lacinipolia pensilis*. *Lacinipolia umbrosa*. *Protorthodes curtica*. *Schinia walsinghami*.

Chrysothamnus Greenei. **Greene's Rabbitbrush**. Asteraceae. Astereae. October.

Hostplant for Acastus Checkerspot (Todd Stout).

Chrysothamnus nauseosus is now *Ericameria nauseosa*. **Rubber Rabbitbrush**.

Chrysothamnus paniculatus is now *Ericameria paniculata*. **Black-stem** or **Mojave Rabbitbrush**.

Chrysothamnus parryi. **Parry Rabbitbrush**. Asteraceae. Astereae. Reakirt's Blue. "Unshowy, but excellent all around" as a nectar plant, says Shapiro. July - September.

Chrysothamnus teretifolius is now *Ericameria teretifolia*. **Green Rabbitbrush**.

Chrysothamnus viscidiflorus. **Green Rabbitbrush**. Asteraceae. Astereae. Nectar: Pine White, Clouded Sulphur, Monarch, Queen (Ron Wolf), Painted Lady, Bordered Patch, Weidemeyer's Admiral, Mourning Cloak, Hoary Comma, Common Ringlet, Great Basin Wood-Nymph. Mormon Metalmark. California Hairstreak, Coral Hairstreak, Behr's Hairstreak, Sagebrush Sooty Hairstreak (Kondla), Blue Copper, Lilac-bordered Copper, Western Pygmy Blue, Melissa Blue, Veined Blue (Hartmut Wisch). Northern White-Skipper, Common Checkered-Skipper, Yuba Skipper, Western Branded Skipper. Shapiro finds it – relatively -- the least attractive rabbitbrush as a nectar plant for California butterflies. *Sympistis albifasciata* (Noctuidae) (BugGuide). July - October.

Green Rabbitbrush is a larval host for Acastus Checkerspot and Northern Checkerspot (*Hostplants*).

Coleophoridae: *Coleophora lynsoidella*. *Coleophora viscidiflorella*.

Geometridae: *Chlorochlamys triangularis* (an emerald). Darwin's Green (*Nemoria darwiniata*).

Tortricidae: *Eucosma bucephaloides*. *Pelochrista aurilineana*. *Pelochrista canariana*. *Pelochrista crambitana* (a root borer). Rabbitbrush Webbing Moth (*Synnoma lynosyrana*).

Chylismia brevipes formerly aka *Oenothera brevipes*. **Yellow Cups**. Onagraceae. March – April.

Presumably, the White-lined Sphinx host eating flowers, leaves and tender distal portions of stems in early May, noted as "Oenothera breviceps" in: Casey, Timothy M. "Activity Patterns, Body Temperature and Thermal Ecology in Two Desert Caterpillars (Lepidoptera: Sphingidae)." *Ecology* 57, no. 3 (1976): 485-97. doi:10.2307/1936433.

Chylismia claviformis was *Camissonia claviformis*. **Browneyes**. Onagraceae. Feb-May (most subspecies). Sphingidae: A Hartmut Wisch photograph shows White-lined Sphinx (*Hyles lineata*) caterpillars eating its buds and seedpod; a Wayne's Word photograph shows caterpillar feeding on subsp. *peirsonii*. Monroes: it is a favorite host.

Noctuidae: *Schinia cupes*. *Schinia deserticola*.

Cicuta spp. **Water Hemlock**. Apiaceae. Oenantheae.

"*Cicuta*" is a larval host for some moth species found in California:

Epermeniidae: *Epermenia cicutaella*.

Geometridae: White-spotted Pug (*Eupithecia tripunctaria*).

Oecophoridae: *Depressaria daucella*.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Cicuta douglasii. **Western Water Hemlock**. Apiaceae. Oenantheae. Red Admiral visits its flowers, rarely (Paul Severns). June – September.

This species is a host for Anise Swallowtail and Black Swallowtail.

Oecophoridae: *Depressaria daucella*.

Cicuta maculata. **Water Hemlock**. Apiaceae. Oenantheae. Nectar: Clouded Sulphur, Cloudless Sulphur, American Snout, American Lady, Common Buckeye, Great Spangled Fritillary, Viceroy, Pearl Crescent (fq), Juniper Hairstreak(fq), Eastern Tailed Blue, Yellow-Collared Scape Moth (observations from the Midwest and Southeast, but likely Lepidoptera visit it in California). The flowers of this poisonous plant serve a great diversity of insects, but Scott considers it generally of little interest to butterflies.

var. *angustifolia*. **Narrow Leafed Water Hemlock**. June – September.

var. *bolanderi*. **Bolander's Water Hemlock**. July - September.

Water Hemlock is a hostplant for the Anise Swallowtail and Black Swallowtail.

Epermeniidae: *Epermenia cicutaella*.

Cirsium spp. **Thistles**. Asteraceae. Cardueae. Thistle flowers attract a wide variety of Lepidoptera: Pipevine Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Pale Swallowtail, Anise Swallowtail, Giant Swallowtail, Indra Swallowtail, Old World Swallowtail (fq). California Dogface, Southern Dogface, Orange Sulphur, Cloudless Sulphur, Harford's Sulphur, Queen Alexandra's Sulphur, Sleepy Orange, Sara Orangetip, Checkered White, Large Marble, Pine White. Monarch, Queen, Variable Checkerspot, Pacific Fritillary, Zerene Fritillary, Callippe Fritillary, Coronis Fritillary, Leto Fritillary, Nokomis Fritillary, Gulf Fritillary, Unsilvered Fritillary, Viceroy, Field Crescent, Mylitta Crescent, Lorquin's Admiral, Weidemeyer's Admiral, American Lady, Painted Lady, West Coast Lady, Common Buckeye, Milbert's Tortoiseshell, California Sister, Common Wood-Nymph, Great Basin Wood-Nymph. American Snout. Hedgerow Hairstreak, Golden Hairstreak, Gray Hairstreak, Great Copper, Western Pygmy Blue, Marine Blue, Reakirt's Blue, Acmon Blue, Cinereous Blue. Meridian Duskywing, Northern White-Skipper, Common Checkered-Skipper, Lindsey's Skipper, Sachem, Pahaska Skipper, Western Branded Skipper, Umber Skipper, Dun Skipper, Yuma Skipper. Clark's Day Sphinx and White-lined Sphinx.

Thistles serve as larval hosts of the Painted Lady, Mylitta Crescent, and California Crescent.

Crambidae: *Udea turmalis* (Powell & Opler, p. 177).

Noctuidae: Variegated Cutworm (*Peridroma saucia*).

Pyralidae: *Phycitodes mucidella*.

Cirsium andersonii. **Rose Thistle**. Asteraceae. Cardueae. West Coast Lady. A showy thistle that likely serves many butterflies. Callippe Hummingbird. July - September.

1988 Season Summary, John F. Emmel reports pre-diapause larval colonies of California Crescent [*Phyciodes orseis herlani*] and Mylitta Crescent [*Phyciodes mylitta*] on *Cirsium andersonii*, upper Glen Alpine Creek, 7600', Eldorado Co, 19 July.

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Cirsium andrewsii. **Franciscan Thistle**. Asteraceae. Cardueae. May – September.

Arctiidae: Bob Sikora photographed Ranchman's Tiger Moth (*Arctia virginialis*) caterpillars feeding on Franciscan Thistle at Tomales Point, Point Reyes National Seashore (27 April 2012).

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Cirsium arizonicum var. *arizonicum*. **Arizona Thistle**. Asteraceae. Cardueae. Nectar: Two-tailed Swallowtail (fq), Pipevine Swallowtail, Mexican Yellow (fq), Northern Cloudywing, Funereal Duskywing (Liz Makings), Silver-spotted Skipper (Liz Makings), Woodland Skipper (Liz Makings), and likely many others. Bumblebees. July- August.

Larval host for Painted Lady, Mylitta Crescent (Desert Survivors Nursery).

Cirsium arizonicum var. *tenuisectum*. **Desert Mountain Thistle**. Asteraceae. Cardueae. July – November.

Cirsium brevistylum. **Indian Thistle**. Asteraceae. Cardueae. Often referred to as *Cirsium edule* (misapplied) in older literature, according to the Online Flora of North America. Asteraceae. Western Tiger Swallowtail. Recommended as a butterfly nectar plant by the Eugene-Springfield Oregon NABA chapter. Bumblebees. Likes some moisture. March - August.

Hostplant for Painted Lady (Stewart Wechsler, NorWestLeps #1954), Mylitta Crescent. Seemed a preferred host to him.

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*) (Stewart Wechsler, NorWestLeps #2158 – seems a preferred host).

Cirsium canovirens is now *Cirsium cymosum* var. *canovirens*.

Cirsium cymosum var. *canovirens*. **Gray-green Thistle**. Asteraceae. Cardueae. Nectar, in south-central Idaho: Two-tailed Swallowtail, Western Tiger Swallowtail, Queen Alexandra Sulphur, Great Basin Wood-Nymph, Common Ringlet, Callippe Fritillary, and Painted Lady. Bumblebees. June - July.

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Pyralidae: Weedfield Sable (*Pyrausta subsequalis*). *Homeosoma impressalis*, which feeds on its seeds.

Tortricidae: *Sparganothis* sp.

Cirsium cymosum var. *cymosum*. **Peregrine Thistle**. Asteraceae. Cardueae. Nectar: Callippe Fritillary – a solitary specimen attracting them! April – July.

Scott notes California Crescent associated with it in northern California, very likely a hostplant.

Cirsium crassicaule. **Slough Thistle**. Asteraceae. Cardueae. Nectar: Giant Swallowtail, Pipevine Swallowtail, Checkered White, a Fritillary, Red Admiral, Painted Lady, a Crescent, Monarch, skippers, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae). (Some uncertainty here – names old and confused from a military document). March - June.

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Cirsium douglasii var. *breweri*. **Brewer's Swamp Thistle**. Asteraceae. Cardueae. Nectar: Glenn Fine Siskiyou County observations: Western Tiger Swallowtail, Anise Swallowtail, Pine White, Orange Sulphur, Monarch, Painted Lady, Lorquin's Admiral, Great Spangled Fritillary, Hydaspe Fritillary, Northwestern Fritillary, Zerene Fritillary, Purplish Copper, Common Checkered-Skipper, Persius Duskywing, Dun Skipper, Juba Skipper, Sachem, Sandhill Skipper, Sonora Skipper, Western Branded Skipper, Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae). Visited by Elegant Sphinx (fq) and White-lined Sphinx (fq) in Lassen County (Gut, Larry J., et al. 1977. "Nectar-sugar concentrations and flower visitors in the western Great Basin." *The Great Basin Naturalist* 37 (4): 523–529. [JSTOR, www.jstor.org/stable/41711603](http://www.jstor.org/stable/41711603)). June -September.

A caterpillar plant for the Mylitta Crescent, "often defoliating" it in the Trinity Alps area (Shapiro), also eaten by the Painted Lady caterpillars. A likely host also for the California Crescent aka Orseis Crescent.

Brewer's swamp thistle usually grows in serpentine wetlands at high elevations in northern California. Considered worth cultivating but thought difficult. The lower elevation var. *douglasii* seems easily grown by Native Here Nursery in Berkeley.

Cirsium fontinale var. *campylon*. **Mt. Hamilton Thistle**. Asteraceae. Cardueae. Nectar: Western Tiger Swallowtail, Monarch, Unsilvered Fritillary. March – October.

Associated with Mylitta Crescent; very likely a hostplant!

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Cirsium hydrophilum. **Suisun Thistle**. Asteraceae. Cardueae. Nectar for Pipevine Swallowtail, California Dogface, no doubt others. June - September.

Larval host for Painted Lady and Mylitta Crescent.

Cirsium mojavnense. **Mojave Thistle**. Asteraceae. Cardueae. A showy species, likely of considerable value as a nectar plant and larval host. One online photograph shows a marble at nectar, another a Fiery Skipper, another a White-lined Sphinx. Bumblebees. July - October.

Cirsium neomexicanum. **Desert Thistle**. Asteraceae. Cardueae. Two-tailed Swallowtail (Dave Ferguson, Ned Harris), Chalcedon Checkerspot (Liz Makings), Leto Fritillary (Scott), skippers. Bumblebees. April - May.

Larval host for Painted Lady.

Cirsium occidentale. **Western Thistle**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail, Anise Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Cloudless Sulphur, California Dogface, Monarch, Callippe Fritillary, Unsilvered Fritillary (fq), Variable Checkerspot, American Lady, Painted Lady, West Coast Lady, Red Admiral, Harbison's Dun Skipper and Umber Skipper. Bumblebees. Varieties in flower from February - September.

Larval host for Painted Lady and Mylitta Crescent.

Arctiidae: Ranchman's Tiger Moth (*Arctia virginalis*) – a 2012 photograph on BugGuide (Robert P. Sikora) notes its generalist feeding caterpillar found especially on its flowers at Pt. Reyes National Seashore.

Noctuidae: Figwort Stem Borer (*Papaipema sauzalitae*).

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Pyralidae: *Homeosoma impressalis*. Weedfield Sable (*Pyrausta subsequalis*) – capable of killing the plants! (Steven Palmisano, and Laurel R. Fox. 1997. "Effects of Mammal and Insect Herbivory on Population Dynamics of a Native Californian Thistle, *Cirsium occidentale*." *Oecologia* 111 (3): 413-21. <http://www.jstor.org/stable/4221709>).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Var. *occidentale*: Zones 15-17.

Cirsium occidentale var. *californicum*. **California Thistle**. Asteraceae. Cardueae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail (J.C., David Horner), California Dogface, Harford's Sulphur, Chalcedon Checkerspot, Callippe Fritillary, Coronis Fritillary (fq), Silver-spotted Skipper (fq), Mournful Duskywing (fq), Columbian Skipper, Rural Skipper, Yuba Skipper, Umber Skipper, Woodland Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae). Anna's Hummingbird. April - July.

Noted as a favorite nectar source for Coronis Fritillary, Silver-spotted Skipper, Mournful Duskywing and Columbian Skipper by the Grinnells in 1907. Likely this the thistles they also noted as the favorite nectar plant for Columbian Skipper.

Hostplant for Painted Lady.

Cirsium occidentale var. *venustum*. **Venus Thistle**. Asteraceae. Cardueae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Anise Swallowtail, California Dogface. Anna's Hummingbird. May - July.

Mylitta Crescent larvae reported on this taxon on Mount Diablo in 1982 Season Summary.

Zones 3, 7, 14-16, 18-21.

Cirsium quercetorum. **Brownie Thistle**. Asteraceae. Cardueae. Nectar: Mission Blue [Boisduval's Blue segregate] and Callippe Silverspot on San Bruno Mountain. Mission Blue in San Francisco. April - August.

Cirsium remotifolium. **Fewleaf Thistle**. Asteraceae. Cardueae. Nectar: Clodius Parnassian (fq); "great butterfly nectar plant" (Mountain Plants of the Western Cascades). May - August.

Hostplant for Mylitta Crescent.

Cirsium remotifolium var. *odontolepis*. **Pacific Fringed Thistle**. Asteraceae. Cardueae. Nectar: Clodius Parnassian (Mark Egger). June – July.

Cirsium rhotophilum. **Surf Thistle**. Asteraceae. April – August.

Pterophoridae: Artichoke Plume Moth (*Platyptilia carduidactylus*).

Cirsium scariosum. **Bird's Nest Thistle**. Asteraceae. Cardueae. Nectar: Callippe Fritillary, Zerene Fritillary, Milbert's Tortoiseshell, Greenish Blue, Painted Lady, Sonora Skipper, Uncas Skipper (Scott). Bumblebees. May - July (varieties over a yet wider range of months).

Larval host for Painted Lady.

Cirsium scariosum var. *congdonii*. **Rosette Thistle**. Asteraceae. Cardueae. Nectar: West Coast Lady, White-lined Sphinx, no doubt others. June - August.

Cistanthe umbellata var. *umbellata* was *Calyptidium umbellatum*. **Pussypaws**. Montiaceae. Nectar: Clodius Parnassian (fq), Sierra Nevada Parnassian. Pearly Marble, Orange Sulphur. Callippe Fritillary, Northwestern Fritillary, Zerene Fritillary, Hydaspe Fritillary (Tanya Harvey), Pacific Fritillary, Variable Checkerspot (fq), Edith's Checkerspot {Quino Checkerspot in San Bernardino Mts.}, Northern Checkerspot, Hoffman's Checkerspot, Rockslide Checkerspot, Painted Lady, American Lady, West Coast Lady, Common Buckeye, Hoary Comma, California Tortoiseshell, Milbert's Tortoiseshell, California Crescent, Mylitta Crescent, Field Crescent. California Hairstreak (Glenn Fine), Lambert's Green Hairstreak, Nelson's Hairstreak (fq), Thicket Hairstreak, Johnson's Hairstreak, Brown Elfin, Western Pine Elfin, Pacific Dotted-Blue, Boisduval's Blue, Leona's Little Blue, Lupine Blue, Melissa Blue (Glenn Fine), Silvery Blue (Roger Steeb), Western Tailed Blue, Acmon Blue, Echo Azure, American Copper, Ruddy Copper, Lilac-Bordered Copper (fq), Edith's Copper, Lustrous Copper (fq), Blue Copper. Common Checkered-Skipper, Two-banded Checkered-Skipper (fq) ('addicted' according to Shapiro), Nevada Cloudywing, Mexican Cloudywing, Pacuvius Duskywing, Propertius Duskywing, Arctic Skipper, Common Branded Skipper, Sonora Skipper, Tecumseh Skipper, and Juba Skipper. Shapiro: "Extremely attractive to all small and some medium-sized butterflies. In the first half of the season in the mountains: Blues, Coppers, Hairstreaks, Skippers, some Pierids and Nymphalids. I commonly see 15-20 species at Pussypaws at Donner Summit (7000') in June - early July. Particularly attractive to the Lustrous Copper!" *Gyros mairii* (Crambidae). May - October.

Pussypaws is a foodplant for caterpillars of the Lustrous Copper – its mature pink larvae feed on its flowers, where they blend in quite well.

Horticulturist Ted Kipping, as a rock garden plant: "It is not difficult to grow; it just wants good aeration."

Clarkia spp. **Farewell-to-Spring**. Onagraceae. Rural Skipper (aka the Farmer) the only butterfly to visit *Clarkia* spp. flowers in Shapiro's study areas – a decidedly secondary nectar source for butterflies (Shapiro, personal communication). Butterworth finds Lindsey's Skipper visits *Clarkia* spp. in San Luis Obispo County.

Noctuidae: Riding's Forester (*Alypia ridingsii*, Noctuidae) a day-flying flower-visiting moth – sporting black-and-white wings with tufts of orange hairs on its middle legs -- and the similar California Forester (*Alypia mariposa*).

Sphingidae: Pacific Green Sphinx or Bear Sphinx (*Proserpinus lucidus*) which flies in late winter.

Tortricidae: *Sparganothis senecionana*.

Clarkia affinis. **Chaparral Clarkia. Speckled Clarkia.** Onagraceae. Paul Johnson photographed a Rural Skipper (aka the Farmer) visiting its flowers in Pinnacles National Monument. May – June.

Clarkia amoena. **Farewell to Spring.** Onagraceae.

Sphingidae: T.J. Gehling photographed a White-lined Sphinx caterpillar in one of its flowers in a park planting in El Cerrito. Elaine Salinger found it on hers in San Mateo.

Clarkia bottae. **Punch Bowl Godetia.** Onagraceae. April - July.

Noctuidae: California Forester (*Alypia mariposa*).

Clarkia breweri. **Brewer's Clarkia. Fragrant Fairy Fans.** Onagraceae. A fragrant species, pollinated by hawkmoths. Hummingbirds often visit the flowers by day. April - June.

Sphingidae: White-lined Sphinx (*Hyles lineata*). Pacific Green Sphinx (*Proserpinus lucidus*).

Clarkia concinna. **Red Ribbons. Lovely Clarkia.** Onagraceae. Pale Swallowtail shown at nectar in a photograph taken on Mt. Diablo. Another shot shows a Rural Skipper at nectar (Hints). Long-tongued moths visit its flowers. April - July.

Sphingidae: Clark's Day Sphinx (*Proserpinus clarkiae*).

Clarkia cylindrica. **Speckled Fairyfan.** Onagraceae. Moths – Pollinator Partnership. April - June.

Clarkia modesta. **Waltham Creek Clarkia.** Onagraceae. Paul Johnson photographed the Three-striped Longhorn (*Adela trigrpha*) on its flowers. April - May.

Sphingidae: Pacific Green Sphinx (*Proserpinus lucidus*).

Clarkia purpurea. **Purple Clarkia.** Onagraceae. Moths – Pollinator Partnership. April - June.

Sphingidae: Probably a foodplant for the Pacific Green Sphinx (*Proserpinus lucidus*) according to Wikipedia.

Clarkia rhomboidea. **Forest Clarkia, Tongue Clarkia or Diamond Clarkia.** Onagraceae. March - September.

Sphingidae: Clark's Day Sphinx (*Proserpinus clarkiae*). White-lined Sphinx (*Hyles lineata*). Western Snowberry Clearwing (*Hemaris thetis*).

Clarkia unguiculata. **Elegant Fairyfans. Elegant Clarkia**. Onagraceae. Nectar: Clark's Day Sphinx (*Proserpinus clarkiae*, Sphingidae). April - September.

Sphingidae: White-lined Sphinx (*Hyles lineata*). Clark's Day Sphinx (*Proserpinus clarkiae*), an attractive day-flying sphinx moth. Suspected foodplant for Pacific Green Sphinx (*Proserpinus lucidus*) (Paul Johnson).

Noctuidae: California Forester (*Alypia mariposa*, Noctuidae), a showy day-flying moth.

Clarkia williamsonii. **Fort Miller Clarkia**. Onagraceae. April - September.

Noctuidae: California Forester (*Alypia mariposa*).

Claytonia cordifolia. **Heart Leaf Spring Beauty**. Montiaceae. Nectar: Sara Orangetip (Tanya Harvey). June – August.

Claytonia exigua subsp. *exigua*. **Serpentine Spring Beauty**. Montiaceae. Nectar: Sleepy Duskywing (iNaturalist). February – May.

Claytonia lanceolata. **Western Spring Beauty**. Montiaceae. Nectar: Echo Azure, Moss's Elfin. May – July.

Claytonia nevadensis. **Sierra Spring Beauty**. Montiaceae. Moldenke found the Tecumsah Skipper (a segregate of Sandhill Skipper) associated with its flowers. July - September.

Claytonia parviflora. **Narrow-leaved Miner's Lettuce**. Montiaceae. Nectar plant for Margined White (Pyle), Echo Azure (Pyle), *Annaphila lithosina* (Noctuidae), a day-flying moth (Buckett). Likely ssp. *grandiflora*, which is cross-pollinated and flowers May - July.

Claytonia perfoliata. **Indian Lettuce**. Montiaceae. Nectar: Clodius Parnassian. Gray-veined White (Margined White), Sara Orangetip (julia, Pyle). Red Admiral (Marc Kummel). Echo Azure, Sonoran Blue, Western Tailed Blue (San Juan Islands, Washington, slight usage, Susan Vernon). Umber Skipper (Marc Kummel). Western White-ribboned Carpet (*Mesoleuca gratulata*, Geometridae). *Annaphila diva* (Noctuidae) (Ron Wolf), White Annaphila (*Annaphila diva*). Three-striped Longhorn (*Adela trigrapha*) (Ron Wolf). January - May.

Sphingidae: White-lined Sphinx (*Hyles lineata*) (?) – [possibly a rather secondary host for this polyphagus species].

Noctuidae: *Annaphila abdita*. *Annaphila arvalis*. White Annaphila (*Annaphila diva*). The *Annaphila* are day-flying, flower-visiting species.

Geometridae: The Milky-white Carpet Moth (*Enchoria lacteata*) reported as having "Montia" as its hostplant, which may refer to this or another *Claytonia* species (long formerly known as *Montia* species).

Claytonia perfoliata subsp. *mexicana*. **Southern Miner's Lettuce**. Montiaceae. Nectar: Sara Orangetip (photograph by Arleen Webster). February – April.

Claytonia sibirica. **Candy Flower**. Montiaceae. Nectar: Milbert's Tortoiseshell (Yake, NorWestLeps #2031). February – August.

Clematis spp. **Virgin's Bower**. Ranunculaceae. Nectar: Indra Swallowtail, Common Wood-Nymph, Tailed Copper. Shapiro finds them good butterfly flowers on the Sierran west slope, noting fritillaries, hairstreaks and blues.

Clematis suspected as a hostplant for Fatal Metalmark.

Geometridae: *Eupithecia maestosa*. *Eupithecia misturata*. *Horisme* spp.

Noctuidae: *Orthodes neverca*.

Clematis lasiantha. **Chaparral Virgin's Bower**. Ranunculaceae. Pale Swallowtail (Marc Kummel photograph). "Good nectar plant for adult butterflies" – *Plants of the San Gabriel Mountains* CD. January - June.

Tortricidae: *Epinotia pulsatillana* (Powell & Opler).

Popular and adaptable in cultivation, Zones 7-9, 14-24.

Clematis ligusticifolia. **Western Clematis**. **Western Virgin's Bower**. Ranunculaceae. Nectar: Becker's White, Cabbage White, Orange Sulphur, Southern Dogface, Common Buckeye, Red Admiral, Weidemeyer's Admiral (fq), American Lady, Painted Lady, Callippe Fritillary, Northwestern Fritillary, Gulf Fritillary, Monarch, Queen, Hackberry Emperor, Great Basin Wood-Nymph, Small Wood-Nymph (fq), Common Wood-Nymph, Gray Hairstreak, Coral Hairstreak, Hedgerow Hairstreak, Thicket Hairstreak, Juniper Hairstreak, Behr's Hairstreak, Sylvan Hairstreak, Blue Copper, Tailed Copper (fq), Marine Blue, Acmon Blue, Melissa Blue, Fatal Metalmark, Afranius Duskywing (Scott). Scott rates it as generally "popular" with butterflies. In the North Okanagan, British Columbia, large numbers of Great Basin Wood-Nymphs observed in August, gathered on it "on the dry west side of Kalamalka Lake". June - September.

Sesiidae: *Alcathoe verrugo* -- a striking wasp mimic moth.

Tortricidae: *Epinotia pulsatillana* (Powell & Opler).

Zones 1 - 9, 14-24.

Cleome lutea is now *Peritoma lutea*. **Yellow Spiderwort**. Cleomaceae.

Cleome serrulata is now *Peritoma serrulata*. **Rocky Mountains Bee Plant**. Cleomaceae.

Cleomella obtusifolia. **Bluntleaf Stinkweed**. Mojave Cleomella. Cleomaceae. April – October.

Checkered White ova (1988 Season Summary, San Bernardino County, John F. Emmel).

Cleomella parviflora. **Slender Cleomella**. Cleomaceae. Nectar: Carson Wandering Skipper. May - September.

Cleomella plocasperma. **Small-flowered Cleomella**. Cleomaceae. Nectar: Carson Wandering Skipper. May - October.

Clinopodium douglasii was *Satureja douglasii*. **Yerba Buena**. Lamiaceae. Nectar: Rural Skipper. April-September.

Coleogyne ramosissima. **Blackbush**. Rosaceae. Kerrieae. April - June.

Geometridae: Red-winged Wave, *Dasyfidonia avuncularia* (Geometridae), colorful day-flying flower-visiting moth.

Noctuidae: *Spaelotis unicava*.

Collinsia bartsiiifolia. **White Collinsia**. Plantaginaceae. March - June.

Foodplant for Edith's Checkerspot.

Collinsia callosa. **Desert Collinsia**. Plantaginaceae. April - June.

Foodplant for Edith's Checkerspot.

Collinsia childii. **Child's Collinsia**. Plantaginaceae. May - June.

Foodplant for Edith's Checkerspot.

Collinsia concolor. **White Collinsia**. Plantaginaceae. April - June.
Foodplant for Quino Checkerspot (a segregate of Edith's Checkerspot).

Collinsia grandiflora. **Giant Blue-eyed Mary**. Plantaginaceae. April – July.

Foodplant for Taylor's Checkerspot, an endangered segregate of Edith's Checkerspot, in Oregon and Washington. The plant also occurs in California.

Collinsia greenii. **Greene's Collinsia**. Plantaginaceae. April - August.

Foodplant for Edith's Checkerspot.

Collinsia heterophylla. **Chinese Houses**. Plantaginaceae. Butterworth says Echo Azure comes to the flowers of Chinese Houses in San Luis Obispo County. March - June.

Shapiro does not find flowers of this good bee plant visited by butterflies, but notes it as a larval host for some populations of Edith's Checkerspot. Variable Checkerspot hostplant (secondary in the San Bruno Mountains).

Depressariidae: *Ethmia scylla* (Powell & Opler, p. 69).

Noctuidae: Stephen's Gem (*Megalographa biloba*).

Collinsia multicolor. **San Francisco Blue-eyed Mary**. Plantaginaceae. March – May.

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Collinsia parviflora. **Maiden Blue-eyed Mary**. Plantaginaceae. Nectar: Spring White (Scott observed a visit). March - July.

Foodplant for Edith's Checkerspot. A report in 1984 Season Summary.

Collinsia sparsiflora. **Spinster's Blue-eyed Mary**. Plantaginaceae. Propertius Duskywing and *Heliolonche modicella* (Noctuidae) noted among insect visitors to its flowers (at one of three sites): Rust, Richard W., and Stephen L. Clement. 1977. "Entomophilous Pollination of the self-compatible species *Collinsia sparsiflora* Fisher and Meyer." *Journal of the Kansas Entomological Society* 50 (1): 37-48. <http://www.jstor.org/stable/25082899> . March - May.

Foodplant for Edith's Checkerspot.

Collinsia tinctoria. **Sticky Chinese Houses. Iodine Collinsia**. Plantaginaceae. May - August.

Foodplant for Edith's Checkerspot.

Collinsia torreyi. **Torrey's Collinsia**. Plantaginaceae. May - August.

Foodplant for Edith's Checkerspot. Better survival on this rather than *Pedicularis semibarbata* in this study: Singer, Michael C., and Carolyn S. McBride. 2010. "Multitrait, host-associated divergence among sets of butterfly populations: implications for reproductive isolation and ecological speciation." *Evolution* 64 (4): 921-33. <http://www.jstor.org/stable/27784060>

Collomia grandiflora. **Grand Collomia**. Polemoniaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Gray Hairstreak, Boisduval's Blue, Acmon Blue, Greenish Blue, Propertius Duskywing, Persius Duskywing. Hummingbirds, too. April - June.

Collomia linearis. **Tiny Trumpet**. Polemoniaceae. Nectar: Edith's Checkerspot. May - August.

Collomia rawsoniana. **Flaming Trumpet**. Polemoniaceae. Nectar: this rare plant, considered adapted for hummingbird pollination, gets some long-tongued bees, probably a few butterfly visits. July - August.

Comandra umbellata subsp. *californica* **Bastard Toadflax**. Santalaceae. Nectar: Gray Hairstreak. Shapiro finds small butterflies visit this species. An online photograph shows a checkerspot, Northern Checkerspot. Scott notes visits by Variegated Fritillary, Field Crescent, Bramble Green Hairstreak, 'Siva' Juniper Hairstreak, and Persius Duskywing; in comparison with other Colorado flowers, Scott considers it 'unpopular'. April - August.

Noctuidae: American Swordgrass Moth (*Xylena nupera*, Noctuidae).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*). *Xenotemna pallorana*.

Bastard Toadflax is semi-parasitic on a wide range of plant hosts (200 species).

Comarostaphylis diversifolia. **Summer Holly**. Ericaceae. April - June.

Tortricidae: *Epinotia bigemina* (Powell & Opler, p. 139).

Condalia globosa var. *pubescens*. **Spiny Crucillo**. Rhamnaceae. March - April.

Noctuidae: Likely larval host for the Orbed Narrow-wing (*Magusa orbifera*).

Condea emoryi was *Hyptis emoryi*. **Desert Lavender**. Lamiaceae. Nectar: Desert Black Swallowtail. Becker's White, Checkered White, Spring White (David H. Bartholomew), Sara Orangetip, Sleepy Orange, Dainty Sulphur. Queen, California Patch (fq), Variable Checkerspot, Quino Checkerspot (a segregate of Edith's Checkerspot), Tiny Checkerspot, Painted Lady. Gray Hairstreak, Great Purple Hairstreak, 'Loki' Juniper Hairstreak (fq), Bramble Green Hairstreak, Leda Ministreak, Mallow Scrub-Hairstreak, Brown Elfin, Silvery Blue, Sonoran Blue, Acmon Blue, Ceraunus Blue. Desert Metalmark. Funereal Duskywing, Powdered Skipper. Beautiful moths such as *Cisthene* spp. (lichen moths) and Ridings' Forester (*Alypia ridingsii*, Noctuidae – a showy diurnal species Ken Kertell found “a frequent visitor to Desert Lavender” (February 2012, Anza-Borrego State Park) and a *Schinia* (Noctuidae, flower moth). Monroes note *Annaphila astrologa* (Noctuidae) and Desert False Underwing (*Drasteria tejonica*, Noctuidae) at nectar on it. In Anza-Borrego, the Monroes found 18 butterfly species at its flowers! Popular with hummingbirds, also. January – May.

Among foodplants for the polyphagus Gray Hairstreak.

Conocephalum conicum. **Great Scented Liverwort. Snakeskin Liverwort**. Kingdom Plantae, Order Marchantiales, Conocephalaceae.

A hostplant for a micro-moth, *Epimartyria pardella* (Micropterigidae) (Wikipedia). Tuskes & Smith (1984), find it also associated with *Pellia* sp. (liverworts in Order Metzgeriales, Pelliaceae), and mosses: Hookeria Moss (*Hookeria lucens*, Hookeriaceae) and Common Smoothcap (*Atrichum undulatum*, Polytrichaceae).

Conioselinum pacificum aka *Conioselinum chinense* aka *Conioselinum gmelinii*. **Hemlock Parsley**. Apiaceae. Tribe not confirmed but seems likely Selineae. June – August.

Hostplant for Anise Swallowtail.

Oecophoridae: *Agonopterix rosaciliella*.

Constancea nevinii was *Eriophyllum nevinii*. 'Canyon Silver'. **Canyon Silver Island Snowflake**. Asteraceae. Madieae. Gray Hairstreak and Western Pygmy Blue (Lynn Watson). *California Native Plants for the Garden* says “butterfly- and bee-attracting”. April - September.

Tortricidae: *Saphenista latipunctana* (aka *Phalonidia latipunctana*) caterpillars eat immature flowers on Santa Barbara and San Clemente Islands.

Very attractive plant for the garden.

Convolvulus spp. **Morning Glories**. Convolvulaceae. Nectar: Indra Swallowtail. Noted on “*Convolvulus* sp.” in Clark County, Nevada (may refer only to the non-native bindweed (*Convolvulus arvensis*) or may include native *Calystegia* spp.): Orange Sulphur, Purplish Copper, Bordered Patch, Eufala Skipper, Sandhill Skipper (Austins).

Conyza canadensis is now *Erigeron canadensis*. **Horseweed**.

Cordylanthus sp. **Bird's-beak**. Orobanchaceae.

Larval host for Leanira Checkerspot (Butterworth).

Cordylanthus maritimus now *Chloropyron maritimum* subsp. *maritimum*. **Saltmarsh Bird's Beak**. Orobanchaceae.

Cordylanthus mollis is now *Chloropyron molle*.

Cordylanthus pilosus. **Hairy Bird's Beak**. Orobanchaceae. Moldenke found at least seven species of nocturnal moths associated with Hairy Bird's Beak flowers. July - September.

Hairy Bird's Beak is a hostplant for Leanira Checkerspot.

Cordylanthus rigidus subsp. *littoralis*. **Seaside Bird's Beak**. Orobanchaceae. July - August.

Secondary larval host for Quino Checkerspot (a segregate of Edith's Checkerspot).

Cordylanthus rigidus subsp. *rigidus*. **Rigid Bird's Beak**. Orobanchaceae. July - September.

Foodplant for Common Buckeye at Pinnacles National Monument (Paul Johnson) and for Quino Checkerspot (a segregate of Edith's Checkerspot) at Tecate Peak in southern San Diego County. Adam Clause posted two photographs on CalPhotos showing larvae of the Variable Checkerspot on Rigid Bird's Beak on a roadside in Ventura County. Marc Kummel photographed a tattered Common Buckeye near it in Santa Barbara County suspected of ovipositing or interested in ovipositing.

Cordylanthus tenuis. **Slender Bird's Beak**. Orobanchaceae. July - September.

Foodplant for Leanira Checkerspot.

Coreopsis sp. **Tickseeds**. Note: Native "Coreopsis" species of Lepidoptera interest now re-assigned to *Leptosyne*. Asteraceae. Common Buckeye, Southern Dogface (Butterworth). It seems that *Leptosyne*, segregated from the formerly more inclusive designation *Coreopsis*, offer of the most attractive "Coreopsis" flowers for butterflies.

Geometridae: Wavy-lined Emerald (*Synchlora aerata*).

Noctuidae: *Xanthothrix neumoegeni* – the beautiful flower moth on the banner at The Skeptical Moth blog site.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Coreopsis bigelovii is now *Leptosyne bigelovii*. **Bigelow's Tickseed**.

Coreopsis californica is now *Leptosyne californica*. **California Tickseed**.

Coreopsis calliopsidea is now *Leptosyne calliopsidea*. **Leafstem Tickseed.**

Coreopsis douglasii is now *Leptosyne douglasii*. **Douglas' Coreopsis.**

Coreopsis gigantea is now *Leptosyne gigantea*. **Giant Coreopsis.**

Coreopsis maritima is now *Leptosyne maritima*. **Sea Dahlia.**

Coreopsis stillmanii is now *Leptosyne stillmanii*. **Stillman's Tickseed.**

Corethrogyne filaginifolia was *Lessingia filaginifolia*. **California Corethrogyne. California Sandaster.** Asteraceae. Astereae. Nectar: Anise Swallowtail (Paul Furman). Orange Sulphur, Harford's Sulphur, California Dogface (Marc Kummel), Becker's White (David Horner), Cabbage White, Checkered White (David Horner). Callippe Fritillary, Painted Lady, American Lady, West Coast Lady, Red Admiral, Field Crescent, Mylitta Crescent. Fatal Metalmark (Marc Kummel), Mormon Metalmark. Acmon Blue, Marine Blue, Western Pygmy Blue, Pacific Dotted-Blue. Mournful Duskywing, Common Checkered-Skipper, White Checkered-Skipper, Northern White-Skipper, Orange Skipperling, Columbian Skipper, Juba Skipper, Fiery Skipper, Sandhill Skipper, Umber Skipper, Woodland Skipper (David Horner, others). A Bernard Field Station (Claremont) photograph shows *Schinia buta* on a flower, likely at nectar. Las Pilitas Nursery finds it attracts "a host of butterflies from skippers to swallowtails". 'Silver Carpet' is an attractive cultivar. July – November.

Larval host for Gabb's Checkerspot (Heath).

Noctuidae: *Cucullia astigma*. *Cucullia eccissica*.

Gelechiidae: *Dichomeris baxa* (Wikipedia).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Snakeweed Borer (*Pelochrista ridingsana*) [Powell & Opler].

Zones 7, 9, 14-24.

Cornus. **Dogwood.** Cornaceae.

Larval hosts for Echo Azure.

Coleophoridae: *Coleophora cornella*.

Drepanidae: *Euthyatira lorata*.

Geometridae: Peppered Moth (*Biston betularia*). Linden Looper (*Erannis tiliaria*, Canada). Sulphur Wave (*Hesperumia sulphuraria*). Alien Proboscis (*Probole alienaria*). Friendly Proboscis (*Probole amicaria*).

Gracillariidae: *Caloptilia burgessiella*, a leaf miner.

Heliozelidae: *Antispila aurirubra*.

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*, Canada).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Noctuidae: Yellow-haired Dagger (*Acrionicta impleta*). Copper Underwing (*Amphipyra pyramidoides*). White-lined Bomolocha (*Hypena abalienalis*) (Powell & Opler, p. 255).

Notodontidae: Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Sphingidae: Great Ash Sphinx (*Sphinx chersis*, Canada).

Tortricidae: Forbes' Acleris (*Acleris forbesana*). Fruit-tree Leafroller (*Archips argyrospila*). Southern Ugly-nest Caterpillar (*Archips rileyana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Diamondback Epinotia (*Epinotia lindana*, California). *Olethreutes punctanum*. *Sparganothis senecionana* (Washington).

Cornus canadensis. **Bunchberry**. Cornaceae. Nectar: for the rare Johnson's Hairstreak; also moths. May – July.

Tortricidae: *Olethreutes punctanum*. Black-and-Gray Banded Leafroller (*Syndemis afflictana*).

Cornus glabrata. **Brown Dogwood**. Cornaceae. Nectar for California Sister, Variable Checkerspot, likely others. The Pollinator Partnership notes this species serves bees, flies, beetles, and butterflies. May - June.

Larval host for Echo Azure.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Diamondback Epinotia (*Epinotia lindana*). *Olethreutes punctanum*.

Cornus nuttallii. **Pacific Dogwood**. Cornaceae. Nectar: Johnson's Hairstreak (Xerces Society, Robert Michael Pyle) – a rare small butterfly. Shapiro finds flowers of this mainly beetle-pollinated species never visited by butterflies, but shrubby dogwoods are good draws, especially the eastern *C. amomum* (Silky Dogwood). April - July.

Pacific Dogwood is a larval host for Echo Azure.

Geometridae: Rindge's Pero (*Pero mizon*). Western Carpet (*Melanolophia imitata*, Canada), Horned Spanworm (*Nematocampa resistaria*). Alien Probole (*Probole alienaria*). Friendly Probole (*Probole amicaria*). October Thorn (*Tetraxis jubararia*, Canada). Pearsall's Carpet (*Venusia pearsalli*, Canada).

Noctuidae: *Adelphagrotis stellaris*. Toothed Snout Moth (*Hypena bijugalis*).

Notodontidae: Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*).

Cornus sericea. **American Dogwood. Redtwig Dogwood.** Cornaceae. Flower visitors include the Orange Sulphur, Painted Lady, Red Admiral, Pearl Crescent [Michigan], California Sister, and Echo Azure. Scott rates it as “unpopular” for butterflies. The flowers are fragrant. May - July.

Redtwig Dogwood is among the larval hosts for the Echo Azure.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*).

Drepanidae: *Euthyatira lorata* (fq).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Peppered Moth (*Biston betularia*, Canada). Pale Beauty (*Campaea perlata*). Small Engrailed (*Ectropis crepuscularia*, Canada). Johnson’s Euchlaena (*Euchlaena johnsonaria*). Northwest Phoenix (*Eulithis xyliana*). *Eupithecia misturata*. Twilight Moth (*Lycia rachelae*). George’s Carpet (*Plemyria georgii*, Canada). Friendly Probole (*Probole amicaria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Western Tussock Moth (*Orgyia vetusta*) – have seen a photograph of a caterpillar which seems to be this generalist species, on it in a garden setting.

Noctuidae: Funerary Dagger (*Acronicta funeralis*). Gray Dagger (*Acronicta grisea*). Rusty Shoulder Knot (*Aseptis binotata*). *Egira crucialis*. American Angle Shades (*Euplexia benesimilis*). Toothed Snout Moth (*Hypena bijugalis*). Bailey’s Pinion (*Lithophane baileyi*, Canada). Large Gray Pinion (*Lithophane georgii*). *Neoligia subjuncta*. Speckled Green Cutworm (*Orthosia hibisci*). *Papestra cristifera*. Battered Sallow (*Sunira verberata*).

Notodontidae: Unicorn Caterpillar (*Schizura unicornis*).

Tortricidae: Forbes’ Acleris (*Acleris forbesana*). Allen’s Tortrix (*Aphelia alleniana*). Diamondback Epinotia (*Epinotia lindana*). *Olethreutes punctanum*. Pandemis Leafroller (*Pandemis pyrusana*).

Heliozelidae: *Antispila aurirubra*.

Cornus sericea subsp. *occidentalis*. Western Dogwood. Nectar: California Pyrausta Moth (*Pyrausta californicalis*, Pyralidae).

Corydalis aurea. **Golden Smoke.** Papaveraceae. Nectar: Pipevine Swallowtail, Southwestern Orangetip, Sleepy Orange, Dainty Sulphur, Painted Lady, Marine Blue, and Golden-headed Scallopwing (Elaine Halbedel, observing in Arizona and New Mexico). May - August.

Golden Smoke is possibly a foodplant for the Clodius Parnassian.

Corylus cornuta. **Hazelnut.** Betulaceae.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Drepanidae: Tufted Thyatirid Moth (*Pseudothyatira cymatophoroides*).

Geometridae: Pale Beauty (*Campaea perlata*), Orange-marked Hazelnut Moth (*Dysstroma ochrofuscaria*), Linden Looper (*Erannis tiliaria*). Northwest Phoenix (*Eulithis xyliana*). *Hesperumia latipennis*. Sulphur Wave (*Hesperumia sulphuraria*). July Highflier (*Hydriomena furcata*). Western White Ribboned Carpet (*Mesoleuca gratula*) – an early spring day-flying species. Brown-lined Looper

(*Neocalcis californiaria*). Rindge's Pero (*Pero mizon*). American Barred Umber Moth (*Plagodis pulveraria occiduaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*).

Noctuidae: Charred Dagger (*Acronicta brumosa*). Corylus Dagger (*Acronicta falcula*). Copper Underwing (*Amphipyra pyramidoides*). Rusty Shoulder Knot (*Aseptis binotata*). American Dun-bar (*Cosmia calami*). *Diarsia esurialis*. *Egira hiemalis*. *Lacinipolia pensilis*. Nameless Pinion (*Lithophane innominata*). Speckled Green Cutworm (*Orthosia hibisci*). Brown Angle Shades (*Phlogophora periculosa*). *Pseudorthodes irrorata*. Otter Spiramater (*Spiramater lutra*). Colorful Zale (*Zale minerea*).

Notodontidae: Angle-lined Prominent (*Clostera inclusa*).

Tortricidae: *Acleris cervinana* (likely; moth found in California, eats "Corylus sp." in Canada). Ugly-nest Caterpillar (*Archips cerasivorana*) also said to eat "Corylus sp." in Canada. Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Filbertworm (*Cydia latiferreana*). Birch Leafroller (*Epinotia solandriana*). Three-lined Leafroller (*Pandemis limitata*). Poplar Leafroller (*Pseudosciaphila duplex*, Canada).

Coryphantha vivipara var. *rosea*. **Viviparous Foxtail Cactus**. Cactaceae. Scott records a flower visit by an Anise Swallowtail forma *nitra* to a purple specimen, possibly this taxon or another subspecies. May.

Crataegus spp. **Hawthorn**. Rosaceae. Maleae. Shapiro finds hawthorn flowers rarely visited by California butterflies.

Hostplants for Gray Hairstreak and Lorquin's Admiral.

Choreutidae: Apple Leaf Skeletonizer (*Choreutis pariana*).

Coleophoridae: Apple-and-plum Casebearer (*Coleophora spinella*).

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Gelechiidae: Lesser Bud Moth (*Recurvaria nanella*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray (*Anavitrinella pampinaria*). Peppered Moth (*Biston betularia*). Maple Spanworm (*Ennomos magnaria*). Autumnal Moth (*Epirrita autumnata*). Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena mollisaria*). Sharp-angled Carpet (*Euphyia intermediata*). Bent-line Gray (*Iridopsis larvaria*). Mournful Thorn (*Lambdina fiscellaria*). Speckled Granite (*Macaria exauspicata*). Horned Spanworm (*Nematocampa resistaria*). Spring Cankerworm (*Paleacrita vernata*). Brown-tipped Thorn (*Selenia alciphearia*). October Thorn (*Tetracis jubararia*). Tissue Moth (*Triphosa haesitata*). Pearsall's Carpet (*Venusia pearsalli*, Canada).

Heliozelidae: Resplendent Shield Bearer (*Coptodisca splendoriferella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*). European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: Red Cutworm (*Abagrotis placida*). Alder Dagger (*Acronicta dactylina*). Funerary Dagger (*Acronicta funeralis*). Yellow-haired Dagger (*Acronicta impleta*). Interrupted Dagger (*Acronicta interrupta*). Radcliffe's Dagger (*Acronicta radcliffei*). Copper Underwing (*Amphipyra pyramidoides*). The Mouse (*Amphipyra tragopoginis*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Red-washed Prominent (*Oligocentria semirufescens*). Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Oecophoridae: Lesser Tawny Crescent (*Batia lunaris*). Packard's Flatbody Moth (*Semioscopis packardella*).

Pyrilidae: Leaf Crumpler Moth (*Acrobasis indigenella*). *Oreana unicolorella*.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*). Walters' Saturnia Moth (*Saturnia walterorum*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*). Small-eyed Sphinx (*Paonias myops*).

Tortricidae: Snowy-shouldered Acleris (*Acleris nivisellana*). Fruit Tortricid (*Acleris variegana*). Allen's Tortrix (*Aphelia alleniana*). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Cotton Tipworm (*Crociosema plebejana*). Codling Moth (*Cydia pomonella*). Sumac Leaf-tier (*Episimus argutana*). Lesser Appleworm Moth (*Grapholita prunivora*). *Oreana unicolorella* (BugGuide). Eye-spotted Bud Moth (*Spilonota ocellana*). Black-and-gray Banded Leafroller (*Syndemis afflictana*).

Crataegus douglasii. **Black Hawthorn**. Rosaceae. Maleae. Nectar: Western Tiger Swallowtail, Two-tailed Swallowtail, California Sister (rarely), Lorquin's Admiral, Gray Hairstreak (Paul Severns). Echo Azure visits the flowers and may employ it as a larval host. Also attracts moths (Plants for Pollinators in the Intermountain West). May - August.

Larval host for Pale Swallowtail – likely more so outside of California, where Rhamnaceae generally are preferred (Shapiro). Possible Echo Azure hostplant.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Drepanidae: *Ceranemota improvisa*.

Geometridae: Autumnal Moth (*Epirrita autumnata*). Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Northwest Phoenix (*Eulithis xylina*). *Eupithecia nevadata*. Brown-lined Looper (*Nealcis californiaria*). Brown-tipped Thorn (*Selenia alciphearia*). October Thorn (*Tetracis jubararia*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: Fragile Dagger (*Acronicta fragilis*). Funerary Dagger (*Acronicta funeralis*). Radcliffe's Dagger (*Acronicta radcliffei*). Large Gray Pinion (*Lithophane georgii*). Nameless Pinion (*Lithophane innominata*). *Mesogona olivata*. Speckled Green Cutworm (*Orthosia hibisci*).

Notodontidae: Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*) (fq).

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Crepis acuminata. **Tapertip Hawksbeard**. Asteraceae. Cichorieae. Nectar: Monarch, Callippe Fritillary, Boisduval's Blue. May - August.

Crepis modocensis ssp. *modocensis*. **Modoc Hawksbeard**. Asteraceae. Cichorieae. Nectar: Anise Swallowtail (Wechsler, NorWestLeps #3075). May – July.

Crepis pleurocarpa. **Nakedstem Hawksbeard**. Asteraceae. Cichorieae. Nectar: Western White (Tom Murray, photo on BugGuide). June – August.

Crocidium multicaule. **Spring Gold**. Asteraceae. Senecioneae. Nectar: Western Pine Elfin. February - June.

Cressa truxillensis. **Alkali Weed**. Convolvulaceae. Among secondary nectar plants for Carson Wandering Skipper. May – October.

Croton californicus. **California Croton**. Euphorbiaceae. Nectar: Lange's Metalmark, Square-spotted Blue. April - July.

Arctiidae: a day-flying tiger moth, California Tiger Moth (*Leptarctia californiae*).

Gelechiidae: *Anacamptis lacteuschrella*. *Gelechia versutella* (Canada).

Pyralidae: *Pseudadelphia ochripunctella*.

Noctuidae: *Grotella citrinella*.

Croton setigerus was *Eremocarpus setigerus*. **Dove Weed**. Euphorbiaceae. Nectar: American Lady, Common Buckeye, Gray Hairstreak, Acmon Blue, Western Pygmy Blue, Common Checkered-Skipper, Mojave Sootywing, others. Shapiro: an "excellent" nectar source for butterflies. May – October.

Larval host for the Gray Hairstreak.

Gelechiidae: *Anacamptis lacteuschrella*.

Pyralidae: *Pseudadelphia ochripunctella*.

Cryptantha spp. **Cryptantha**. Boraginaceae. Nectar: Desert Orangetip, Checkered White, Spring White (Bart Jones), Large Marble, California Marble aka Pearly Marble (Brett Badeaux). Quino Checkerspot,

Sagebrush Checkerspot, Gabb's Checkerspot. Mormon Metalmark. Great Copper, Ceraunus Blue, Sonoran Blue, Lupine Blue, Acmon Blue, Mojave Dotted-Blue, Square-spotted Blue. Propertius Duskywing, Common Checkered-Skipper, White Checkered-Skipper. Common Flower Moth (*Schinia pulchripennis*, Noctuidae), Buckwheat Borer (*Synanthedon polygona*, Sesiidae) – a striking red and black diurnal wasp mimic (Hartmut Wisch Bug Guide photograph). Three-striped Longhorn (*Adela trigrappa*, Incurvariidae).

Species in the genus *Cryptantha* can be difficult to distinguish.

Larval hosts for Painted Lady.

Cryptantha affinis. **Quill Cryptantha**. Glenn Fine notes one species as a flower visitor in his Siskiyou County study. June- July.

Cryptantha angustifolia. **Narrow Leaved Cryptantha**. Boraginaceae.

Hostplant for Painted Lady, noted in 1992.

Cryptantha barbiger. **Bearded Cryptantha**. Boraginaceae. February – June.

Hostplant for Painted Lady in 1991 migration, Inyo County.

Cryptantha celosioides. **Cocks-comb Cat's-eye**. Boraginaceae. Nectar: Becker's White, Large Marble, Painted Lady, California Ringlet, Juniper Hairstreak (Roger Steeb) and Silvery Blue. June – August.

Cryptantha cinerea var. *abortiva*. **Bownut Cryptantha**. Boraginaceae. Nectar: Juniper Hairstreak. May - August.

Cryptantha circumscissa. **Cushion Cryptantha**. Boraginaceae. March – August.

Hostplant for Painted Lady noted in 1992.

Ethmiidae: *Ethmia brevistriga*.

Cryptantha confertiflora. **Yellow-flowered Cryptantha**. Boraginaceae. Nectar: Indra Swallowtail (*phyllisae*) (David Horner), Northern Checkerspot (David Horner). A showy species, likely others. May – July.

A Painted Lady hostplant in the 1991 migration, Inyo County.

Cryptantha gracilis. **Slender Cryptantha**. Boraginaceae. March – June.

Hostplant for Painted Lady, noted in 1992.

Cryptantha intermedia. **Common Cryptantha**. Boraginaceae. Nectar: Becker's White, Common Ringlet, Field Crescent, Edith's Checkerspot, Boisduval's Blue, Lompoc Blue [a segregate of Small Blue] (Alice Abela), Silvery Blue, Acmon Blue, Arrowhead Blue, Square-spotted Blue, Eastern Tailed Blue, Gray Hairstreak, Common Checkered-Skipper (slight usage). A secondary nectar plant for the endangered

Fender's Blue (a segregate of Boisduval's Blue) in Oregon. A common species, likely some of the observations under *Cryptantha* species listed above apply here. May - July.

Depressariidae: *Ethmia minuta*.

Cryptantha leiocarpa. **Coastal Cryptantha**. Boraginaceae. Nectar: Lompoc Blue [a segregate of Small Blue] (Alice Abela). March – August.

Cryptantha micrantha. **Redroot Cryptantha**. Boraginaceae.

Hostplant for Painted Lady in 1991 migration event, Inyo County.

Cryptantha muricata. **Prickly Cryptantha**. Boraginaceae. “A source of nectar for a variety of adult butterflies” – Plants of the San Gabriel Mountains. March - July.

Cryptantha pectocarya. **Winged-nut Cryptantha**. Boraginaceae. March – July.

A Painted Lady hostplant in the 1991 migration event, Inyo County.

Cryptantha recurvata. **Curved-nut Cryptantha**. Boraginaceae. March – June.

Hostplant for Painted Lady, Inyo County, 1991 migration year.

Cryptantha utahensis. **Scented Cryptantha**. Boraginaceae. March – July.

Hostplant for Painted Lady in Inyo County in the 1991 migration year.

Cryptoporus volvatus. Fungi. A polypore fungus that decomposes rotting sapwood of conifers.

Tineidae: *Elatobia carbonella*.

Cucurbita digitata. **Fingerleaf Gourd**. Cucurbitaceae. August – October.

Sesiidae: Manroot Borer (*Melittia gloriosa*).

Cucurbita foetidissima. **Calabazilla**. Cucurbitaceae. June – August.

Arctiidae: Calabazilla is among hostplants for the polyphagous Salt Marsh Moth (*Estigmene acrea*).

Sesiidae: In southern California, Calabazilla and Coyote Melon are among larval hosts for the spectacular Manroot Borer (*Melittia gloriosa*), our largest wasp mimic. Powell & Opler: “Stealthy search during cool mornings will reveal the moths perched along the midrib facing outward. Later, after temperatures rise, *Melittia* are almost impossible to approach and are very rapid fliers.”

Calabazilla is also forage for caterpillars of *Melittia grandis* and *Melittia snowi* – yet other large, striking wasp mimic species, especially the former.

Cucurbita palmata. **Coyote Melon**. Cucurbitaceae. April – September.

Sesiidae: Manroot Borer (*Melittia gloriosa*).

Cupressus sp. **Cypresses**. Cupressaceae. All native Californian species recently formerly designated *Cupressus* are now reassigned to *Hesperocyparis*. Plants designated merely as *Cupressus* on the HOSTS database are listed as foodplants for these Californian moths:

Erebidae: Fall Webworm (*Hyphantria cunea*).

Gelechiidae: *Coleotechnites stanfordia*.

Geometridae: Orilla Angle (*Digrammia excurvata*). Cypress Pug (*Eupithecia cupressata*). Freyer's Pug (*Eupithecia intricata*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Tortricidae: *Epinotia hopkinsana*. *Epinotia subviridis*.

Yponomeutidae: Cypress Tip Moth (*Argyresthia cupressella*). *Argyresthia franciscella*.

Cupressus forbesii is now *Hesperocyparis forbesii*. **Tecate Cypress**.

Cupressus goveniana is now *Hesperocyparis goveniana*. **Gowen Cypress**.

Cupressus lawsoniana is now *Chamaecyparis lawsoniana*. **Port Orford Cedar**.

Cupressus macnabiana is now *Hesperocyparis macnabiana*. **MacNab Cypress**.

Cupressus macrocarpa is now *Hesperocyparis macrocarpa*. **Monterey Cypress**.

Cupressus nootkatensis is now *Callitropsis nootkatensis*. **Alaska Cedar**.

Cupressus sargentii is now *Hesperocyparis sargentii*. **Sargent Cypress**.

Cuscuta spp. **Dodder**. Convolvulaceae. The flowers attract male Queens; dodder nectar's pyrrolizidine alkaloids enable them to make sex pheromones! Patches of dodder in San Diego County said to be especially attractive to Hedgerow Hairstreak ("Strymon saepium chlorophora Watson & W.P. Comstock". "Almost any patch of dodder, if in bloom, will yield them in abundance." William S. Wright. "An Annotated List of the Butterflies of San Diego County, California". Published February 28, 1930 in Transactions of the San Diego Society of Natural History, Volume 6 (1930-1931): 1-40 (p. 23) <http://www.biodiversitylibrary.org/page/5716593#page/7/mode/1up>

Larval host for Brown Elfin.

Cuscuta californica. **Chaparral Dodder**. Convolvulaceae. Nectar: Gray Hairstreak. March – September. Paul Johnson finds Chaparral Dodder a Brown Elfin hostplant in Pinnacles National Monument; Alice Abela photographed a Brown Elfin caterpillar eating it as parasitic on California Buckwheat (*Eriogonum fasciculatum*).

A parasitic plant, hosts include Poison Oak (*Toxicodendron diversilobum*) and Toyon (*Heteromeles arbutifolia*) (Corelli, "Plants that Like Hosts" web page). Also found on many other plants.

Tortricidae: Chrysanthemum Flower Borer (*Lorita scarificata*).

Cuscuta pacifica. **Goldenthread. Saltmarsh Dodder**. Convolvulaceae. Nectar: Wandering Skipper at Ballona Wetlands Ecological Reserve. July – October.

Cuscuta salina. **Saltmarsh Dodder**. Convolvulaceae. Wandering Skipper at Ballona Wetlands Ecological Reserve. May – October.

Cuscuta subinclusa. **Canyon Dodder**. Convolvulaceae. Nectar: Gray Hairstreak, Acmon Blue, Alfalfa Semilooper (*Autographa californica*, Noctuidae) (Pinnacles National Monument Paul Johnson). March - October, or later.

Coyote Brush is a host for this Dodder (Corelli, web page).

Cymopterus panamintensis. **Panamint Indian Parsley**. Apiaceae. Selineae. March - May.

Larval host for Indra Swallowtail, one of its smallest races (Whaley), and for Desert Black Swallowtail.

Cymopterus purpurascens. **Purple Springparsley**. Apiaceae. Selineae. March – May.

Hostplant for Indra Swallowtail.

Cymopterus terebinthinus (syn. *Pteryxia terebinthina*). **Turpentine Cymopterus**. Apiaceae. Selineae. Nectar: Anise Swallowtail, Indra Swallowtail, Mormon Fritillary, Leto Fritillary, Thicket Hairstreak, Alpine Sheridan's Hairstreak, Greenish Blue, and two species of diurnal moths.

var. *californicus*. May – June.

var. *petraeus*. May - June.

Hostplant for Indra Swallowtail, likely Anise Swallowtail primary hostplant at high elevations in the Sierra Nevada.

Cynanchum utahense is now *Funastrum utahense*. **Utah Swallow Wort**.

Cynoglossum grande. **Pacific Hound's Tongue**. Boraginaceae. Nectar: Western Tiger Swallowtail, Anise Swallowtail (fq). Gray-veined White (Margined White) (Scot Peden, others). Clouded Sulphur (Ron Wolf). Stella Orange-tip (Shapiro's web site). Sara Orangetip (photo on Hastings Natural History Reservation web site). Silvery Blue. Stuart Wechsler finds it a "magnet for Propertius Duskywing and some other early fliers" in Washington – no doubt here, too.

A nectar source and hostplant for the Hound's Tongue Woolly Bear or Sierran Pericopid (*Gnophaela latipennis*), a striking black-and-white day-flying, flower-visiting tiger moth (Powell & Hogue). Hummingbirds and the Large Bee-fly (*Bombylius major*). February - May.

Choreutidae: *Caloreas apocynoglossa*.

Noctuidae: Hound's Tongue Woolly Bear (*Gnophaela latipennis*).

Oecophoridae: *Agonopterix fusciterminella*.

Pyralidae: *Udea itysalis*. (1987 Season Summary).

Tortricidae: *Sparganothis senecionana*.

Cynoglossum occidentale. **Western Hound's Tongue**. Boraginaceae. Nectar: Clouded Sulphur (Yosemite photograph by Ron Wolf). Good butterfly nectar plant – *Growing Native*. Sierran Pericopid (*Gnophaela latipennis*, Arctiidae). May - July.

Arctiidae: Sierran Pericopid (*Gnophaela latipennis*).

Cyperaceae. **Sedge Family**.

Arctiidae: Yellow-collared Scape Moth (*Cisseps fulvicollis*) – especially Cyperaceae (PNW Moths). Red-shouldered Ctenucha (*Ctenucha rubroscapus*) – especially Cyperaceae (PNW Moths).

Elachistidae: Known hosts for this family (Grass Miner Family is a common name) are all grasses and sedges.

Noctuidae: Foodplants for Henry's Marsh Moth (*Acronicta insularis*), *Benjaminiola colorada* – probably bores into stems (PNW Moths). Dark-winged Quaker (*Eremobina claudens*). *Globia alameda* probably bores into stems (PNW Moths). *Hypocoena rufostriata* (PNW Moths). *Oligia tusa* – probably bores into the stems of rushes or sedges (PNW Moths). Lempke's Gold Spot (*Plusia putnami*). White-streaked Looper (*Plusia venusta*). Oblique Brocade (*Xylomoia indirecta*) — bores into stems (PNW Moths).

Cyperus spp. **Flatsedge** or **Nutsedge**. Cyperaceae.

Food plants for Dun Skipper. Eufala Skipper recorded using the introduced weedy *C. rotundus* in Brazil. Todd Stout thinks most may work for Sonora Skipper (he has been working with the *utahensis* segregate).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*).

Tortricidae: Javelin Moth (*Bactra verutana*).

Cyperus esculentus. **Nut Grass**. Cyperaceae.

Foodplant for the Dun Skipper – “The larvae fell upon this with relish and were easily reared” – Heitzman.

Tortricidae: Javelin Moth (*Bactra verutana*).

Glyphipterigidae: Yellow Nutsedge Moth (*Diploschizia impigritella*).

Dalea ornata. **Blue Mountain Prairie Clover**. Fabaceae. Amorpheae. Nectar: In May 2010, Tyler L. Hicks observed Cabbage White, Coronis Fritillary, Common Ringlet, Ruddy Copper, Acmon Blue, Northern White-Skipper, and Common Checkered-Skipper (Umatilla National Wildlife Refuge on the Oregon - Washington border). June.

It is a rare plant in California and little known in cultivation.

Dalea searlsiae. **Searls' Prairie Clover**. Fabaceae. Amorpheae. Showy flowers likely of value. May – June.

Southern Dogface ova and larvae found on it in San Bernardino County by John F. Emmel (1984 Season Summary).

Danthonia californica. **California Oatgrass**. Poaceae. Danthonioideae.

Foodplant for the Columbian Skipper, Lindsey's Skipper, and the Mardon Skipper. Oviposition noted by Western Branded Skipper.

Dasiphora fruticosa was *Potentilla fruticosa*. **Shrubby Cinquefoil**. Rosaceae. Potentilleae. Nectar: Western Tiger Swallowtail, Phoebus Parnassian, Rocky Mountain Parnassian. Clouded Sulphur, Cabbage White, Checkered White, Western White. Monarch, Milbert's Tortoiseshell, Painted Lady, West Coast Lady, Anicia Checkerspot (Emmel), Hoary Comma, Small Wood-Nymph. American Snout. California Hairstreak, Coral Hairstreak [fq in Michigan], Hedgerow Hairstreak (fq), Thicket Hairstreak, Nelson's Hairstreak, Blue Copper, Great Copper, Purplish Copper, Tailed Copper, Ruddy Copper, Boisduval's Blue, Marine Blue, Reakirt's Blue, Echo Azure, Heather Blue (fq). Sandhill Skipper. At least two species of diurnal moths. Usually seems secondary, but can be important where other nectar plants are lacking. Most of these records are from VanOverbeke, *et alia*, a focused study on the value of this plant as a nectar source for butterflies. June – September.

Saturniidae: Nevada Buckmoth (*Hemileuca nevadensis*).

Datura discolor. **Desert Thorn Apple**. Solanaceae. Nectar: Five-spotted Hawkmoth, Carolina Sphinx. April - October.

Datura wrightii. **Sacred Datura**. Solanaceae. Several hawkmoths visit Sacred Datura for nectar. A favorite of the Carolina Sphinx, *Manduca sexta*. Others: Pink-spotted Hawkmoth (*Agrius cingulata*), Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Rustic Sphinx (*Manduca rustica*). White-lined Sphinx (*Hyles lineata*). Amusing and edifying observations about hawkmoth visits to Sacred Datura related in an online article,

“The Jimsonweed Junkie Moth” by Wayne P. Armstrong (as of this writing, in Feb 2011) at: <http://waynesword.palomar.edu/ww0703.htm#Junkie>

Flowers April - October.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Daucus pusillus. **American Wild Carrot**. Apiaceae. Scandiceae. April - June.

Larval host for Black Swallowtail, Anise Swallowtail.

Dayia grantii. **Grant's Dayia**. Polemoniaceae. Newly described from northern Baja California attracts butterflies.

Dedeckera eurekaensis. **July Gold**. Polygonaceae. June - October.

The 2000 Season Summary reports an Acmon Blue larva taken on it in Inyo County.

Deinandra spp. **Tarplants**. Asteraceae. Madieae. All are likely nectar plants, many with long flowering periods.

Deinandra clementina. **Island Tarplant**. Asteraceae. Madieae. Nectar: Western Pygmy Blue (Lynn Watson). March – December.

Gelechiidae: *Chionodes nanodella* reared from Santa Barbara Island populations, where the moth is very abundant; eats decaying leaves at the base of the plant.

Deinandra fasciculata was *Hemizonia fasciculata*. **Common Tarweed**. Asteraceae. Madieae. Nectar at least for a metalmark, and a day-flying moth, *Heliothodes diminutiva* (Noctuidae) (Mechanold Dolly). Cultivated, it may be the tarweed butterfly gardeners report attracts ‘many’ species. April – September.

Geometridae: *Cyclophora dataria*.

Zones 15-17, 22-24.

Delphinium spp. **Larkspurs**. Ranunculaceae. Western Tiger Swallowtail – Bill Yates finds larkspur the top nectar draw for it in the Oregon prairie he studies. Pipevine Swallowtail (Chamberlain & Schlising). Orange Sulphur (Steiner). Good butterfly nectar plants – *Growing Native*.

Noctuidae: Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Stephen’s Gem (*Megalographa biloba*).

Tortricidae: Verbena Bud Moth (*Endothenia hebesana*).

Delphinium andersonii. **Anderson Larkspur**. Ranunculaceae. Nectar: Pale Swallowtail. April - May.

Delphinium cardinale. **Scarlet Larkspur**. Ranunculaceae. A favorite of the White-lined Sphinx moth at Torrey Pines State Reserve.

Anna’s Hummingbird, Allen’s Hummingbird, Costa’s Hummingbird among its visitors: Schlising, Robert A., and Randolph A. Turpin. "Hummingbird Dispersal of *Delphinium Cardinale* Pollen Treated with Radioactive Iodine." *American Journal of Botany* 58, no. 5 (1971): 401-06.
<http://www.jstor.org/stable/2441131>. February - July.

Delphinium glaucum. **Mountain Giant**. Ranunculaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Great Spangled Fritillary, skippers. Attracts large butterflies and a clearwing moth. Also hummingbirds. (Mountain Plants of the Western Cascades web site). July - September.

Delphinium gracilentum. **Meadow Larkspur. Pine Forest Larkspur**. Ranunculaceae. Pale Swallowtail shown at nectar on CalPhotos. March - June.

Delphinium hesperium. **Western Larkspur**. Ranunculaceae. Nectar: Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae, James Maughn photographs). March – June.

Delphinium nudicaule. **Scarlet Larkspur**. Ranunculaceae. Long-tongued moths. Hummingbirds. March - June.

Zones 7, 15-17.

Delphinium nuttallianum. **Low Larkspur. Meadow Larkspur.** Ranunculaceae. Nectar: Pale Swallowtail, White-lined Sphinx (*Hyles lineata*). Pollinated generally by hummingbirds and bumblebees (Schulke & Wasser, 2001).

Delphinium parishii. **Desert Larkspur.** Ranunculaceae. Nectar: Desert Black Swallowtail. March - May.

Delphinium parryi subsp. *blochmaniae*. **San Bernardino Larkspur.** Ranunculaceae. Nectar: Pipevine Swallowtail, Desert Black Swallowtail, Monarch, Silver-spotted Skipper, grass skipper. April - May.

Delphinium trolliifolium. **Cow Poison.** Ranunculaceae. Nectar: Margined White (photograph by Mike Patterson). April - June.

Noctuidae: Caterpillars of Disjunct Looper (*Polychrysis morigera*) known to eat this plant and no other (Wikipedia).

Zones 4, 6.

Delphinium umbraculorum. **Umbrella Larkspur.** Ranunculaceae. Nectar: Pale Swallowtail (Nature Shutterbug), Western Snowberry Clearwing (*Hemaris thetis*) (Marc Kummel). April - June.

Delphinium variegatum. **Royal Larkspur.** Ranunculaceae. Nectar: Western Tiger Swallowtail, Bay Checkerspot (a segregate of Edith's Checkerspot). Hummingbirds. March - May.

Dendromecon rigida. **Bush Poppy.** Papaveraceae. Shapiro notes that many members of the poppy family have essentially nothing to offer butterflies and are only visited by young butterflies who don't know any better and soon desist. April - June.

Geometridae: Bush Poppy is a hostplant for an attractive moth, *Neoterpes edwardsata*.

Deschampsia caespitosa. **Tufted Hairgrass.** Poaceae. Poaceae.

Foodplant for the Umber Skipper in the Santa Monica Mountains (Garth & Tilden). In addition, a larval host for the European Skipper, an introduced species expected to expand its range to the State of California.

Deschampsia elongata. **Slender Hairgrass.** Poaceae. Poaceae.

Foodplant for the Juba Skipper.

Descurainia californica. **Sierra Tansymustard.** Brassicaceae. May - August.

Foodplant for Western White (Todd Stout) and for the Large Marble (HOSTS).

Descurainia incana. **Mountain Tansymustard.** Brassicaceae. May - September.

A foodplant for the Large Marble, Pearly Marble, Becker's White, Western White, Spring White.

Noctuidae: Army Cutworm (*Euxoa auxiliaris*).

Descurainia pinnata. **Western Tansy Mustard**. Brassicaceae. Nectar: Checkered White, Desert Orangetip, Painted Lady, Western Pygmy Blue, Common Checkered-Skipper. "Flowers visited heavily by Juniper Hairstreak and spring Pierids in eastern California" (Shapiro). Scott considers it unpopular in Colorado. February - June.

Western Tansy Mustard is a hostplant for Becker's White (Todd Stout), Checkered White, Spring White and for Sara Orangetip (including Southwestern Orangetip, *thoosa*), Desert Orangetip (including the Pima Orange-tip), and Pearly Marble (including *lotta*, the Desert Marble). Works as a lab host for Western White (Todd Stout) and Shapiro records it as a hostplant: Arthur M. 1992. "Twenty Years of Fluctuating Parapatry and the Question of Competitive Exclusion in the Butterflies *Pontia Occidentalis* and *P. Protodice* (Lepidoptera: Pieridae)." *Journal of the New York Entomological Society* 100 (2): 311–319.

Descurainia incana was *Descurainia richardsonii* subsp. *viscosa*. **Mountain Tansy Mustard**. Brassicaceae. May – September.

Foodplant for Western White: Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." *The Great Basin Naturalist* 37 (4): 443-52. <http://www.jstor.org/stable/41711594>.

Detritus. Particularly dead leaves a food for some moth caterpillars.

Noctuidae: *Caradrina mona* eats dead leaves.

Dicentra formosa. **Western Bleeding Heart**. Papaveraceae. Nectar: Swallowtails, Anise Swallowtail (JC), Pale Swallowtail, Clodius Parnassian, Fritillaries, West Coast Lady, Persius Duskywing, Propertius Duskywing (JC), Umber Skipper. Hummingbirds. March - July.

Foodplant of a race of Clodius Parnassian of the Santa Cruz Mountains, thought extinct since 1958, and extant races in northern California. It, as many other plants, may be cultivated far beyond the ranges of butterflies that use it!

Noctuidae: *Platypolia contadina*.

Zones 4-5, 7, 14-24.

Dicentra ochroleuca is now *Ehrendorferia ochroleuca*. **White Eardrops**.

Dicentra nevadensis. **Tulare County Bleeding Heart**. Papaveraceae. July.

Foodplant for an undescribed segregate of Clodius Parnassian in its territory (Kenneth Davenport, DesertLeps 24510). Also reported in 1975 Season Summary.

Dicentra pauciflora. **Shorthorn Steer's Head**. Papaveraceae. June - July.

Foodplant for Clodius Parnassian in the Trinity Alps.

Dicentra uniflora. **Steer's Head**. Papaveraceae. May - July.

Steer's Head is a foodplant for *Clodius Parnassian* caterpillars (Scott, 1986, Pyle, 2002).

Dichanthelium oligosanthes var. *scribnerianum* (synonym *Panicum oligosanthes*). **Scribner's Rosette Grass**. Poaceae. Paniceae.

Noctuidae: Larval host for Corn Earworm (*Helicoverpa zea*).

Dichelostemma capitatum. **Blue Dicks**. Themidaceae. Nectar: Pipevine Swallowtail (fq), Pale Swallowtail (fq), Western Tiger Swallowtail, Two-tailed Swallowtail, Anise Swallowtail, Desert Black Swallowtail. Sara Orangetip (fq), California Dogface, Southern Dogface, Boisduval's Marble, Large Marble, Pearly Marble, Cabbage White, Margined White, Western White. Monarch (fq), American Lady, Painted Lady, West Coast Lady, Northern Checkerspot, Variable Checkerspot, Bay Checkerspot (a segregate of Edith's Checkerspot), Callippe Fritillary. Common Ringlet. Mission Blue [a segregate of Boisduval's Blue], Silvery Blue, Acmon Blue, Sonoran Blue. Northern White-Skipper, Funereal Duskywing, Mournful Duskywing, Propertius Duskywing, Northern Cloudywing, Silver-spotted Skipper, Fiery Skipper, Umber Skipper, Common Roadside-Skipper, spring Skippers. Clark's Day Sphinx, White-lined Sphinx. Fairy Moth (*Adela septentrionella*). Great butterfly nectar plant! March - June.

Dichelostemma congestum. **Ookow**. Themidaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Anise Swallowtail, Pipevine Swallowtail (fq), Painted Lady, Common Ringlets, Unsilvered Fritillary, Propertius Duskywing, Northern Cloudywing, Mournful Duskywing, Common Checkered-Skipper, Skippers. April - June.

Dichelostemma ida-maia. **Firecracker Flower**. Themidaceae. Nectar: Pipevine Swallowtail. Mostly hummingbirds. May - July.

Dichelostemma multiflorum. **Manyflower Brodiaea**. Themidaceae. Nectar: Pale Swallowtail (<https://www.inaturalist.org/observations/13764050>), Pipevine Swallowtail, Silver-spotted Skipper (<https://www.inaturalist.org/observations/13763636>), Umber Skipper. May - June.

Dicoria canescens. **Desert Dicoria**. Asteraceae. Heliantheae. Ambrosiinae. September - January.

Foodplant for Painted Lady.

Noctuidae: *Schinia tobia*.

Dieteria asteroides was *Machaeranthera asteroides*. **Hoary Aster**. Asteraceae. Astereae. "Great butterfly nectar source" according to Desert Survivors Nursery. Noted as attracting most of 50 species of butterflies seen on a fall fieldtrip of the Southeast Arizona Butterfly Association. March - June, September - October.

Hoary Aster is a foodplant for the Sagebrush Checkerspot (*Chlosyne acastus sabina*) in Arizona.

Dieteria asteroides var. *lagunensis* was *Machaeranthera asteroides* var. *lagunensis*. **Laguna Mountain Aster**. Asteraceae. Astereae. 'Great' for butterflies - Las Pilitas Nursery. July - October.

Dieteria canescens was *Machaeranthera canescens*. **Hoary Aster**. Asteraceae. Astereae. Nectar: Pine White (John Cothron), Fatal Metalmark (Anne Reeves). Species at nectar recorded in Idaho: Common

Branded Skipper, Juba Skipper, Mylitta Crescent, Field Crescent. A nectar plant for Leona's Little Blue in southern Oregon. June – October.

Larval host for Acastus Checkerspot.

Noctuidae: *Cucullia dorsalis*. Darker-spotted Straw Moth (*Heliothis phloxiphaga*) and *Schinia ligeae*, both day-flying moths.

Pterophoridae: *Hellinsia lacteodactylus*.

Tortricidae: *Pelochrista bolanderana*.

Diplacus torreyi formerly *Mimulus torreyi*. **Torrey's Monkeyflower**. Phrymaceae. Nectar: Flame Longhorn group (cf. *Adela flammeusella*, unspotted) (Al Ludtke). May – September.

Dirca occidentalis. **Western Leatherwood**. Thymelaeaceae. November – March.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Distichlis spicata. **Saltgrass**. Poaceae. Chlorideae.

Foodplant for Wandering Skipper, Sandhill Skipper, Orange Skipperling, Sachem, and Alkali Skipper. Shapiro notes Saltgrass is a hostplant for Fiery Skipper in South America and likely so serves here, too.

Distichlis spicata var. *stricta*. **Desert Saltgrass**. Poaceae. Chlorideae.

Foodplant for Eunis Skipper (aka Alkali Skipper) (Garth & Tilden); also for Sandhill Skipper (Monroes).

Dodecatheon alpinum. **Alpine Shooting Star**. Primulaceae. Bumblebees. June – August.

Foodplant for the Sierra Nevada Blue (*Plebejus podarce*) – a localized species of mountain meadows.

Dodecatheon hendersonii is now *Primula hendersonii*. **Mosquito Bills**. Primulaceae. Bumblebees. March – July.

Tortricidae: *Sparganothis senecionana*.

Dodecatheon jeffreyi is now *Primula jeffreyi*. **Sierra Shooting Star**. Primulaceae. Glenn Fine notes 1 Lepidoptera flower visitor in his Siskiyou County study. Bumblebees. June – August.

Larval foodplant for the Gray Blue (aka Sierra Nevada Blue, *Plebejus podarce*).

Downingia spp. **Calicoflowers**. Campanulaceae. Nectar: Satyridae, *Adela* sp. (Thorp & Leong). Paul Severns notes occasional visits by the Great Copper and Eastern Tailed Blue.

Downingia bella. **Hoover's Calicoflower**. Campanulaceae. Nectar: Lindsey's Skipper (seen in Ventura County Butterflies of America web site photographs by Bill Bouton, Kim Davis and Mike Strangeland).

Downingia cuspidata. **Toothed Calicoflower**. Campanulaceae. Nectar: American Lady (fq), Acmon Blue (fq), and unspecified Pieridae among its most frequent flower visitors at the Santa Rosa Plateau:

Martin, Bradford D., and Earl W. Lathrop. 1986. "Niche partitioning in *Downingia bella* and *D. cuspidata* (Campanulaceae) in the vernal pools of the Santa Rosa Plateau Preserve, California." *Madroño* 33 (4): 284-99. <http://www.jstor.org/stable/41413364>. March – June, variable; at the study site peak flowering from early May to mid-July in various pools, depending on when they dried up.

Downingia elegans. **Elegant Calicoflower**. Campanulaceae. A secondary nectar plant for Great Copper. June – September.

Downingia willamettensis (formerly *Downingia yina* var. *major*). **Cascade Calicoflower**. Campanulaceae. A secondary nectar plant for Great Copper. June – July.

Draba albertina was *Draba crassifolia*. **Slender Draba. Alaska Whitlow Grass**. Brassicaceae. June - August.

Foodplant for Western White (Shapiro, 1977). Works in Nevada County: Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." *The Great Basin Naturalist* 37 (4): 443-52. <http://www.jstor.org/stable/41711594> .

Draba cuneifolia. **Wedgeleaf Draba**. Brassicaceae. January - May.

Foodplant for Western White (HOSTS).

Draba howellii. **Howell's Draba**. Brassicaceae. July - August.

Foodplant for the Western White (HOSTS).

Drymocallis glandulosa was *Potentilla glandulosa*. **Sticky Cinquefoil**. Rosaceae. Potentilleae. Western White. David Horner got a photograph of Pacific Fritillary at a flower, appears to be at nectar. Moldenke records *Adela* cf. *septentrionella* 'common' (10 - 64 captures in his study) with another diurnal moth associated with its flowers. Shapiro never sees butterflies at it -- secondary nectar source for butterflies. May – July.

Oviposition by the Laguna Mountains Skipper, a segregate of the Two-banded Checkered-Skipper; likely secondary hostplant.

Dryopteris arguta. **California Wood Fern**. Dryopteridaceae.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Dudleya calcicola is now *Dudleya abramsii* ssp. *calcicola*. **Limestone Dudleya**.

Dudleya abramsii ssp. *calcicola* was *Dudleya calcicola*. **Limestone Dudleya**. Crassulaceae. May - June (July).

Main Sonoran Blue hostplant in the southern Sierra Nevada (Kenneth Davenport, personal communication).

Dudleya abramsii ssp. *setchellii*. **Santa Clara Valley Liveforever**. Crassulaceae. May - June.

Some populations, such as at Alum Rock Park in San Jose, are caterpillar plants for the spectacular Sonoran Blue, an early spring butterfly species.

Dudleya blochmaniae. **Blochman's Liveforever**. Crassulaceae. April – June.

Tortricidae: *Eucosma hasseanthi*.

Dudleya cymosa. **Canyon Live-forever**. Crassulaceae. Nectar: Indra Swallowtail, Pale Swallowtail (Larry Miller), Pipevine Swallowtail (Larry Miller), Variable Checkerspot (Larry Miller). May - July.

Larval host for Moss's Elfin and Sonoran Blue. Bob Allen reports a close association with a form close to *Dudleya cymosa* cf. subsp. *cymosa* on Modjeska Peak, Santa Ana Mountains, Orange County, which may be an undescribed subspecies (personal communication, Bob Allen).

Dudleya cymosa ssp. *pumila*. Crassulaceae. Noted as attractive to hummingbirds by UCSC Arboretum. May – July.

Dudleya edulis. **Fingertips**. Crassulaceae. Hummingbirds visit the flowers. May – July.

Suspected hostplant for Sonoran Blue at Torrey Pines, La Jolla, and Sweetwater Dam. Sighting Record 484607, BAMONA, 3 June 1991 – Sonoran Blue ova taken from this species by G. Ballmer, J. Emmel.

Dudleya farinosa. **Bluff Lettuce**. Crassulaceae. Nectar: Cabbage White. June – August.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Dudleya lanceolata. **Lanceleaf Liveforever**. Crassulaceae. Nectar: California Dogface. Hummingbirds. April - July.

A foodplant for Sonoran Blue.

Dudleya pulverulenta. **Chalk Dudleya**. Crassulaceae. A hummingbird plant by UCSC Arboretum. May – July.

Dudleya saxosa. **Desert Dudleya**. Crassulaceae. May - June.

Foodplant for Gray Hairstreak and Sonoran Blue.

Dudleya variegata. **Variegated Dudleya**. Crassulaceae. April – June.

Tortricidae: *Eucosma hasseanthi*.

Dudleya virens. **Bright Green Dudleya**. Crassulaceae. April – June.

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Dudleya viscida. **Sticky Dudleya**. Crassulaceae. May - June.

Strongly suspected hostplant for Sonoran Blue, which flies in close association with it in the Santa Ana Mountains in Orange County, in moist canyons (Falls Canyon and San Juan Canyon) (Bob Allen).

Eastwoodia elegans. **Yellow Mock Aster**. Asteraceae. Astereae. Nectar: Painted Lady (Edd Russell). April - July.

Echinodorus berteroi. **Burhead**. Alismataceae. Flowers mid-summer to fall.

Pyralidae: *Elophila occidentalis*.

Eclipta prostrata. **False Daisy**. Asteraceae. Heliantheae. Nectar plant. Mimosa Yellow. All year.

Ehrendorferia ochroleuca was *Dicentra ochroleuca*. **Fire Hearts**. Papaveraceae. Pale Swallowtail photographed at nectar by Marc Kummel, 10 June 2004, San Marcos Pass. Rural Skipper photographed by Nancy Asquith, 24 June 2018 (<https://www.inaturalist.org/observations/14375572>) May - July.

Eleocharis spp. **Spikerush**. Cyperaceae.

Arctiidae: Yellow-collared Scape Moth (*Cisseps fulvicollis*).

Elymus spp. **Wildrye** or **Wheatgrass**. Poaceae. Hordeae.

Preferred larval hosts for the Woodland Skipper (Garth & Tilden).

Noctuidae: Meadow Wainscot (*Leucania farcta*). Armyworm (*Mythimna unipuncta*).

Elymus cinereus was *Leymus cinereus*. **Basin Wildrye**. Poaceae. Hordeae.

Foodplant for Woodland Skipper. Likely host for the Great Basin Wood-Nymph (NorWestLeps #2373).

Elymus condensatus was *Leymus condensatus*. **Giant Wildrye**. Poaceae. Hordeae.

Foodplant for the Woodland Skipper (Xerces Society).

Arctiidae: Brown Ctenucha (*Ctenucha brunnea*) (fq).

Noctuidae: *Apamea cuculliformis*. *Benjaminiola colorada*. *Mammifrontia rileyi*. Armyworm (*Mythimna unipuncta*).

Elymus elymoides. **Squirreltail**. Poaceae. Hordeae.

Likely foodplant for Great Basin Wood-Nymph (Monroes) – larvae found on it 2002 Season Summary. Foodplant for the Nevada Skipper (Garth & Tilden). Hostplant for Uncas Skipper (Warren, NorWestLeps #3070).

Elymus glaucus. **Blue Wild Rye**. Poaceae. Hordeae.

Oviposition by Arctic Skipper observed in Oregon.

Elymus mollis ssp. *mollis*. **American Dunegrass**. Poaceae. Hordeae.

Arctiidae: an unpreferred larval foodplant for the polyphagous Ranchman's Tiger Moth (*Arctia virginalis*).

Elymus smithii. **Western Wheat Grass**. Poaceae. Hordeae.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Army Cutworm (*Euxoa auxiliaris*).

Elymus trachycaulus ssp. *trachycaulus*. **Slender Wheatgrass**. Poaceae. Hordeae.

Foodplant for Woodland Skipper. [Note: "*Agropyron caninum* ssp. *majus*" is a synonym for *Elymus trachycaulus* ssp. *trachycaulus*, Slender Wheatgrass, recorded as larval host for the Woodland Skipper.]
Hostplant for Common Roadside-Skipper in Colorado, at least.

Elymus triticoides was *Leymus triticoides*. **Valley Wild Rye**. Poaceae. Hordeae.

Poaceae. Foodplant for Common Ringlet and Woodland Skipper.

Emmenanthe penduliflora. **Whispering Bells**. Boraginaceae. April - July.

Noctuidae: only known foodplant for *Annaphila astrologa*.

Encelia actoni. **Mountain Bush Sunflower**. Asteraceae. Heliantheae. Western Tiger Swallowtail. An especially favored nectar source for Painted Lady in Inyo County in 1991 migration year. Recommended for butterfly gardens in the Mojave Desert by the Four Directions Institute of Native American Studies. February - July.

Zones 8, 9, 11, 14, 19-21.

Encelia californica. **Coast Sunflower**. Asteraceae. Heliantheae. Nectar: Western Tiger Swallowtail, Monarch, Common Buckeye, Red Admiral (Alan Harper), Gulf Fritillary, Variable Checkerspot, Gabb's Checkerspot, Mourning Cloak, Mormon Metalmark, Western Tailed-Blue (Dagmar Collins), Funereal Duskywing; very attractive to skippers. White-lined Sphinx. February - June.

Larval host for Fatal Metalmark (Heath), and likely Gray Hairstreak (Heath, SoWestLep #3392).

Geometridae: Dwarf Tawny Wave (*Cyclophora nanaria*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Zones 8, 9, 14, 19-24. Grown in gardens and used in restoration work, too.

Encelia farinosa. **Brittlebush**. Asteraceae. Heliantheae. Nectar: Desert Black Swallowtail, Checkered White (Liz Makings), Cloudless Sulphur, Painted Lady (fq), American Lady, West Coast Lady, Variable Checkerspot, Tiny Checkerspot (fq), Sagebrush Checkerspot (*neumoegeni*, David Horner), Sagebrush Checkerspot (Ron Wolf), California Patch, Desert Mexican Metalmark (David Horner), Mormon Metalmark, Behr's Hairstreak (David S. Horner), Gray Hairstreak, Juniper Hairstreak (*siva juniperaria*) (David S. Horner), Ceraunus Blue (Anne Reeves), Silvery Blue, Western Pygmy-Blue (David Horner), Funereal Duskywing (David Horner), Arizona Powdered-Skipper (Anne Reeves), Alfalfa Looper

(*Autographa californica*, Noctuidae). Serves most or all species flying early in the year. January - June, August – September.

Brittlebrush serves as a Painted Lady hostplant.

Bucculatricidae: Brittlebrush Moth (*Bucculatrix enceliae*) – a leaf miner known to eat only this species.

Zones 8-14, 19-24.

Encelia frutescens. **Button Brittlebush**. Asteraceae. Heliantheae. Nectar: Painted Lady (Hartmut Wisch photo). “Flowers are not showy, but butterflies seem to like them ... great smell” – Las Pilitas Nursery. February-May.

Encelia virginensis. **Virgin River Brittlebrush**. Asteraceae. Heliantheae. Nectar: Desert Black Swallowtail, Checkered White, Painted Lady. Surrogate nectar for rearing Lange’s Metalmark. March - June, December.

Zones 7-9, 11, 14, 18-24.

Enceliopsis covillei. **Panamint Daisy**. Asteraceae. Heliantheae. Likely butterfly nectar plant. March – June.

Enceliopsis nudicaulis. **Naked-stemmed Daisy. Sunray**. Asteraceae. Heliantheae. Sagebrush Checkerspot (Jim Morefield photograph). Butterfly nectar plant. May – June.

Ephedra sp. **Jointfir**. Ephedraceae. In 1970 Oakley Shields observed the Pale Blue (*Philotes rita* = *Euphilotes palleescens*) sheltering on the stiff stems of Ephedra plants in a wind and sand storm in Utah. He estimated the winds at about 30-40 miles per hour. Most hung on to the uppermost parts of the plant, head down, away from the wind’s angle and were somewhat buffeted about. Nineteen were collected from the plant during the wind.

Ephedra californica. **Desert Tea**. Ephedraceae.

Ypsolophidae: *Ypsolopha maculatella*.

Ephedra viridis. **Green Ephedra**. Ephedraceae.

Ypsolophidae: *Ypsolopha maculatella*.

Epilobium sp. **Fireweed**. Onagraceae.

Note: other *Epilobium* species were formerly lumped with what is now *Chamerion angustifolium*, a common and widespread species, some entomologists may have been generalizing from it.

Sphingidae: Bedstraw Hawkmoth (*Hyles gallii*). White-lined Sphinx (*Hyles lineata*). Clark’s Day Sphinx (*Proserpinus clarkiae*). Yellow-banded Day Sphinx (*Proserpinus flavofasciata*).

Geometridae: Black-banded Carpet (*Antepirrhoe semiatrata*). Many-lined Carpet (*Anticlea multiferata*). The Small Phoenix (*Ecliptopera silaceata*). *Eulithis destinata*. Lesser Grapevine Looper (*Eulithis*

diversilineata). Satyr Pug (*Eupithecia satyrata*). Grey Pug (*Eupithecia subfuscata*). Double-banded Carpet (*Spargania magnoliata*). White-striped Black (*Trichodezia albovittata*). *Xanthorhoe* sp.

Noctuidae: Langton's Forester (*Alypia langtoni*). MacCulloch's Forester (*Androloma maccullochii*). *Eudryas brevipennis*. *Hyppa brunneicrista* (Canada). Pearly Underwing aka Variegated Cutworm (*Peridroma saucia*).

Scythrididae: *Landryia matutella*.

Sesiidae: Fireweed Clearwing (*Albuna pyramidalis*).

Cosmopterigidae: *Mompha unifasciella*.

Epilobium angustifolium is now *Chamerion angustifolium* subsp. *circumvagum*. **Fireweed**.

Epilobium brachycarpum formerly *Epilobium paniculatum*. **Parched Fireweed**. Onagraceae. Nectar: Anise Swallowtail (T.J. Gehling). Orange Sulphur, Checkered White (Hints), Cabbage White. Monarch. Acmon Blue. Eufala Skipper (Hints), Woodland Skipper, Sonora Skipper (late season with few other plants in flower). Seems a secondary nectar source for some butterflies. June - September.

Sphingidae: Likely for White-lined Sphinx (*Hyles lineata*). Clark's Day Sphinx (*Proserpinus clarkiae* [Haggard]).

Cosmopterigidae: *Mompha achlyognoma* (Powell & Opler, p. 77, slightly misspelled there).

Geometridae: Double-banded Carpet (*Spargania magnoliata*) (Haggard & Haggard).

Heliodinidae: *Aetole extraneella*.

Momphidae: *Mompha achlyognoma* – a leaf miner. (Koster, J.C. & T. Harrison. 1997. "Identity of *Mompha sextrigella* (Braun), with two new Nearctic species (Momphidae: Lepidoptera)." *Holarctic Lepidoptera* 4(1):19-23).

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Epilobium canum was *Zauschneria californica*. **California Fuchsia. Zauschneria**. Onagraceae. Nectar: Pipevine Swallowtail (most avid user known to Shapiro), Anise Swallowtail, California Dogface, Cloudless Sulphur Orange-barred Sulphur, Sleepy Orange, Mexican Yellow. Outstanding for hummingbirds. June - December.

Sphingidae: White-lined Sphinx (*Hyles lineata*) (fq). Clark's Day Sphinx (*Proserpinus clarkiae*) – Paul Johnson found an injured fifth instar larva on it; he attempted to rear it out to confirm, but it did not survive. Another photographed a caterpillar on it:

<https://www.flickr.com/photos/21529332@N08/8980488367/in/album-72157630701847414/>

Cosmopterigidae: *Mompha franclemonti* (suspected; seen in association in Monterey County, Powell & Opler, p. 77). *Mompha powelli* (Powell & Opler, p. 77).

Heliodinidae: *Aetole extraneella* (fq).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Epilobium canum ssp. *latifolium*. **California Fuchsia**. Cloudless Sulphur, Southern Dogface. June - December.

Epilobium ciliatum ssp. *ciliatum*. **Fringed Willowherb**. Onagraceae. Cabbage White, Echo Azure. June - October.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Noctuidae: *Eudryas brevipennis*.

Epilobium minutum. **Little Willowherb**. April - September.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Eragrostis hypnoides. **Teal Lovegrass**. Poaceae. Eragrostideae.

Foodplant for the Fiery Skipper.

Eremalche exilis. **White Mallow**. Malvaceae. March – May.

Larval host for West Coast Lady, Northern White-Skipper.

Noctuidae: *Pseudalypia crotchii* --body and wings dark brown marked with white, orange prothoracic collar.

Eremalche rotundifolia. **Desert Five-spot**. Malvaceae. March – May.

Larval host for Northern White-Skipper, Common Checkered-Skipper and White Checkered-Skipper.

Eremocarpus setigerus is now *Croton setigerus*. **Dove Weed**.

Eremothera boothii was *Camissonia boothii*. **Booth's Evening Primrose**. Onagraceae. Alfalfa Semilooper (*Autographa californica*, Noctuidae) visits flowers (Paul Johnson). Various subspecies from as early as February to as late as August. March to June for ssp. *decorticans*, expected for Pinnacles National Monument.

Eriastrum densifolium. **Giant Woollystar** or **Heavenly Blue**. Polemoniaceae. Nectar: Western Tiger Swallowtail, Anise Swallowtail, Cabbage White, California Dogface (B.J. Stacey), Clouded Sulphur (B.J. Stacey), Painted Lady, Callippe Fritillary (B.J. Stacey), Coronis Fritillary, Western Branded Skipper, Gorgon Copper, Propertius Duskywing (B.J. Stacey), Western Snowberry Clearwing (B.J. Stacey), Five-spotted Hawkmoth. June – July.

Eriastrum densifolium ssp. *elongatum*. **Giant Eriastrum**. Polemoniaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Cabbage White, Variable Checkerspot (Orsak), Western Snowberry Clearwing. Great! June – September.

Eriastrum densifolium spp. *sanctorum*. **Santa Ana River Woolly Star**. Polemoniaceae. Anise Swallowtail is among its pollinators. The giant flower-loving fly (*Raphiomidas actoni* ssp. *actoni*) is a major pollinator and Black-chinned Hummingbird pollinates it. May – September.

Eriastrum diffusum. **Blue Mantle**. Polemoniaceae. Likely nectar plant. March – June.

Eriastrum pluriflorum. **Tehachapi Woollystar**. Polemoniaceae. Showy, likely a good nectar plant. May – July.

Eriastrum sapphirinum. **Sapphire Woollystar**. Polemoniaceae. Nectar: ‘Butterflies’, Indra Swallowtail, Checkered White (Nancy Hamlett), unidentified hairstreak, Marine Blue (Nancy Hamlett), Lycaenidae, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae). May – August.

Noctuidae: *Schinia aurantiaca*, an ‘attractive little moth’ (*Moths of Western North America*).

Ericameria spp. **Goldenbushes**. Asteraceae. Astereae. Nectar: Thicket Hairstreak. Old “Haplopappus sp.” nectar records for Clark County Nevada (Austins) likely are *Ericameria* species: Desert Black Swallowtail, Checkered White, Orange Sulphur, Marine Blue, Red Admiral, Painted Lady, Sagebrush Checkerspot, California Patch.

Geometridae: “Haplopappus”, a former *Ericameria* designation, applies to *Chlorochlamys triangularis*, an emerald.

Noctuidae: *Schinia walsinghami*.

Ericameria arborescens. **Golden Fleece**. Asteraceae. Astereae Coronis Fritillary (Pete Veilleux), Mountain Mahogany Hairstreak (JAC). ‘Generally attractive’ to butterflies (Shapiro); moths also. Treebeard posted a photograph of a Gray Hairstreak perched on its flowers (9/4/11). August – November.

Bucculatricidae: Only known larval host for the leaf miner *Bucculatrix ericameriae*.

Gelechiidae: *Gnorimoschema coquillettella*.

Ericameria bloomeri. **Bloomer’s Goldenbush**. Asteraceae. Astereae. Nectar: Pine White. Atlantis Fritillary, Coronis Fritillary, Great Spangled Fritillary (fq), Callippe Fritillary, Mormon Fritillary, California Tortoiseshell (fq), West Coast Lady, Great Basin Wood-Nymph. California Hairstreak, Hedgerow Hairstreak, Anna Blue, Boisduval’s Blue. Persius Duskywing, Juba Skipper (fq), Columbian Skipper (fq), Woodland Skipper, Fiery Skipper. Shapiro: “Good for most butterflies ... saw 8 species at it on Castle Peak, Nevada County, ~9000', 9 September 2009”. Yosemite Skipper (Shields). Similar to rabbitbrush in its butterfly drawing power. July – October.

Ericameria brachylepis. **Boundary Goldenbush**. Asteraceae. Astereae. Nectar: No specific records, such species as California Patch and Painted Lady seem quite likely. Las Pilitas Nursery nectar plant. September – December.

Ericameria cuneata. **Wedgeleaf Goldenbush**. Asteraceae. Astereae. Las Pilitas Nursery recommends for butterfly garden. Monroes: Yuba Skipper. September – November.

Gelechiidae: *Prolita recens* (Powell & Opler).

Zones 7,15,16,18.

Ericameria ericoides. **Mock Heather. California Goldenbush.** Asteraceae. Astereae. A Funereal Duskywing, a rare stray in San Francisco, seen in September 2008 seeking nectar on this species at the Presidio. Two stray Queen seen at nectar on “California Goldenbush” in southern Santa Barbara County by Nick Lethaby, 14 October 2008 (SoWestLep #9444) – however, the plant may have been *Isocoma menziesii*. September- November.

Gelechiidae: *Aristotelia argentifera*. *Gnorimoschema ericameriae*.

Tortricidae: *Argyrotaenia* sp. *Pelochrista* near *crambitana*, a root borer.

Zones 15-17.

Ericameria greenei. **Greene’s Goldenbush.** Asteraceae. Astereae. Nectar: Blue Copper (Paul Slichter).

Ericameria laricifolia ‘Aguirre’. **Turpentine-brush.** Asteraceae. Astereae. Nectar: Desert Black Swallowtail, Checkered White, Dainty Sulphur (fq) (The Firefly Forest), Queen (Christopher Christie), Northern White-Skipper (Liz Makings).. Attracts numerous late season butterflies in SE Arizona. September – October.

Noctuidae: *Schinia argentifascia*, which feeds only on *Ericameria* species.

Ericameria linearifolia. **Narrowleaf Goldenbush. Interior Goldenbush.** Asteraceae. Astereae. Nectar: Indra Swallowtail, Leanira Checkerspot (fq), Variable Checkerspot, Mylitta Crescent, Behr’s Metalmark, John Muir’s Hairstreak [a segregate of Juniper Hairstreak], Mournful Duskywing, Propertius Duskywing, Common Sootywing, Juba Skipper. Hints: “very good butterfly haunt” on Mt. Diablo. March – May.

John Lane, in a personal communication, notes: “I have been interested in the “juniper hairstreaks” for many years and can offer a few nectar records.

“O. E. Sette studied southern California “*Mitoura*” in the 1950s-60s and his notebooks at the Natural History Museum of Los Angeles County are gold mines. He noted that the flights of “*M. siva mansfield*” and what we now would call “*M. gryneus muiri* associated with California Juniper in the Central Inner Coast Ranges, were always in association with *Ericameria* (= *Haplopappus*) *linearifolius*. He took the bloom period of this species as the best indicator of the flight time of the butterflies.”

Gelechiidae: *Gnorimoschema coquillettella*. *Prolita recens*. *Prolita variabilis* (Wikipedia).

Geometridae: *Digrammia pictipennata*.

Noctuidae: *Cucullia dammersi*.

Tortricidae: *Pelochrista* near *crambitana*, a root borer. Rabbitbrush Webbing Moth (*Synnoma lynosyrana*).

Zone 7. Tends to be difficult in cultivation. According to nurseryman Pete Veilleux of East Bay Wilds, it does not do well kept long in containers and is quite averse to summer irrigation. Successful cultivation

depends on planting out young specimens in the fall and allowing them to be dry in the summer. However, one specimen in a San Jose garden (Linda Ruthruff) thrived on the edge of a lawn on the north side of a house!

Ericameria nauseosa was *Chrysothamnus nauseosus*. **Rubber Rabbitbrush**. Asteraceae. Astereae. Nectar: Western Tiger Swallowtail, Desert Black Swallowtail, Western White, Becker's White, Pine White, Checkered White, Cabbage White, Orange Sulphur (fq), Clouded Sulphur, Mexican Yellow, Yellow Sulphur, Dainty Sulphur, California Dogface, Southern Dogface. Monarch, Queen, Variegated Fritillary, Tehachapi Fritillary, Atlantis Fritillary, Coronis Fritillary (fq), Mormon Fritillary, Zerene Fritillary (fq), Mourning Cloak, California Tortoiseshell, Milbert's Tortoiseshell, Satyr Comma, Zephyr Angewing (fq), American Lady, West Coast Lady (fq), Painted Lady, Lorquin's Admiral, Red Admiral, Mylitta Crescent, Texan Crescent, Common Buckeye (fq), Common Ringlet (fq), Great Basin Ringlet, Small Wood-Nymph. American Snout. Mormon Metalmark (fq). Gray Hairstreak (fq), Great Purple Hairstreak, Thicket Hairstreak (fq), Leda Ministreak, Hedgerow Hairstreak, Sooty Hairstreak, Acmon Blue, Ceraunus Blue, Marine Blue, Reakirt's Blue (fq) Western Pygmy Blue, Melissa Blue, Blue Copper (fq), Purplish Copper, Edith's Copper, Tailed Copper (some usage), Desert Tailed Copper. Northern White-Skipper, Mournful Duskywing, Funereal Duskywing, White Checkered-Skipper, Common Checkered-Skipper, Arizona Powdered-Skipper, Orange Skipperling, Pahaska Skipper, Eufala Skipper, Juba Skipper (fq), Yuma Skipper, Woodland Skipper (fq), Columbian Skipper (fq), Lindsey's Skipper, Sandhill Skipper; Sachem, Harpalus Skipper, Woodland Skipper (David Horner). White-lined Sphinx. Blackberry Leaf Skeletonizer (*Schreckensteiniella festaliella*, Schreckensteiniidae). *Euxoa hollemani*, Noctuidae (PNW Moths), Collared Arches (*Lacinipolia strigicollis*) (PNW Moths), *Pseudanarta flava* (Noctuidae), Indomitable Melipotis (*Melipotis indomita*, Noctuidae), *Pseudanarta crocea* (Noctuidae) (PNW Moths), *Schinia albafascia* [tentative ID of moth in BugGuide photograph by Hartmut Wisch] (Noctuidae), *Schinia walsinghami*, Noctuidae. and other noctuids and geometers (Pyle). In the Trinity Alps area "at least a dozen diurnal moths (mostly Noctuidae with showy banded hindwings)" were noted as flower visitors by Shapiro, *et. al.* Rubber Rabbitbrush is one of the best general nectar plants, conspicuously frequented by butterflies, native in much of the West. August - October.

Rubber Rabbitbrush is a larval host for the Northern Checkerspot.

Gelechiidae: *Gnorimoschema octomaculella*.

Geometridae: *Chlorochlamys triangularis* (an emerald). *Digrammia curvata*. *Eupithecia misturata*. *Somatolophia ectrapelaria* – lab reared on it (Powell & Opler, p. 218). *Tetracis formosa*.

Noctuidae: *Condica lunata*. *Schinia tertia*. Rabbitbrush Flower Moth (*Schinia unimacula*). *Schinia walsinghami*.

Tortricidae: *Pelochrista crambitana*. *Eucosma bucephaloides*. Rabbitbrush Webbing Moth (*Synnoma lynosyrana*).

See *The Jepson manual* (1993) for cultivation notes on some varieties.

Ericameria nauseosa var. *mohavensis*. **Mojave Rabbitbrush**. Asteraceae. Astereae. Nectar: American Lady, Coronis Fritillary, Common Wood-Nymph. Photographed at nectar on it on Mt. Hamilton, 25 September 2015, with several other butterflies also coming to the flowers (NABA Sightings). August-October.

Ericameria palmeri var. *pachylepis*. **Palmer's Goldenbush**. Asteraceae. Astereae. Mormon Metalmark. August – December.

Noctuidae: *Cucullia dammersi*.

Ericameria paniculata was *Chrysothamnus paniculatus*. **Black-stem** or **Mojave Rabbitbush**. Asteraceae. Astereae. June - December.

Larval host for Northern Checkerspot.

Noctuidae: *Schinia tertia*. Rabbitbrush Flower Moth (*Schinia unimacula*). *Schinia walsinghami*.

Ericameria parishii. **Parish's Goldenbush**. Asteraceae. Astereae. California Sister (David Horner), Painted Lady (David Horner), Woodland Skipper (David Horner). Visited by many butterflies. July – October.

Ericameria pinifolia. **Pine-bush**. **Pine Goldenbush**. Asteraceae. Astereae. Mournful Duskywing (Bernard Field Station), Northern White-Skipper, Eufala Skipper, Juba Skipper (Lynn Monroe, SoWestLep #10718). Bernard Field Station also records the heavy bee, *Anthophora urbana*, visiting its flowers. April – July, September – January.

Gelechiidae: *Gnorimoschema coquillettella*.

Noctuidae: *Cucullia dammersi*.

Ericameria suffruticosa formerly *Haplopappus suffruticosus*. **Singlehead Goldenbush**. Asteraceae. Astereae. July – October.

Tortricidae: *Phaneta stramineana*.

Ericameria teretifolia was *Chrysothamnus teretifolius*. **Green Rabbitbrush**. Asteraceae. Astereae. September - November.

Noctuidae: *Schinia argentifascia*, a flower moth.

Erigeron spp. **Fleabanes**. Asteraceae. Astereae. Nectar: Checkered White, Sleepy Orange. Gulf Fritillary, Arachne Checkerspot, Variable Checkerspot, and Milbert's Tortoiseshell. Thicket Hairstreak, Ceraunus Blue, Boisduval's Blue. Common Checkered-Skipper, Arizona Powdered-Skipper (Liz Makings). Shapiro finds *Erigeron* spp. generally secondary in butterfly nectar value to *Aster* spp., and utilized mostly in the fall, with *Erigeron glaucus* near the coast the best nectar plant in the genus. Western Small Flower Moth (*Schinia perminuta*, Noctuidae) is among diurnal moth visitors to its flowers.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Noctuidae: Gray-hooded Owlet (*Cucullia florea*). Western W-marked Cutworm (*Spaelotis havilae*).

Oecophoridae: *Agonopterix arnicella*.

Pterophoridae: *Lioptilodes albistriolatus*.

Pyralidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Xenotemna pallorana*.

Erigeron algidus. **Sierra Fleabane**. Asteraceae. Astereae. Moldenke finds Mountain Crescent (a segregate of the Field Crescent) and Mariposa Copper associated with its flowers. July – August.

Erigeron aliceae. **Alice Eastwood's Fleabane**. Asteraceae. Astereae. Nectar: Edith's Checkerspot (Tanya Harvey), Northern Checkerspot, Great Spangled Fritillary (Tanya Harvey), Lilac-bordered Copper, Mariposa Copper, and Northern Blue (Mountain Plants of the Western Cascades). June – August (September).

Erigeron aphanactis. **Rayless Shaggy Fleabane**. Asteraceae. Astereae. Nectar: Common Ringlet, Acmon Blue, Boisduval's Blue, Juba Skipper (from an Idaho study). Prettier than the name may suggest! April – September.

Erigeron barbellulatus. **Shining Daisy. Shining Fleabane**. Asteraceae. Astereae. Nectar: Mormon Fritillary (David S. Horner). Sierra Nevada Blue (David S. Horner), Greenish Blue (David S. Horner). Showy species, likely many others. June - July.

Erigeron breweri. **Brewer's Fleabane**. Asteraceae. Astereae. Nectar: West Coast Lady (photograph by Pete Veilleux), skipper. June – September.

Erigeron canadensis was *Conyza canadensis*. **Horseweed**. Asteraceae. Astereae. Nectar: Monarch (Wikipedia). Scott noted a visit by Cabbage White and another by Gray Hairstreak. Value likely slight. All year.

Geometridae: Common Pug (*Eupithecia miserulata*). Wavy-lined Emerald (*Synchlora aerata*).

Noctuidae: Gray-hooded Owlet (*Cucullia florea*). Variegated Cutworm (*Peridroma saucia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Erigeron clokeyi. **Clokey Fleabane**. Asteraceae. Astereae. A primary nectar source for a rare subspecies of the Shasta Blue in Nevada. The Californian variety is var. *pinzliae* and flowers June – September.

Erigeron compositus. **Cutleaf Daisy. Alpine Daisy**. Asteraceae. Astereae. Nectar: Sierra Sulphur (Pyle). Scott: Painted Lady, Hoary Comma, Rockslide Checkerspot. May – September.

Erigeron coulteri. **Coulter's Fleabane**. Asteraceae. Astereae. Nectar: Margined White (Scott), Mormon Fritillary (Scott), Tecumseh Skipper (Moldenke). July – September.

Erigeron divergens. **Spreading Fleabane**. Asteraceae. Astereae. Pipevine Swallowtail, Common Buckeye, Field Crescent, Common Ringlet, Erichson's Skipper, Common Checkered-Skipper, Dun Skipper, others. April – August.

Noctuidae: Darker-sided Straw Moth (*Heliothis phloxiphaga*).

Zones 2, 3, 7, 8, 9, 10, 14, 18-21, 22-24.

Erigeron eatonii var. *plantagineus*. **Eaton's Daisy**. Asteraceae. Astereae. Flowers attract butterflies. Tanya Harvey noted a copper very interested in them. May – August.

Erigeron filifolius. **Threadleaf Fleabane**. Asteraceae. Astereae. May – August.

Arctiidae: Williams' Tiger Moth (*Grammia williamsii*).

Erigeron flagellaris. **Trailing Fleabane**. Asteraceae. Astereae. Nectar: Out of California, Scott notes flower visitation by Pale Crescent, Bryan Reynolds photographed Field Crescent on it in New Mexico and also a Western Pine Elfin. May – August.

Erigeron foliosus. **Fleabane Aster**. Asteraceae. Astereae. Hoffmann's Checkerspot, Lilac-bordered Copper (Tanya Harvey). Harbison's Dun Skipper. Umber Skipper. "Good source of nectar for adult butterflies" – Plants of the San Gabriel Mountains. Kummel photographed a couple of small moths on its flowers, one a silvery micromoth (28 May 2015) (cf. Gracillariidae). Varieties flower in the range of April – October.

See *The Jepson manual* for cultivation notes on varieties.

Erigeron foliosus var. *confinis*. **Lovely Leafy Fleabane**. Asteraceae. Astereae. Tanya Harvey, observing in southern Oregon, notes nectar seeking by the Western White and Lilac-bordered Copper. May – September.

Erigeron glacialis formerly *Erigeron peregrinus*. **Subalpine Fleabane. Wandering Daisy**. Asteraceae. Astereae. Nectar: Rocky Mountain Parnassian, Western White, Orange Sulphur, Clouded Sulphur, Edith's Checkerspot (Christopher Christie), Lustrous Copper, Mardon Skipper. Butterflies are common flower visitors to its "copiously" nectarous flowers and among its pollinators (Pojar, 1970). July – September.

Larval host for Pearl Crescent.

Erigeron glaucus. **Seaside Daisy** and its cultivars. Asteraceae. Astereae. Nectar: Anise Swallowtail, Checkered White, California Dogface, Monarch, Variable Checkerspot, Common Buckeye, West Coast Lady (fq), Painted Lady, Field Crescent (<https://www.inaturalist.org/observations/13384095>), Mylitta Crescent (fq), Myrtle's Silverspot (fq), Callippe Fritillary, Mourning Cloak (<https://www.inaturalist.org/observations/13384231>). Gray Hairstreak, Green Hairstreak (fq), Purplish Copper, Acmon Blue. Boisduval's Blue including Point Reyes Blue (<https://www.inaturalist.org/observations/13890797>), Mournful Duskywing, Common Checkered-Skipper, Umber Skipper, Skippers. Liam O'Brien, San Francisco lepidopterist, finds it a major nectar source. May – July.

Pterophoridae: Williams' Plume Moth (*Platyptilia williamsii*) – one of its more common herbivores at Bodega Bay, eating flower heads: Karban, Richard, and Sharon Y. Strauss. 1993. "Effects of Herbivores on Growth and Reproduction of Their Perennial Host, *Erigeron glaucus*." *Ecology* 74 (1): 39-46..

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leaf-tier (*Cnephasia longana*).

Zones 14-17, 22-24. Popular in cultivation, many selections.

Erigeron glaucus ‘**Cape Sebastian**’. ‘Adored’ by butterflies, notably Checkered White. Las Pilitas Nursery photographs show Gray Hairstreak, a Fritillary and Mylitta Crescent.

Erigeron glaucus ‘**Wayne Roderick**’. Great for butterflies, including Orange Sulphur, Checkered White (fq), Monarch, Mylitta Crescent, Common Checkered-Skipper.

Erigeron inornatus. **Western Rayless Fleabane**. Asteraceae. Astereae. June - September.

Tortricidae: *Eucosma laticurva*.

Erigeron linearis. **Desert Yellow Fleabane**. Asteraceae. Astereae. Nectar: Becker’s White, Sagebrush Checkerspot, Bramble Green Hairstreak, Green Hairstreak. David Nunnallee found flowering plants “literally covered” with Juniper Hairstreak on 13 June 2012 in Oregon, just southwest of Malheur NWF along Hwy. 205 – not unusual to see ten specimens on a single small plant cluster, tame enough to touch some of them; an unusual outbreak of thousands of Juniper Hairstreak!

Nunnallee finds it a hostplant for Sagebrush Checkerspot in Washington (NorWestLeps #2894). May – July.

Erigeron peregrinus is now *Erigeron glacialis*.

Erigeron philadelphicus. **Philadelphia Fleabane**. Asteraceae. Astereae. Nectar: Clouded Sulphur, Sleepy Orange, Viceroy, Pearl Crescent, Gray Hairstreak, American Copper, Eastern Tailed Blue, Tawny-edged Skipper, and Yellow-collared Scape Moth. May – June.

Zones 3-7, 14-24.

Erigeron pumilus. **Shaggy Fleabane**. Asteraceae. Astereae. Scott notes flower visits by Rocky Mountain Parnassian. Checkered White, Western White (Scott), Clouded Sulphur. Field Crescent, Arachne Checkerspot, Callippe Fritillary, Variegated Fritillary, Small Wood-Nymph, Common Ringlet (fq). Gray Hairstreak, Tailed Copper, Arrowhead Blue, Boisduval’s Blue, Lupine Blue, Melissa Blue, Silvery Blue. Saltbush Sootywing (fq), Dreamy Duskywing, Persius Duskywing, Common Checkered-Skipper, Juba Skipper, Nevada Skipper, Pahaska Skipper, Sandhill Skipper, Tawny-edged Skipper, Uncas Skipper. The Californian variety is *intermedius* and flowers May – August.

Erigeron pumilus var. *intermedius*. **Shaggy Fleabane**. Asteraceae. Astereae. Nectar: Purplish Copper. May – August.

Erigeron pygmaeus. **Dwarf Alpine Daisy**. Asteraceae. Astereae. Moldenke finds Edith’s Checkerspot, Rockslide Checkerspot (*Chlosyne damoetes*), Mountain Crescent, Lustrous Copper and Tecumsah Skipper associated with its flowers. Also a diurnal moth. July – August.

Larval host for Northern Checkerspot.

Eriodictyon spp. **Yerba Santa**. Boraginaceae. Nectar: Edwards’ Swallowtail, California Dogface, Pearly Marble, Great Basin Wood-Nymph, Callippe Fritillary, Nelson’s Hairstreak, Gold-hunter’s Hairstreak, California Hairstreak, Macaria Fritillary, Great Purple Hairstreak, Leda Ministreak, Thicket Hairstreak,

Johnson's Hairstreak, Thorne's Juniper Hairstreak, Northern White-Skipper. Great genus as a nectar plant for butterflies. Sequoia Sphinx at dusk.

Eriodictyon angustifolium. **Narrowleaf Yerba Santa**. Boraginaceae. Nectar: Desert Black Swallowtail, Becker's White, Checkered White, Cabbage White, Orange Sulphur, Southern Dogface, Dainty Sulphur, Monarch, Queen, California Sister, American Lady, Painted Lady, West Coast Lady, Red Admiral, Weidemeyer's Admiral, California Tortoiseshell, Milbert's Tortoiseshell, Satyr Comma, Arachne Checkerspot, Great Basin Wood-Nymph, Western Pygmy Blue, Marine Blue, Reakirt's Blue, Acmon Blue, Echo Azure, Behr's Hairstreak, Leda Ministreak, Thicket Hairstreak, Juniper Hairstreak, Great Purple Hairstreak, Gray Hairstreak, Common Checkered-Skipper, Small-Checkered-Skipper, Northern White-Skipper, Sleepy Duskywing, Funereal Duskywing, Meridian Duskywing, Orange Skipperling. The Thicket Hairstreak is "particularly fond" of Narrowleaf Yerba Santa! May - August.

Eriodictyon californicum. **Yerba Santa**. Boraginaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Pale Swallowtail (fq), Anise Swallowtail. Boisduval's Marble, Spring White (<https://www.inaturalist.org/observations/12689883>), Western White, Sara Orangetip, Pearly Marble, Western Sulphur. Edith's Checkerspot, Gabb's Checkerspot, Northern Checkerspot, Leanira Checkerspot, Variable Checkerspot (fq), Callippe Fritillary, Macaria Fritillary, Unsilvered Fritillary, Lorquin's Admiral, California Sister, American Lady, Painted Lady, California Tortoiseshell (fq), Great Basin Wood-Nymph (Scott). Western Brown Elfin. Bramble Green Hairstreak, California Hairstreak, Gold-hunter's Hairstreak (fq), Mountain Mahogany Hairstreak, Hedgerow Hairstreak, Thicket Hairstreak, Johnson's Hairstreak, Nelson's Hairstreak (John Lane), Juniper Hairstreak [including the John Muir's Hairstreak segregate], Gorgon Copper, Arrowhead Blue, Greenish Blue. Northern White-Skipper (fq), Propertius Duskywing, Funereal Duskywing, Mournful Duskywing, Northern Cloudywing, Columbian Skipper, Lindsey's Skipper, Rural Skipper, Woodland Skipper, Umber Skipper. Western Clearwing (*Hemaris thetis*), Clark's Day Sphinx (*Proserpinus clarkiae*, Sphingidae), *Drasteria ochracea* (Noctuidae) (J. Maughn), *Mecyna mustelinalis* (Crambidae) (iNaturalist, Nancy Asquith <https://www.inaturalist.org/observations/14376672>). A diurnal moth (possibly *Heliothodes diminutiva*). Yerba Santa is the best butterfly nectar source apart from California Buckeye at Jasper Ridge Biological Preserve near Stanford University. Also attracts about 30 species of native bees. April - July.

Yerba Santa is a larval host for the Brown Elfin and Painted Lady.

Elachistidae: *Coelopoeta glutinosi*, which creates gall-like leaf mines.

Ethmiidae: Yerba Santa Bird-dropping Moth (*Ethmia arctostaphylella*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). *Sparganothis senecionana*.

Eriodictyon crassifolium. **Thick-leaved Yerba Santa**. Boraginaceae Nectar: Pale Swallowtail, Western Tiger Swallowtail, Pipevine Swallowtail, Checkered White, California Dogface, Sara Orangetip (David Horner), Common Buckeye, Callippe Fritillary, American Lady, Painted Lady (fq), West Coast Lady, Lorquin's Admiral, California Sister, Chalcedon Checkerspot, Coastal Green Hairstreak (David S. Horner), Hedgerow Hairstreak, California Hairstreak (fq), Funereal Duskywing (fq), Northern White-Skipper (fq), Common Branded Skipper, Rural Skipper (David S. Horner), and likely others. Nicknamed "butterfly crack" by some lepidopterists because they are so wrapped up in enjoying it! April - June.

Elachistidae: *Coelopoeta glutinosi*, which creates gall-like leaf mines (Powell & Opler, p. 74), especially noted in this species.

Las Pilitas Nursery: “quite the butterfly magnet and easier to grow”.

Eriodictyon crassifolium var. *nigrescens*. **Bicolored Yerba Santa**. Boraginaceae. Nectar: Pale Swallowtail (David Horner). Treebeard got great photographs of a fresh Western Tiger Swallowtail at nectar on Bicolored Yerba Santa on 11 May 2012 and 22 April 2016, Variable Checkerspots on 4 May 2015 and a Northern White-Skipper on 13 April 2013, and observed an Anise Swallowtail and several Gabb’s Checkerspots on it. Callippe on it in David Horner photographs, appears to be beginning to uncoil proboscis. April – July.

Eriodictyon parryi was *Turricula parryi*. **Poodle-dog Bush**. Boraginaceae. Nectar: Western Tiger Swallowtail (Alan King, Flickr, David Horner), Pale Swallowtail (Hartmut Wisch photograph). Butterflies attracted to its flowers include “Pale Swallowtail and Variable Checkerspot” – *Plants of the San Gabriel Mountains*. Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae, Ron King photographs). May – August.

Eriodictyon tomentosum. **Woolly Yerba Santa**. Boraginaceae. Nectar: Monarch, Common Buckeye, West Coast Lady, Callippe Fritillary (fq), Leanira Checkerspot, Variable Checkerspot (fq), Edith’s Checkerspot (fq), California Sister, California Ringlet. Gray Hairstreak, California Hairstreak (also imbibing spittlebug spittle on this plant per Paul Johnson), Hedgerow Hairstreak (fq), Sylvan Hairstreak, Great Purple Hairstreak, Juniper Hairstreak [John Muir’s Hairstreak segregate], Brown Elfin, Gorgon Copper, Great Copper (fq), Bernardino Dotted-Blue, Lupine Blue. Northern White-Skipper, Rural Skipper. *Digrammia muscariata* (Geometridae) and a putative *Pyralis* sp. Good butterfly plant at Pinnacles National Monument (Paul Johnson). May - July.

Eriodictyon traskiae. **Trask’s Yerba Santa**. Boraginaceae. Nectar: Pale Swallowtail, Harford’s Sulphur (Lynn Watson), Variable Checkerspot (fq), Lorquin’s Admiral, Red Admiral, Painted Lady, Hedgerow Hairstreak, Northern White-Skipper, Western Snowberry Clearwing (*Hemaris thetis*). Very popular with butterflies. Beeflies, too. May - July.

Eriodictyon trichocalyx. **Smooth Leaf Yerba Santa**. Boraginaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Orange Sulphur, California Dogface, Queen, Callippe Fritillary, Coronis Fritillary (fq) – Grinnells (1907), Variable Checkerspot, Quino Checkerspot (a segregate of Edith’s Checkerspot), California Sister, American Lady, Painted Lady, West Coast Lady, Hedgerow Hairstreak, Nelson’s Hairstreak, Acmon Blue, Marine Blue, Funereal Duskywing, Northern White-Skipper, Common Branded Skipper. A striking red day-flying moth *Lycomorpha regulus* (Arctiidae) (Hartmut Wisch photograph, BugGuide). A striking black-and-white diurnal noctuid (*Copanarta sexpuncta*, Noctuidae) (Hartmut Wisch photograph on BugGuide). Excellent nectar source. April - July.

Most likely this one noted as second favorite nectar source for Columbian Skipper in the San Bernardino Mountains in 1907 by the Grinnells.

Elachistidae: *Coelopoeta glutinosi*, which creates gall-like leaf mines.

Eriogonum spp. **Wild Buckwheats**. Polygonaceae. Nectar: Mylitta Crescent, Painted Lady, American Lady, Common Buckeye, Mormon Metalmark, Edith’s Copper, Lilac-Bordered Copper, Tailed Copper, Gray Hairstreak, Great Purple Hairstreak, Nelson’s Hairstreak, Marine Blue, Northern White-Skipper. Arthur Shapiro notes that the smaller herbaceous perennial sorts work well in the San Francisco Bay and

Sacramento Valley regions while the shrubby kinds work much better towards the south where they are native.

Almost any significant native population of any *Eriogonum* species is likely to have at least one blue Lycaenid butterfly, if not several, utilizing it as a larval host. Other species utilizing *Eriogonum*: Mormon Metalmark. Brown Elfin. Gray Hairstreak. Coastal Green Hairstreak. Sheridan's Hairstreak. Blue Copper. Gorgon Copper.

Geometridae: Citrus Looper (*Iridopsis fragilaria*). *Nemoria intensaria*.

Noctuidae: *Drasteria howlandii* and *Drasteria mirifica* (showy false underwings). Dark Grey Fishia (*Fishia yosemitae*). Brown Arches (*Lacinipolia stricta*). *Xestia infimatis*.

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*). Electra Buckmoth (*Hemileuca electra*). Hera Buckmoth (*Hemileuca hera*).

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Eriogonum angulosum. **Angle-stem Wild Buckwheat**. Polygonaceae. Nectar: Painted Lady. Flowers all year.

Eriogonum arborescens. **Santa Cruz Island Buckwheat**. Polygonaceae. Nectar: Common Buckeye, Echo Azure, hairstreaks, Mournful Duskywing, grass skippers. Acmon Blue visits it for nectar on the island (and in gardens), but prefers legumes, its hostplants. April - October.

Eriogonum baileyi. **Bailey Buckwheat**. Polygonaceae. May - October.

Eriogonum cinereum. **Ashy-leaf Buckwheat**. Polygonaceae. Nectar: Mormon Metalmark, Gray Hairstreak, Echo Azure, Acmon Blue, Marine Blue, Funereal Duskywing, Mournful Duskywing, Fiery Skipper, and Umber Skipper. Flowers all year.

Larval host for Mormon Metalmark and Square-spotted Blue.

Eriogonum compositum. **Arrowleaf Buckwheat**. Polygonaceae. Nectar: Western Tiger Swallowtail (Tanya Harvey), Clodius Parnassian (Mountain Plants of the Western Cascades), Field Crescent, Coronis Fritillary, Hedgerow Hairstreak (Tanya Harvey), Juniper Hairstreak (Tanya Harvey), Thicket Hairstreak, Dotted Blue and likely all the lycaenids that employ it as a larval host. April - July.

Larval host for Bramble Green Hairstreak, Sheridan's Hairstreak, Varied Blue, Dotted Blue, Acmon Blue.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Psychidae: a bagworm, *Hyaloscotes fumosa* (Haggard).

Eriogonum covilleianum. **Coville's Buckwheat**. Polygonaceae. April - August.

Foodplant for Dotted Blue.

Eriogonum crocatum. **Saffron Buckwheat. Conejo Buckwheat.** Polygonaceae. Nectar: Common Buckeye, hairstreaks, Mournful Duskywing. April – July.

Eriogonum davidsonii. **Davidson Buckwheat.** Polygonaceae. May - September.

Larval host for Pratt's Dotted Blue in the San Jacinto and Santa Rosa Mountains in Riverside County (Monroes). Also serves caterpillars of Gray Hairstreak, Acmon Blue and Ceraunus Blue.

Eriogonum deflexum. **Flat-topped Skeleton Weed.** Polygonaceae. Nectar source for Ceraunus Blue, Western Pygmy Blue (Miller).
var. *deflexum* flowers all year.

Larval host for Mormon Metalmark.

Eriogonum deserticola. **Dune Buckwheat. Colorado Desert Buckwheat.** Polygonaceae. Nectar: Sleepy Orange, Tiny Checkerspot. July - January.

Eriogonum elatum. **Tall Buckwheat.** Polygonaceae. Nectar: Small Wood-Nymph, Mormon Metalmark, Behr's Hairstreak, California/Sylvan Hairstreak, Purplish Copper, Ruddy Copper, Anna's Blue. Caitlin LeBar thinks she remembers Hydaspe Fritillary and possibly others at nectar on it as well. May - October.

Larval host for Mormon Metalmark, Gray Hairstreak, Bramble Green Hairstreak, Lember's Hairstreak, Sheridan's Green Hairstreak and Acmon Blue. David James and Dave Nunnallee reared later instars of Blue Copper on it, as well, though not recorded as used by it in the wild.

Eriogonum elongatum. **Longstem Buckwheat.** Polygonaceae. "A butterfly favorite" -- U.C. Riverside Botanic Garden. Variable Checkerspot, American Lady, Painted Lady, West Coast Lady, Behr's Metalmark, Mormon Metalmark, Gray Hairstreak, Great Purple Hairstreak, California Hairstreak, Mountain Mahogany Hairstreak, Gorgon Copper, Square-spotted Blue, Acmon Blue, Marine Blue, Funereal Duskywing, Northern White-skipper (David Horner), Common Branded Skipper. July - November.

Hostplant for Mormon Metalmark, Bramble Green Hairstreak, Gray Hairstreak Acmon Blue, Dotted Blue, Ceraunus Blue, Gorgon Copper.

Eriogonum fasciculatum. **California Buckwheat.** Polygonaceae. Nectar: Swallowtails, Becker's White, Checkered White, Dainty Sulphur, Harford's Sulphur. Queen, Variable Checkerspot, Common Buckeye (fq), Painted Lady, American Lady, West Coast Lady, Red Admiral, California Sister, Lorquin's Admiral, Sagebrush Checkerspot, California Patch, Callippe Fritillary (<https://www.inaturalist.org/observations/13342808>), Coronis Fritillary, California Ringlet, Common Wood-Nymph, Great Basin Wood-Nymph. Mormon Metalmark, Fatal Metalmark. Brown Elfin, Green Hairstreak, Gray Hairstreak, Great Purple Hairstreak, Gold-hunter's Hairstreak, California Hairstreak, Mountain Mahogany Hairstreak (fq), Hedgerow Hairstreak, Nelson's Hairstreak, Thorne's Juniper Hairstreak, Thicket Hairstreak, Bramble Green Hairstreak, Leda Ministreak. Great Copper (fq), Gorgon Copper, Tailed Copper (fq), Hermes Copper (fq, a favorite nectar plant), Echo Azure, Acmon Blue, Bernardino Dotted-Blue [Bernardino Blue], , Dotted Blue, Marine Blue, Ceraunus Blue, Reakirt's Blue, Square-spotted Blue, Lupine Blue (fq) (including *monticola*, David. S. Horner), Western Pygmy-Blue. Common Checkered-Skipper, White Checkered-Skipper (Marc Kummel), Northern White-Skipper,

Mournful Duskywing, Funereal Duskywing, Propertius Duskywing, Common Sootywing, Common Branded Skipper, Fiery Skipper, Harbison's Dun Skipper, Sandhill Skipper, Umber Skipper. Favorite nectar for the second brood of the rare Thorne's Hairstreak, according to Butterflies of America. Peter J. Bryant saw Golden Hairstreak at nectar on California Buckwheat in Orange County. One of the top butterfly nectar plants in southern California! Also gets moths, such as Buckwheat Borer (*Synanthedon polygona*, Sesiidae) a colorful day-flying wasp mimic, and a showy tiger moth, *Lycomorpha fulgens*. Loads of other insects, too. Flowers all year.

Larval host for Mormon Metalmark, Behr's Metalmark, likely Desert Metalmark (Monroes), Blue Copper [aka Varied Blue], Bramble Green Hairstreak, Bernardino Blue, Square-spotted Blue, Lupine Blue, Acmon Blue, Varied Blue.

Gelechiidae: *Aroga morenella*.

Geometridae: *Chlorochlamys appellaria* – an emerald. McDunnough's Leafwing (*Pero macdunnoughi*). Wavy-lined Emerald (*Synchlora aerata*) – also known as the Camouflaged Looper, because the caterpillar attaches pieces of the flowers it feeds upon to its back (Wikipedia). Pink-margined Green (*Nemoria leptalea*).

Lasiocampidae: *Gloveria gargamelle* (reported on HOSTS as using this plant, possibly an error). *Gloveria medusa*.

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*) – reported with some uncertainty about the moth species.

Noctuidae: *Dichagyris variabilis*. *Triocnemis saporis*.

Pyralidae: *Toripalpus trabalis* – MacFarland (1975) notes that near Hesperia in San Bernardino County the larvae were found in July “in conspicuous communal webs” on California Buckwheat.

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*). [Neumogen's Buckmoth (*Hemileuca neumogeni*) recorded, but Tuskes believes this is an error]. Electra Buckmoth (*Hemileuca electra*) – a day-flying silk moth with bright red-orange hindwings bordered in black. Neumogen's Buckmoth (*Hemileuca neumogeni*).

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Eriogonum fasciculatum var. *foliolosum*. **Leafy California Buckwheat**. Polygonaceae. Nectar: Mountain Mahogany Hairstreak (<https://www.inaturalist.org/observations/13725847>).

Eriogonum fasciculatum var. *polifolium*. **Interior California Buckwheat**. Polygonaceae. Nectar: California Dogface, West Coast Lady (Maureen Sullivan), Common Buckeye, Gorgon Copper, Dryope Hairstreak, Hedgerow Hairstreak, Silver-banded Hairstreak, Bernardino Dotted-Blue. Values much the same as above. A race of the Square-spotted Blue is associated with this plant, a nectar source and larval host, in southernmost Nevada. Bernardino Dotted-Blue closely associated with this taxon. Flowers any time.

This is the applicable variety in much of the range of the species. Emmel & Emmel (1973): “Probably” a hostplant for Mormon Metalmark and Edward’s Metalmark, and the Desert Metalmark; they confirm it as a hostplant for the segregate known as Behr’s Metalmark, and for Bramble Green Hairstreak, Bernardino Dotted-Blue, a segregate of Square-spotted Blue known as Martin’s Philotes. Very likely also for Acmon Blue and Lupine Blue.

Saturniidae: Electra Buckmoth (*Hemileuca electra* subsp. *mojavensis* and *clio*). Supports caterpillars of Burns’ Buckmoth (*Hemileuca burnsi*) of the 4th instar or older (Tuskes), but not the younger ones.

Geometridae: Larvae of the emerald *Chlorochlamys appellaria* and *Synchlora aerata liquoraria*, a subspecies of the Wavy-lined Emerald (McFarland, 1975) develop on its flower heads.

Eriogonum foliosum is now *Eriogonum evanidum*. **Leafy Buckwheat. Vanishing Wild Buckwheat.** Polygonaceae. July - October.

Geometridae: Pink-margined Green (*Nemoria leptalea*).

Eriogonum giganteum. **Saint Catherine’s Lace.** Polygonaceae. One of the best garden buckwheats for butterflies (*Growing Native*). Nectar: Painted Lady, Gray Hairstreak, Avalon Hairstreak, Acmon Blue, Western Pygmy Blue. Flowers all year.

Saint Catherine’s Lace is a hostplant for the Avalon Hairstreak.

Saturniidae: Electra Buckmoth (*Hemileuca electra*).

Scythrididae: Powell & Opler refer to an undescribed species with genitalia similar to that of *Arotrura divaricata* found feeding on it on Santa Barbara Island (Powell & Opler, p. 79).

May hybridize with Santa Cruz Island Buckwheat or California Buckwheat in cultivation.

Eriogonum giganteum var. *compactum*. **Santa Barbara Island Buckwheat.** Polygonaceae. Nectar: Western Pygmy Blue. May - October.

Eriogonum gracile. **Slender Woolly Buckwheat.** Polygonaceae. All year.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Eriogonum gracillimum. **Rose and White Buckwheat.** Polygonaceae. All year.

Foodplant for Acmon Blue.

Eriogonum grande. **Island Buckwheat.** Polygonaceae. March - October.

Foodplant for Avalon Hairstreak.

Pyralidae: *Toripalpus trabalis*.

Eriogonum grande var. *rubescens*. **Pink Island Buckwheat**. Polygonaceae. Nectar: Common Buckeye, Acmon Blue, Gray Hairstreak (fq), Northern White-Skipper, Mournful Duskywing, Common Checkered-Skipper. April - September.

Susan Taylor-Brown of San Jose photographed an Acmon Blue ovipositing on its flower heads in her San Jose garden. The Wildscaping web site (Chris and Trish Meyer) also notes Acmon Blue oviposition in Sherman Oaks. Michael Schmidt photographed what appears to be a Gray Hairstreak caterpillar on his in San Diego area.

Very popular and useful in cultivation. Central Coast Wilds says Pink Island Buckwheat easily interbreeds with Coast Buckwheat (*E. latifolium*) and Naked Buckwheat (*E. nudum*), so please do not plant Pink Island Buckwheat near wild populations of those species.

Eriogonum grande ssp. *timorum*. **San Nicolas Island Buckwheat**. Polygonaceae. April - October.

Eriogonum heermannii. **Heermann Buckwheat**. Polygonaceae. Nectar: Painted Lady, Mormon Metalmark, Sheridan's Hairstreak, Gray Hairstreak, Western Pygmy Blue, Ellis's Square-spotted Blue, Northern White-Skipper, Common Checkered-Skipper in Clark County, Nevada. The 1981 Season Summary reports *Stylopona modestella* (Noctuidae) day-flying and at these blossoms in Ventura County. May - November.

Larval host for Blue Copper, Sheridan's Hairstreak, Comstock's Hairstreak, Ellis's Square-spotted Blue, Veined Blue, Square-spotted Blue.

Eriogonum heracleoides var. *heracleoides*. **Parsnipflower Buckwheat**. Polygonaceae. Nectar: Coronis Fritillary. Gray Hairstreak, Juniper Hairstreak, Behr's Hairstreak, Sagebrush Sooty Hairstreak (Kondla), Blue Copper, Purplish Copper, Acmon Blue. May - September.

Larval host for Bramble Green Hairstreak, Square-spotted Blue and Dotted Blue.

Eriogonum incanum. **Frosted Buckwheat**. Polygonaceae. Nectar: Indra Swallowtail, Lustrous Copper, Acmon Blue, Pacific Dotted Blue, Melissa Blue, Shasta Blue, Northern Blue, Square-spotted Blue, Mournful Duskywing, Common Checkered-Skipper, Two-banded Checkered-Skipper, Comma Skipper, Tecumseh Skipper, at least one diurnal moth. June - September.

Larval host for Lember's Hairstreak and Square-spotted Blue.

Eriogonum inflatum. **Desert Trumpet**. Polygonaceae. Nectar: Painted Lady, likely others, especially those that use it for a hostplant. All year.

Caterpillar plant for Desert Metalmark, Mormon Metalmark, Gray Hairstreak, and Ceraunus Blue.

Noctuidae: *Triocnemis saporis*.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Eriogonum kennedyi. **Kennedy's Buckwheat**. Polygonaceae. Nectar: Nelson's Hairstreak (fq), Western Pine Elf, Lupine Blue, Dotted-Blue. April - July.

Larval host for Mormon Metalmark, Comstock's Hairstreak, Mojave Dotted-Blue and Veined Blue.

Eriogonum kennedyi var. *pinicola*. **Kern Buckwheat** Polygonaceae. A 1995 letter to the California Natural Diversity Database about occurrences of this rare species notes "small, silvery white, iridescent butterflies (Lycaenidae?) ...visiting the flowers" (Sandy Hare). May - June.

Eriogonum kennedyi var. *purpusii*. **Purpus' Buckwheat**. Polygonaceae. May - July.

Oviposition by Langston's Blue, a segregate of the Dotted Blue, in Mono County (Shields, 1977).

Eriogonum latifolium. **Coast Buckwheat**. Polygonaceae. Nectar: Anise Swallowtail. Callippe Fritillary, Common Buckeye (fq), Field Crescent. Lange's Metalmark. Gray Hairstreak, Green Hairstreak, Great Copper, Gorgon Copper, Blue Copper, Dotted Blue (fq), Acmon Blue (fq), Mission Blue [a segregate of Boisduval's Blue], also Point Reyes Blue (<https://www.inaturalist.org/observations/13890797>). Eufala Skipper, Fiery Skipper. Coast Buckwheat is a primary nectar and larval host for a rare form of the Dotted Blue known as Smith's Blue. Its flowers are a terrific draw for flower-visiting insects of all kinds in San Francisco. It flowers all year.

Coast Buckwheat is a hostplant for Mormon Metalmark. Bramble Green Hairstreak, Comstock's Hairstreak, Green Hairstreak, Blue Copper, Acmon Blue, Dotted Blue, Veined Blue. An important plant for the Green Hairstreak Corridor project in San Francisco.

Blastobasidae: *Holcocera* sp.

Gelechiidae: *Aroga xyloglypta*. *Chionodes dammersi*. *Chionodes nanodella* – caterpillar eats decaying vegetation at the base of the plant, found associated with Coast Buckwheat (Powell & Opler). *Chionodes notandella*.

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Saturniidae: Electra Buckmoth (*Hemileuca electra*).

Sesiidae: Buckwheat Borer (*Synanthedon polygona*) a wasp mimic.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leaf-tier (*Cnephasia longana*). Omnivorous Leafroller (*Platynota stultana*).

Eriogonum lobbii. **Lobb's Buckwheat**. Polygonaceae. Nectar: Tecumsah Skipper. June - August.

Larval host for Square-spotted Blue and Dotted Blue.

Eriogonum marifolium. **Marumleaf Buckwheat**. Polygonaceae. Nectar: Painted Lady, Lember's Hairstreak, Square-spotted Blue, Acmon Blue, Lupine Blue. June - August.

Larval host for Lember's Hairstreak, Square-spotted Blue, Acmon Blue and Lupine Blue.

Eriogonum microthecum. **Great Basin Buckwheat**. Polygonaceae. Nectar: Becker's White, Mormon Metalmark, Juniper Hairstreak, Sheridan's Hairstreak, Painted Lady. Various segregates in flower in the June - October period.

Larval host for Mormon Metalmark, Blue Copper, and Square-spotted Blue.

Eriogonum nidularium. **Birdnest Buckwheat**. Polygonaceae. March - October.

Reported as used by Ceraunus Blue (News of the Lepidopterists' Society, Season Summary 1992). Likely larval host for the Mojave Dotted Blue.

Eriogonum nudum. **Naked Buckwheat**. Polygonaceae. Nectar: Orange Sulphur., Leanira Checkerspot, Zerene Fritillary, Painted Lady, Common Buckeye, Great Basin Wood-Nymph (fq), Milbert's Tortoiseshell. Brown Elfin. California Hairstreak, Sylvan Hairstreak, Behr's Hairstreak, Hedgerow Hairstreak, Gold-Hunter's Hairstreak, Gray Hairstreak, Great Purple Hairstreak, Tailed Copper (fq), Gorgon Copper, Purplish Copper, American Copper, Lustrous Copper, Edith's Copper, Ruddy Copper, Lilac-bordered Copper, Blue Copper (fq), Acmon Blue, Dotted Blue, Square-spotted Blue, Eastern Tailed Blue, Mojave Blue (David S. Horner), Northern Blue, Boisduval's Blue, Greenish Blue, Shasta Blue, Western Pygmy Blue. Lange's Metalmark (fq). Rural Skipper (fq) (Warren), Western Branded Skipper, Woodland Skipper (fq), Comma Skipper, Tecumseh Skipper, small Skippers and at least one diurnal moth. Shapiro: "Major nectar source." Var. *nudum* in flower June - September; others may be somewhat earlier or later.

Naked Buckwheat is a hostplant for Mormon Metalmark, Bramble Green Hairstreak, Lember's Hairstreak, Gray Hairstreak, Gorgon Copper, Blue Copper, Acmon Blue, Dotted Blue, Square-spotted Blue, Mojave Dotted-Blue, and Veined Blue. Shapiro on Naked Buckwheat: "Major Lycaenid host plant." 1991 Season Summary reports four larvae of Lupine Blue on it (Humboldt County).

Gelechiidae: *Aroga xyloglypta*. *Chionodes heliocosticta* (Powell & Opler, p. 93

Pyralidae: *Toripalpus trabalis*.

Sphingidae: White-lined Sphinx (Hints: <http://www.inaturalist.org/observations/737245>).

Eriogonum nudum var. *indictum* formerly *E. indictum*. **Protruding Buckwheat**. May – October.

Hostplant for Mormon Metalmark and associated with Gorgon Copper, a likely host for it.

Eriogonum nudum var. *oblongifolium*. **Harford's Wild Buckwheat**. Polygonaceae. The flowers on this variety tend to yellow, formerly known as var. *sulphureum*. May - October.

Acmon Blue larval host and likely many others.

Eriogonum nudum var. *westonii*. **Weston's Buckwheat**. Nectar: 'Langston's' Dotted Blue on a flowerhead, Kern County, photograph by David S. Horner. A yellow-flowered variety. May - August.

Eriogonum nummulare. **Money Buckwheat**. Polygonaceae. July - October.

Foodplant for Mormon Metalmark, Lupine Blue, Pallid Dotted Blue.

Eriogonum ovalifolium. **Cushion Buckwheat**. Polygonaceae. Nectar: ‘Siva’ Juniper Hairstreak (Scott). Uncas Skipper (Andrew Warren NorWestLeps #2170). No doubt a nectar source for butterflies for which it is a hostplant. Var. *ovalifolium* flowers April - August; others may be earlier or later.

Larval host for Square-spotted Blue, Dotted Blue, Lupine Blue.

Eriogonum palmerianum. **Palmer’s Buckwheat**. Polygonaceae. March - October.

Foodplant for Lupine Blue.

Eriogonum parvifolium. **Seacliff Wild Buckwheat**. Polygonaceae. Nectar: Checkered White (Eric Jacob), Common Buckeye, Sand Dune Behr’s Metalmark, Mormon Metalmark, Gray Hairstreak, Hedgerow Hairstreak, Acmon Blue, Boisduval’s Blue, Marine Blue, Dotted Blue, El Segundo Blue, Funereal Duskywing, Northern White-Skipper, Fiery Skipper, Lindsey’s Skipper, Sandhill Skipper, Umber Skipper, Woodland Skipper, Buckwheat Borer (*Synanthedon polygona*) (Alice Abela) and *Cisthene faustinula* (Arctiidae) (Alice Abela). Flowers all year.

Larval host for rare El Segundo Blue (a segregate of Square-spotted Blue), Square-spotted Blue, Dotted Blue, Acmon Blue, Gray Hairstreak. Alice Abela photographs show an El Segundo Blue caterpillar tended by *Formica moki*, an ant described as “fierce and aggressive” on AntWiki; other photographs she took at night show Odorous House Ant (*Tapinoma sessile*) tending El Segundo Blue on Seacliff Wild Buckwheat. Alice Abela photographs show Carpenter Ants (*Camponotus vicinus* and *Camponotus hyatii*), Acrobat Ant (*Crematogaster* sp.) and *Formica moki* tending Acmon Blue on it. Alice Abela photographs show other ants tending Gray Hairstreak caterpillars on it, Argentine Ant (*Linepithema humile*), “Little Black Ant” (*Monomorium ergatogyna*), and Pyramid Ant (aka “crazy ant”) (*Dorymyrmex insanus*).

Gelechiidae: *Aroga paraplutella*. *Aroga xyloglypta*. *Chionodes nanodella* – eats decaying leaves at the base of the plant.

Pyralidae: *Toripalpus trabalis*.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Eriogonum plumatella. **Yucca Wild Buckwheat**. Polygonaceae. Nectar: Desert Black Swallowtail, Acmon Blue, Dotted Blue, Cinereous Blue, Great Purple Hairstreak, Gray Hairstreak. April - October.

Larval host for Mormon Metalmark, Acmon Blue.

Geometridae: A smallish beautiful green moth, *Nemoria intensaria*.

Eriogonum polypodium. **Tulare County Buckwheat**. Polygonaceae. July - September. Foodplant for Square-spotted Blue.

Eriogonum pusillum. **Yellow Turbans**. Polygonaceae. Nectar: Dotted Blue, and surely, at the least for others for which it is a hostplant. February - August.

Foodplant for Dotted Blue, Mojave Dotted-Blue, Small Blue.

Noctuidae: *Triocnemis saporis*.

Eriogonum pyrolifolium. **Shasta Buckwheat**. Polygonaceae. July - September.

Foodplant for Acmon Blue.

Eriogonum reniforme. **Kidney-leaf Buckwheat**. Polygonaceae. February - August.

Larval host for Ceraunus Blue, Acmon Blue, Mojave Dotted-Blue and Small Blue (Monroes). Also Dotted Blue.

Eriogonum roseum. **Wand Buckwheat**. Polygonaceae. May - November.

Foodplant for Dotted Blue.

Eriogonum saxatile. **Rock Buckwheat**. Polygonaceae. May - October.

Foodplant for Dotted Blue.

Eriogonum shockleyi. **Shockley's Buckwheat**. Polygonaceae. May - August.

Foodplant for Square-spotted Blue.

Eriogonum sphaerocephalum. **Round-headed Buckwheat**. Polygonaceae. Nectar plant for female Blue Copper (Mountain Plants of the Western Cascades web site). May - July.

Foodplant for Square-spotted Blue and Acmon Blue.

Eriogonum spergulinum. **Spurry Buckwheat**. Polygonaceae. Nectar: Leona's Little Blue, a localized southern Oregon species. June – September.

Hostplant for Leona's Little Blue.

Hostplant for One-banded Pyrausta (*Pyrausta unifascialis*, Pyralidae).

Eriogonum strictum. **Blue Mountain Buckwheat**. Polygonaceae. June - August.

Foodplant for Dotted Blue and Acmon Blue.

Eriogonum tripodum. **Tripod Buckwheat**. Polygonaceae. Nectar: Hedgerow Hairstreak (fq) (David Greenberger). May - July.

Eriogonum umbellatum. **Sulphur Flower**. Polygonaceae. Nectar: Anise Swallowtail, Rocky Mountain Parnassian, Checkered White, Orange Sulphur, Red Admiral, Painted Lady, American Lady, West Coast Lady, Callippe Fritillary, Coronis Fritillary, Zerene Fritillary, Common Buckeye, California Tortoiseshell, Hoary Copper, Chryxus Arctic, Ridings's Satyr, Small Wood-Nymph (fq), Common Ringlet. Western Pine Elfin (iNaturalist photograph). Bramble Green Hairstreak, Gray Hairstreak, Behr's

Hairstreak (fq), Coral Hairstreak, Hedgerow Hairstreak (fq), 'Siva' Juniper Hairstreak (fq), Sagebrush Sooty Hairstreak, Western Sooty Hairstreak (fq), Sheridan's Hairstreak, Thicket Hairstreak (Diane Wilson), Blue Copper (fq), Great Copper, Lilac-bordered Copper, Ruddy Copper. Arrowhead Blue, and Boisduval's Blue (fq), Leona's Little Blue (fq), Lupine Blue, and Marine Blue, Melissa Blue, Reakirt's Blue, Shasta Blue, Silvery Blue, Square-spotted Blue (fq). Northern Cloudywing, Persius Duskywing, Common Checkered-Skipper, Common Branded Skipper, Dun Skipper, Juba Skipper, Pahaska Skipper (most of these from Scott). In Clark County, Nevada, nectar source for Reakirt's Blue, Boisduval's Blue, Acmon Blue, Eastern Tailed Blue, Dotted Blue, Cinereous Blue, Juniper Hairstreak, Gray Hairstreak. Nectar source in the Trinity Alps area for Mormon Metalmark, Dotted Blue, Lupine Blue, Tailed Copper (occasionally), Blue Copper, Mournful Duskywing, Juba Skipper, Uncas Skipper (Andrew Warren NorWestLeps #2170). Sulphur Flower is a nectar source for Behr's Hairstreak, notably a showy late-flowering ecotype near Truckee (Shapiro). In a Wyoming study, Sulphur Flower was the primary nectar source for the Clodius Parnassian (Auckland, et.al.). Scott rates it "very popular" as a butterfly nectar source. *Tebenna gemmalis* (Choreutidae) (BugGuide). A variable species, many segregates! June - September.

Larval host for Mormon Metalmark, Bramble Green Hairstreak, Desert Green Hairstreak, Sheridan's Green Hairstreak, Blue Copper, Square-spotted Blue, Glaucon Blue (a relatively newly described species of the Square-spotted Blue complex, associated with Sulphur Flower), Comstock's Blue, Intermediate Blue, Lupine Blue (fq), Melissa Blue, Acmon Blue.

Eriogonum umbellatum var. *bahiiforme*. **Bay Buckwheat**. Polygonaceae. Nectar: Gorgon Copper (Mt. Diablo Interpretive Association). July – September.

Mormon Metalmark larvae found on this taxon on Mt. Diablo, reported in 1982 Season Summary.

Eriogonum umbellatum var. *covillei*. **Coville's Sulphur Buckwheat**. Polygonaceae. July – September.

Hostplant for Lupine Blue: Shapiro, Arthur M. "The alpine butterflies of Castle Peak, Nevada County, California." 1977. *The Great Basin Naturalist* 37 (4): 443-52. <http://www.jstor.org/stable/41711594> .

Eriogonum umbellatum var. *furcosum*. **Sierra Nevada Sulphur Flower**. Polygonaceae. Scott notes it as a nectar source for both Comstock Blue and Clemence's Blue. Comstock's Blue, a segregate of the Square-spotted Blue, is closely associated with this taxon, surely its host. Clemence's Blue, a segregate of the Lupine Blue, is also closely associated with it. June – September.

Extremely likely hostplant for Comstock Blue and Clemence's Blue.

Eriogonum umbellatum var. *munzii*. **Munz's Sulphur Flower**, Polygonaceae. Photograph by T. J. Gehling shows a Common Buckeye at nectar on a cultivated specimen in Tilden Botanic Garden. Gray Hairstreak (Los Angeles National Forest, David S. Horner). June – September.

Orsak notes it as a preferred hostplant for Blue Copper near the summit of Frazier Mountain and in Lockwood Valley, Ventura County. Orsak, Larry J. & Scott E. Miller. 1978 (1980). "Habitat: *Lycaena heteronea clara* (Lepidoptera: Lycaenidae)." *Journal of Research on the Lepidoptera* 17 (3): 204 – 206. *Eriogonum umbellatum* var. *polyanthum*. **Sulphur Buckwheat**. Polygonaceae. Nectar: West Coast Lady, Common Buckeye, Variable Checkerspot, California Hairstreak, Juniper Hairstreak, Melissa Blue, Shasta Blue (fq), Sooty Gossamer-Wing (fq), Small Wood-Nymph, Ivallda Arctic. "Very good" – Shapiro. June - September.

Hostplant for Lemberg's Hairstreak, Blue Copper, Square-spotted Blue, Dotted Blue, Lupine Blue. A large dark Mormon Metalmark very commonly associated with it in 1988 Season Summary.

Eriogonum umbellatum var. *subaridum*. **Desert Sulphur Buckwheat**. Polygonaceae. June - October.

Dotted Blue seen ovipositing on this variety in Clark County, Nevada.

Eriogonum vimineum. **Wicker Buckwheat**. Polygonaceae. Nectar Acmon Blue, Mojave Dotted Blue. May - September.

Eriogonum wrightii. **Wright's Buckwheat**. Polygonaceae. Nectar: Orange Sulphur, Mormon Metalmark, Behr's Metalmark, Palmer's Metalmark, Gray Hairstreak, Leda Ministreak (fq), Mallow Scrub-Hairstreak (Liz Makings), Echo Azure, Melissa Blue, Western Pygmy Blue, Ceraunus Blue, Dotted Blue, Cinereous Blue, Rita Blue (fq), Veined Blue, Common Sootywing, Common Checkered-Skipper, Western Branded Skipper. "Very good" – Shapiro. July - October.

Larval host for Bramble Green Hairstreak, Gray Hairstreak, Mormon Metalmark, Acmon Blue, Dotted Blue, Lupine Blue, Veined Blue.

Eriogonum wrightii var. *subscaposum*. **Short-stemmed Bastard Sage**. Polygonaceae.

Mark Walker reports a strong association with Veined Blue on Mt. Pinos.

Erioneuron pilosum. **Hairy Erioneuron**. Poaceae. Chlorideae.

Foodplant for the Uncas Skipper.

Erioneuron pulchellum. **Fluff Grass**. Poaceae. Chlorideae.

Foodplant for Pahaska Skipper (Garth & Tilden) and Uncas Skipper (HOSTS).

Eriophyllum confertiflorum. **Golden Yarrow**. Asteraceae. Madieae. Nectar: Anise Swallowtail. Cabbage White, Checkered White, Harford's Sulphur (David Horner), Orange Sulphur (fq). American Lady, West Coast Lady, Painted Lady, Variable Checkerspot, Bay Checkerspot (fq) – a segregate of Edith's Checkerspot, Gabb's Checkerspot (David Horner), Northern Checkerspot, Common Buckeye, Callippe Fritillary, Field Crescent, Mylitta Crescent, California Ringlet (Maughn). Brown Elfin, Tailed Copper, Gorgon Copper, Great Copper, California Hairstreak, Hedgerow Hairstreak, Juniper Hairstreak (Hints), Nelson's Hairstreak, Mountain Mahogany Hairstreak, Echo Azure, Acmon Blue (fq), Lupine Blue (including *monticola*, David S. Horner), Marine Blue, cf. Square-spotted Blue. Funereal Duskywing, Fiery Skipper, Harbison's Dun Skipper (rarely), Umber Skipper, Woodland Skipper (Alice Cummings). Red-winged Wave (*Dasyfidonia avuncularia*, Geometridae), *Heliothodes diminutiva*, a small fast-flying diurnal noctuid, One-banded Pyrausta (*Pyrausta unifascialis*, Pyralidae), an *Adela* sp., and other unidentified moths.

Shapiro and other recent northern California observers, for reasons unknown, find little use of this species by most butterflies. Perhaps nowadays-abundant non-native thistles outdraw it – a more abundant nectar source flowering simultaneously. The Bay Checkerspot, now nearly extinct, found it a favorite; perhaps its formerly frequent usage drew other species to it. Golden Yarrow proved a popular nectar source when

it became a landscape dominant after a southern California burn (David S. Horner, DesertLeps #8723). Maughn got 5 specimens of 3 species in one shot in May 2019! April - August.

Bucculatricidae: *Bucculatrix insolita* (BugGuide).

Oecophoridae: *Agonopterix sabulella*.

Pterophoridae: Williams' Plume Moth (*Platyptilia williamsii*).

Tortricidae: *Epiblema radicana*. *Pelochrista maculatana* – Powell & Opler collected numerous adults from it in southern California, strongly suspected host (known to be a root borer of *Eriophyllum lanatum*).

Zones 7, 14-24. Used in revegetation.

Eriophyllum lanatum. **Oregon Sunshine**. Asteraceae. Madieae. Nectar: Clodius Parnassian (August Jackson). Pine White. Shapiro finds Boisduval's Marble drawn to it "in some places but not others". Major nectar plant for Variable Checkerspot in the Desolation Valley Wilderness. Hoffmann's Checkerspot (fq), Northern Checkerspot (fq), Field Crescent (fq), Pacific Fritillary; Hydaspe Fritillary. Bramble Green Hairstreak (Shapiro); Juniper Hairstreak, Muir's Hairstreak, Blue Copper; Shapiro notes in some areas Gorgon Copper exhibits "an extreme preference" for this species, while ignoring it for other nectar plants in other areas; Nature Shutterbug has a photograph of a Gorgon Copper at nectar on a Mt. Diablo specimen; Lilac-bordered Copper, Acmon Blue (<https://www.inaturalist.org/observations/13251002>), Fender's Blue (in Oregon). Common Checkered-Skipper (fq). *Heliothodes diminutiva* (<https://www.inaturalist.org/observations/13251200>). April - August.

Oecophoridae: *Agonopterix sabulella*.

Tortricidae: *Pelochrista maculatana*. *Sparganothis tunicana*.

Eriophyllum lanatum var. *achillaeoides*. **Oregon Sunshine**. Asteraceae. Madieae. Boisduval's Marble, Variable Checkerspot, Northern Checkerspot, Leanira Checkerspot (fq), Western Brown Elfin (fq), Bramble Green Hairstreak, California Hairstreak, John Muir's Hairstreak, Nelson's Hairstreak, Gorgon Copper, Puget Blue (segregate of Boisduval's Blue). Noted as a very good nectar source on Mt. Diablo, many of these from Mount Diablo Interpretive Association. May - July.

Zones 7-9, 14-24.

Eriophyllum lanatum var. *arachnoidium*. **Spiderweb Sunflower**. Nectar: Leanira Checkerspot, Variable Checkerspot, Gorgon Copper. Quite showy, no doubt others. May – August.

Eriophyllum nevinii is now *Constancea nevinii* 'Canyon Silver'. **Canyon Silver Island Snowflake**.

Eriophyllum staechadifolium. **Seaside Woolly Sunflower**. Asteraceae. Madieae. Nectar: Common Buckeye (Dagmar Collins), Variable Checkerspot, Painted Lady, Field Crescent, Bramble Green Hairstreak, Acmon Blue, Sandhill Skipper. April - September.

Hepialidae: A secondary larval host for the Lupine Ghost Moth (*Phymatopus californicus*) at Bodega Bay.

Oecophoridae: *Agonopterix sabulella*.

Pterophoridae: *Hellinsia meyricki*. Williams' Plume Moth (*Platyptilia williamsii*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Phalonidia latipunctana*. *Phtheochroa aegrana*. *Saphenista* sp.

Eriophyllum wallacei or *Antheropeas wallacei* according to many. **Wallace's Woolly Daisy**. Asteraceae. Madieae. Nectar: Orange Sulphur, Acmon Blue, Sagebrush Checkerspot, California Patch, Leanira Checkerspot. December - July.

Eryngium sp. **Eryngo**. Nectar: Led Ministreak (Liz Makings); Warren notes Columbian Skipper.

Eryngium aristulatum. **Coyote Thistle**. Apiaceae. Saniculeae. Acmon Blue (abundant) and *Schinia* sp. H (common) – Moldenke. May-August.

Eryngium armatum. **Coyote Thistle**. **Coastal Eryngo**. Apiaceae. Saniculeae. Nectar: Common Buckeye (J. Caldwell), Acmon Blue. May – August.

Eryngium articulatum. **Beethistle**. Apiaceae. Saniculeae. Its flowers attract butterflies besides bees according to Xerces Society (CalFlora). Pete Veilleux (East Bay Wilds Nursery), growing it for years, says – “a magnet for bees, little gnats and small butterflies, too”. Likely gets Columbian Skipper. Western Branded Skipper (Ray Bruun). Woodland Skipper (Ray Bruun). June-August.

Eryngium pendletonense. **Pendleton Button-Celery**. Apiaceae. Saniculeae. Nectar: Checkered White, Monarch, Field Crescent, Eastern Tailed Blue, Common Sootywing. Olive-shaded Bird Dropping Moth (*Ponometia candefacta*, Noctuidae). April – June.

Eryngium vaseyi. **Coyote-thistle**. Apiaceae. Saniculeae. May – July.

Oecophoridae: *Agonopterix oregonensis*.

Erysimum spp. **Wallflowers**. Brassicaceae. Large swallowtails, Boisduval's Marble. Recommended as nectar plants for “Swallowtail and Fritillary species” by Sierra Foothills Chapter, CNPS.

Adelidae: *Cauchas simplicella*.

Erysimum ammophilum. **Sand-loving Wallflower**. Brassicaceae. Pacific Dotted Blue often seen perching on the flowers. March – April.

Erysimum capitatum. **Western Wallflower**. Brassicaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail, Indra Swallowtail, Two-tailed Swallowtail, Clodius Parnassian, Rocky Mountain Parnassian. Sara Orangetip, Western White, Boisduval's Marble (fq), Large Marble (fq), Queen Alexandra's Sulphur, Orange Sulphur, Clouded Sulphur, California Dogface. Edith's Checkerspot, Variable Checkerspot, American Lady, Painted Lady, West Coast Lady, Callippe Fritillary, Coronis Fritillary (fq), Semiramis Crown Fritillary, Gulf Fritillary, Pacific Fritillary, Variegated Fritillary, Field Crescent, Hoary Comma, Common Ringlet. Mormon Metalmark. Blue Copper, Arrowhead Blue.

Pacuvius Duskywing, Persius Duskywing, Propertius Duskywing, Meridian Duskywing, Sleepy Duskywing, Northern White-Skipper, Orange Skipperling (Bryan Reynolds, observed in New Mexico), Sachem, Juba Skipper, Mardon Skipper (fq), Nevada Skipper, Pahaska Skipper, Sonora Skipper. March - September.

Larval host for Sara Orangetip. Also Large Marble and Cabbage White, according to HOSTS.

Erysimum concinnum. **Headland Wallflower. Point Reyes Wallflower.** Brassicaceae. Nectar: Pipevine Swallowtail (Jeffrey Caldwell). Recommended as a butterfly plant by the Rancho Santa Ana Botanic Garden. March - June.

Reputed to be particularly easy to cultivate.

Erysimum franciscanum. **Franciscan Wallflower.** Brassicaceae. Nectar: Anise Swallowtail (LightofMorn, others) (fq). Lady. Mylitta Crescent and “numerous other butterflies” (Curbstone Valley Farm). A rather secondary nectar source for the San Bruno Elfin (Steiner), a segregate of Moss’s Elfin. Mission Blue [a segregate of Boisduval’s Blue] (San Bruno Mountain Watch). Elkhorn Native Plant Nursery recommends it for the butterfly garden. January - April.

Occasional larval host for the Large Marble (*A Flora of the San Bruno Mountains*).

Erysimum insulare ssp. *suffrutescens* is now *Erysimum suffrutescens*. **Suffrutescent Wallflower.**

Erysimum menziesii. **Menzies’ Wallflower.** Brassicaceae. Butterfly nectar plant (Elkhorn Native Plant Nursery). January - August.

Erysimum perenne. **Sanddune Wallflower.** Brassicaceae. Nectar: Orange Sulphur, Spring White, Western White, Square-spotted Blue (Moldenke). June - September.

Erysimum suffrutescens was *Erysimum insulare* ssp. *suffrutescens*. **Suffrutescent Wallflower.** Brassicaceae. Nectar: Western Tiger Swallowtail, Variable Checkerspot. December - August.

Erysimum teretifolium. **Santa Cruz Wallflower.** Brassicaceae. Photograph shows a Variable Checkerspot visiting its flowers. February - May.

Erythranthe carsonensis N. S. Fraga. Phrymaceae. **Carson Valley Monkeyflower.** Skipper butterflies (Hesperiidae) and halictid bees among insects observed visiting the flowers of this recently described small annual monkeyflower. April-June. (Fraga, 2012, page 61).

Erythranthe guttata (*Mimulus guttatus*). **Yellow Monkeyflower.** Phrymaceae. Nectar: Painted Lady, White-lined Sphinx. March – August.

Hostplant for the Common Buckeye, Tropical Buckeye, Variable Checkerspot, and Mylitta Crescent.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) (MR 718). *Grammia incorrupta*.

Geometridae: *Herreshoffia gracea* (MR 715) – the only known hostplant. Horned Spanworm (*Nematocampa resistaria*) (in Michigan, where naturalized).

Noctuidae: *Annaphila casta*. *Annaphila lithosina* – the only known hostplant for this day-flying moth. Mouse Moth (*Amphipyra tragopoginis*). *Autographa pasiphaeia* (MR 716). Beet Armyworm (*Spodoptera exigua*) (lab). Yellowstriped Armyworm (*Spodoptera ornithogalli*) (in Michigan, where naturalized). Cabbage Looper (*Trichoplusia ni*) (fq).

Pterophoridae: Snapdragon Plume Moth (*Amblyptilia pica*).

See especially Rotter, Michael C. and Liza M. Holeski. 2017. “The Lepidopteran herbivores of the model plant *Mimulus guttatus*”. *Journal of the Lepidopterists’ Society* 71(3):162-168.

Buckett, J. S. 1966. “Discovery of a larval hostplant for *Annaphila lithosina* with notes on the species (Noctuidae: Amphipyridae).” *Journal of Research on the Lepidoptera* 5(4):262-264. [*Mimulus guttatus*].

Erythronium grandiflorum. **Glacier Lily**. Liliaceae. Nectar: Painted Lady, Western Pine Elfin, Sheridan’s Hairstreak. Flowers abundantly nectarous, butterflies and skippers among its pollinators (Pojar, 1970). April – July.

Erythronium oregonum. **Giant Fawn Lily**. Liliaceae. Pettinger says Giant Fawn Lily (*Erythronium oregonum*) is an early-season butterfly flower. Tatum finds Western White-ribbed Carpet (*Mesoleuca gratulata*, Geometridae) sometimes at nectar on it on southern Vancouver Island. I found a confirming photograph of that and another of a visiting Echo Azure. March – May.

Eschscholzia caespitosa. **Foothill Poppy**. Papaveraceae. Nectar: Nancy Asquith photographed an Umber Skipper at nectar on one; a surprising observation, since butterflies usually don’t visit its flowers. March – August.

Eschscholzia californica. **California Poppy**. Papaveraceae. Nectar: Gulf Fritillary (<https://www.inaturalist.org/observations/1343892>). Skippers, Common Ringlet. Acmon Blue (T.J. Gehling photograph). Moldenke found *Schinia* ‘sp. K’ (a flower-visiting moth) abundant. Steiner includes California Poppy among nectar plants for the Large Marble. Mission Blue (photographed by Kevin Hints). Shapiro insists not a butterfly flower, period. In one study of 8200 insect visits to California Poppy flowers, there were no butterflies; mostly beetles and bees. Bumblebees. Seems secondary at best for butterflies, serving mostly as a landing pad. Skippers observed often visiting it (merely alighting?) in a student study at Jasper Ridge Biological Preserve. February - September.

Geometridae: Powell & Opler think California poppy is an important larval host for *Neoterpes edwardsata*.

Noctuidae: Cabbage Looper (*Trichoplusia ni*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Eucephalus breweri was *Aster breweri*. **Brewer’s Golden Aster**. Asteraceae. Nectar: Arachne Checkerspot. July - September.

Larval host for Hoffmann’s Checkerspot.

Eucephalus engelmannii. **Engelmann’s Aster**. Asteraceae. Astereae. July – September.

Hostplant for Northern Checkerspot; also great for rearing other *Chlosyne* species including *Acastus* Checkerspot (Todd Stout).

Eucephalus ledophyllus var. *covillei* was *Aster covillei*. **Cascade Aster**. Asteraceae. Astereae. Nectar: Pine White, Coronis Fritillary, Green Comma, Hoary Comma, West Coast Lady (fq), Tailed Copper (sometimes), Purplish Copper, Harpalus Skipper, Sonora Skipper, Persius Duskywing. July - September.

Hostplant for Hoffmann's Checkerspot, Northern Checkerspot (Mountain Plants of the Western Cascades web site) and "strongly suspected" (Shapiro) Field Crescent hostplant.

Eucephalus tomentellus. **Rayless Aster**. Asteraceae. Astereae. July – October.

2006 Season Summary reports Haggard found Hoffmann's Checkerspot larvae on it in Humboldt County.

Eucrypta micrantha. **Dainty Desert Hideseed**. Hydrophyllaceae. Nectar: Acmon Blue. March - June.

Eulobus californicus was *Camissonia californica*. **California Suncup**. Onagraceae. April - June.

Sphingidae: White-lined Sphinx (*Hyles lineata*, Sphingidae) (Marc Kummel photograph). Confirmed by observations of Bob Allen.

Noctuidae: Ridings' Forester (*Alypia ridingsii*).

Euphorbiaceae. **Spurge Family**.

Arctiidae: Mousey Tiger Moth (*Pygarctia murina*) – eats desert annuals in this family.

Eurybia integrifolia. **Thickstem Aster**. Asteraceae. Nectar: Shasta Blue. July - September.

Strongly suspected foodplant for Mountain Crescent, a montane form of Field Crescent. Listed by HOSTS as a foodplant for Field Crescent.

Eurybia radulina. **Broad-leaved Aster**. Asteraceae. Astereae. Monarch (Carquinez Regional Environmental Education Center). July - September.

Larval host for Northern Checkerspot. Used in Solano County (1980 Season Summary).

Zones 4-6, 7, 14-18. May be garden invasive.

Euthamia occidentalis. **Western Goldenrod**. Asteraceae. Astereae. Nectar: Western Tiger Swallowtail. Checkered White, Cabbage White, Orange Sulphur, Clouded Sulphur. Monarch, Viceroy, Painted Lady (fq), West Coast Lady, Red Admiral, Lorquin's Admiral (fq), Common Ringlet, Field Crescent, Mylitta Crescent, Pearl Crescent, Coronis Fritillary. Great Purple Hairstreak (fq), Gray Hairstreak, Tailed Copper (fq), Purplish Copper. Mormon Metalmark. Common Checkered-Skipper, Sandhill Skipper (fq), Eufala Skipper, Field Skipper (Sachem), likely other Skippers.

I was amazed and delighted to find Coronis Fritillary follows creeks down from the hills all the way to San Francisco Bay, visiting Western Goldenrod flowers. On 14 September 1984, I noted, "Far outdraws

my zinnias!” Shapiro finds it excellent for butterflies, a major draw for Great Purple Hairstreak among others. Also gets bumblebees, leaf-cutter bees, and other insects. July - November.

Zones 2, 3, 6, 7, 14-24. Spreads quite readily in moist soil.

Fabaceae. **Pea Family.**

Noctuidae: Collared Arches (*Lacinipolia strigicollis*) (PNW Moths).

Fallugia paradoxa. **Apache Plume.** Rosaceae. Colurieae. Nectar: Checkered White, Orange Sulphur, Gray Hairstreak in Clark County, Nevada. Juniper Hairstreak (Randy Floyd, Bryan Reynolds). Others: Sagebrush Checkerspot. Mountain States Wholesale Nursery recommends it as a butterfly garden plant. May - June.

Saturniidae: Neumogen’s Buckmoth (*Hemileuca neumogeni*).

Festuca sp. **Fescue.** Poaceae. Poaceae.

Hostplants for Common Ringlet.

Noctuidae: *Apamea antennata* – probably eats bunchgrasses based on habitat; found in *Festuca* grasslands in the NW (PNW Moths). Lempke’s Gold Spot (*Plusia putnami*) is recorded as using this genus in Finland.

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*). Large Sod Webworm (*Pediasia trisecta*). Western Lawn Moth (*Tehama bonifatella*).

Festuca brachyphylla. **Alpine Fescue.** Poaceae. Poaceae.

Foodplant for Miriam’s Skipper and Sandhill Skipper.

Festuca idahoensis. **Idaho Fescue.** Poaceae. Poaceae.

Foodplant for Lindsey’s Skipper, Sandhill Skipper, Sonora Skipper and Mardon Skipper.

Festuca rubra. **Red Fescue.** Poaceae. Poaceae.

Foodplant for Dodge’s Skipper (Garth & Tilden), a segregate of Western Branded Skipper, Mardon Skipper and the Sachem. Umber Skipper (Barbehenn, 1994) – successfully reared in a laboratory experiment from the 4th instar.

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*). Large Sod Webworm (*Pediasia trisecta*).

Forestiera pubescens. **Desert Olive.** Oleaceae. Early nectar, especially for hairstreaks (Austin Butterfly Forum, Jan/Feb 2006 Newsletter), including Great Purple Hairstreak (fq), Juniper Hairstreak; Gray Hairstreak, American Snout, Red Admiral, Painted Lady (David Horner), American Lady and day-flying moths such as Eight-spotted Forester, and native bees. March - April.

Sphingidae: Desert Olive is a hostplant for the rare Incense Cedar Sphinx (*Sphinx libocedrus*).

Fouquieria splendens. **Ocotillo**. Fouquieriaceae. Nectar: Pipevine Swallowtail (Bob Barber), White-lined Sphinx (Thomas Hamel). ‘Many’ butterflies. Long-tongued moths, hummingbirds. March - July.

Saturniidae: Electra Buckmoth (*Hemileuca electra*). Ocotillo is a foodplant for the Calleta Silkmoth (*Eupackardia calleta*) in Baja California and Arizona, a moth species not reported from California.

Geometridae: *Eubarnesia ritaria*.

Fragaria sp. **Strawberry**. Rosaceae. Potentilleae. Nectar: Western Pine Elfin, Johnson’s Hairstreak.

James and Nunnallee reared Two-banded Checkered-Skipper on an unspecified *Fragaria*.

Noctuidae: Rosy Dart (*Diarsia rosaria*). Western Woodling (*Egira rubrica*). *Euxoa olivia*. Soothsayer (*Graphiphora augur*). Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Brown Arches (*Lacinipolia stricta*). Large Yellow Underwing (*Noctua pronuba*). Speckled Green Cutworm (*Orthosia hibisci*). Purple Arches (*Polia purpurissata*). *Protorthodes curtica*.

Tortricidae: *Acleris fragariana*. *Acleris keiferi*. Strawberry Leafroller (*Ancylis comptana*). Allen’s Tortrix (*Aphelia alleniana*). *Choristoneura obsoletana*. Zapulata (*Choristoneura zapulata*). Omnivorous Leaf-tier (*Cnephasia longana*). *Decodes fragariana*. *Eana georgiella*. *Xenotemna pallorana*.

Fragaria californica is now included in *Fragaria vesca*. **California Strawberry**. Rosaceae. Potentilleae. A secondary nectar source for the San Bruno Elfin, a segregate of Moss’s Elfin. January - July.

California Strawberry reported as a hostplant for Pale Swallowtail and Gray Hairstreak, likely secondary for both.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Geometridae: *Dysstroma manicata* – San Bruno Mountain, larvae found and reared (1988 Season Summary).

Fragaria chiloensis. **Coast Strawberry**. Rosaceae. Potentilleae. Nectar: Sara Orangetip, Brown Elfin, Green Hairstreak, Purplish Copper, Two-banded Checkered-Skipper. February - November.

Arctiidae: Banded Woollybear (*Pyrrharctia isabella*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Marbled Carpet (*Dysstroma truncata*). Drab Brown Wave (*Lobocleta ossularia*). Horned Spanworm (*Nematocampa resistaria*).

Noctuidae: Ipsilon Dart (*Agrotis ipsilon*). Copper Underwing (*Amphipyra pyramidoides*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Aseptis binotata*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). Dingy Cutworm (*Feltia jaculifera*). Corn Earworm (*Helicoverpa zea*). Zebra Caterpillar (*Melanchnra picta*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Fall Armyworm (*Spodoptera frugiperda*).

Tortricidae: *Clepsis fucana*.

Fragaria vesca. **Woodland Strawberry**. Rosaceae. Potentilleae. Nectar: Gray-veined White (Margined White), Sara Orangetip, Edith's Checkerspot, Pacific Fritillary, Green Hairstreak, Nelson's Hairstreak, Gray Hairstreak, Thicket Hairstreak, Eastern Tailed Blue, Mylitta Crescent (fq), Western Brown Elfin (fq), Arctic Skipper. An important nectar plant for Taylor's Checkerspot – a segregate of Edith's Checkerspot – in British Columbia. Unpopular source in Scott's estimation. January - July.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Tischeriidae: *Coptotriche confusa*.

Fragaria virginiana. **Mountain Strawberry**. Rosaceae. Potentilleae. Nectar: Clouded Sulphur, Cabbage White, Edith's Checkerspot, Painted Lady, Mylitta Crescent, Pearl Crescent, Coral Hairstreak, Gray Hairstreak, Johnson's Hairstreak, Eastern Tailed Blue, Melissa Blue, Silvery Blue, Common Sootywing, Dreamy Duskywing (fq), Sleepy Duskywing (fq), Mardon Skipper, Common Roadside-Skipper (fq), Celery Moth. Primary nectar source for Edith's Checkerspot in western Oregon (Severns & Warren). An unidentified strawberry in Bill Yates' Oregon prairie site is likely this one; it attracts Two-banded Checkered-Skipper. May - August.

Noctuidae: Luteous Dart (*Abagrotis trigona*). Two-spot Dart (*Eueretagrotis perattentus*). Hitched Arches (*Melanchnra adjuncta*). Purple Arches (*Polia purpurissata*). Purple-lined Sallow (*Pyrrhia experimens*). Smith's Dart (*Xestia smithii*).

Tortricidae: *Acleris fragariana*. Strawberry Leafroller (*Ancylis comptana*). Allen's Tortrix (*Aphelia alleniana*).

Frangula spp. Rhamnaceae.

Noctuidae: Ceanothus Nola (*Nola minna*).

Frangula californica was *Rhamnus californica*. **California Coffeeberry**. Rhamnaceae. Nectar: Pale Swallowtail, Variable Checkerspot, Edith's Checkerspot, American Lady, California Sister, Lorquin's Admiral (fq), Mourning Cloak, San Bruno Elfin (a segregate of Moss's Elfin), Western Brown Elfin (fq), Gray Hairstreak, California Hairstreak, Gold-hunter's Hairstreak, Hedgerow Hairstreak, Muir's Hairstreak (Leslie Flint), Echo Azure, Great Copper, Tailed Copper. Shapiro notes that *Rhamnus* spp. are excellent for small butterflies with short tongues, especially hairstreaks. Barbara Deutsch finds it a favorite of Lorquin's Admiral at her place near Pt. Reyes.

Ssp. californica. May – July

Ssp. crassifolia. February – April.

Ssp. cuspidata. April – July.

Ssp. occidentalis. March – June.

Ssp. tomentella. January – April.

Ssp. ursina. May – July.

Larval host for Pale Swallowtail, Gray Hairstreak and Echo Azure. Marc Kummel photographed a Brown Elfin ovipositing on the flower buds of California Coffeeberry.

Geometridae: Tissue Moth, *Triphosa haesitata*. Powell & Opler believe it to be the major Californian host.

Cosmopterigidae: Midrib Gall Moth (*Sorhagenia nimbosa*).

Gelechiidae: *Aristotelia rhamnina*.

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*). California Tussock Moth (*Orgyia cana*).

Nepticulidae: *Stigmella diffasciae* (fq). *Acalyptis punctulata*.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*): preferred in the San Bruno Mountains (*A Flora of the San Bruno Mountains*). Western Sheepmoth (*Hemileuca eglanterina*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*), *Clepsis fucana*. *Epinotia lomonana*.

Frangula californica subsp. *tomentella* was *Rhamnus tomentella*. **Hoary Coffeeberry**. Rhamnaceae. Nectar: Variable Checkerspot, Lorquin's Admiral, California Hairstreak, Echo Azure. January – April.

Larval host for Pale Swallowtail, Echo Azure and Brown Elfin.

Frangula purshiana was *Rhamnus purshiana*. **Cascara**. Rhamnaceae. Flower visitors include Margined White, Cedar Hairstreak, Echo Azure (Bill Yake, Oregon). Pyle notes it as a good nectar source for several species of butterflies. February – June range for subspecies.

Stewart Wechsler suspects oviposition by Echo Azure (NorWestLeps 13 May 2018).

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*). Yellow Woolly Bear (*Spilosoma virginica*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*). Western Sheepmoth (*Hemileuca eglanterina*).

Geometridae: Pale Beauty (*Campaea perlata*). Small Engrailed (*Ectropis crepuscularia*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Columbia Pug (*Eupithecia columbiata*). Common Pug (*Eupithecia miserulata*). *Eupithecia misturata*. Tawny Eupithecia (*Eupithecia ravocostaliata*). Brown-lined Looper (*Neolcisc californiaria*). Western Carpet (*Melanolophia imitata*). Brown-tipped Thorn (*Selenia alciphearia*). Falcate Synaxis (*Tetracis cervinaria*). California Tissue Moth (*Triphosa californiata*). Tissue Moth (*Triphosa haesitata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: *Adelphagrotis stellaris*. Speckled Green Cutworm (*Orthosia hibisci*).

Notodontidae: Pale Prominent (*Oligocentria pallida* [Haggard]).

Cosmopterigidae: Midrib Gall Moth (*Sorhagenia nimbosa*).

Gracillariidae: Poison Oak Leafminer (*Caloptilia diversilobiella*).

Frangula rubra was *Rhamnus rubra*. **Sierra Coffeeberry**. Rhamnaceae. March – June.

Foodplant for Pale Swallowtail.

Frankenia salina. **Alkali Heath**. Frankeniaceae. Nectar: Cabbage White (fq), Checkered White, Marine Blue, Western Pygmy Blue, Common Checkered-Skipper, Wandering Skipper (fq), Fiery Skipper, Umber Skipper, Woodland Skipper, *Perizoma custodiata* (Geometridae), Strawberry Crown Moth (*Synanthedon bibionipennis*, Sesiidae). Plume Moth. *Lipographis umbrellata* (Pyralidae) found diurnally associated with this plant in September in Alameda County (Powell & Opler, p. 193). Often hardly noticed attracting butterflies in comparison to salt heliotrope, in the same habitat typically conspicuously drawing butterflies. Many photographs in Ballona Wetlands Ecosystem album on Flickr document various Lepidoptera at nectar on the flowers. April - September.

Gelechiidae: *Aroga elaboratella*.

Geometridae: Alkali Heath is a major hostplant for *Perizoma custodiata* in central California. Alice Abela photographed *Perizoma pictata* on the plant in Santa Barbara County.

Sesiidae: Strawberry Crown Moth (*Synanthedon bibionipennis*, Sesiidae) frequently associates with this plant, its caterpillars feeding upon roots and basal areas of its stems.

Frasera speciosa formerly *Swertia radiata* var. *radiata*. **Monument Plant**. Gentianaceae. Nectar: Marine Blue (“mobbing ... the few that are in full bloom” ... Elaine Halbedel on 12 June 2013) and Silver-spotted Skipper (fq). Elaine Halbedel notes Silver-spotted Skipper at nectar on “nothing else that I could see ... It made for lovely photos, at any rate, as they hung like fruit off the blossoms” – Pinos Altos Mts. (NE of town, Grant County, New Mexico on 20 June 2012). Scott thought it “shunned” by most butterflies, did not see any butterfly visits.

Butterflies among many insects visiting its flowers in a Colorado pollinator study: Margined White, Large Marble, Lilac-bordered Copper, Boisduval’s Blue, and a Noctuid moth: Beattie, A. J., D. E. Breedlove, and P. R. Ehrlich. 1973. "The Ecology of the Pollinators and Predators of *Frasera speciosa*." *Ecology* 54 (1): 81-91.

Flowers July – August.

Fraxinus anomala. **Single-leaf Ash**. Oleaceae.

Larval host for the Two-tailed Swallowtail.

Fraxinus dipetala. **Flowering Ash**. Oleaceae. Showy, fragrant flowers may attract butterflies. April-June.

Hostplant for Two-tailed Swallowtail and likely for the Western Tiger Swallowtail (Arthur Shapiro).

Its dead wood supports larvae of Banded Alder Borer (*Rosalia funebris*, Cerambycidae), an attractive flower-visiting longhorn beetle.

A small easily cultivated tree under-used in gardens.

Fraxinus latifolia. **Oregon Ash**. Oleaceae.

Larval host for the Two-tailed Swallowtail and Western Tiger Swallowtail (personal communication, Arthur Shapiro).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: *Eupithecia maestosa*. *Operophtera danybi*. *Philtraea latifoliae*. October Thorn (*Tetraxis jubararia*).

Noctuidae: *Egira hiemalis*. Large Gray Pinion (*Lithophane georgii*). *Sympistis fortis*.

Sphingidae: Great Ash Sphinx (*Sphinx chersis* [Haggard]).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Fraxinus velutina. **Arizona Ash**. Oleaceae. Nectar: American Snout, Mourning Cloak, Echo Azure (SoWestLep #11032, Klinkel). March – April.

Arizona Ash seems to be a hostplant for Western Tiger Swallowtail (seen ovipositing on ‘Modesto’, personal communication, Arthur Shapiro). It supports Bigleaf Mistletoe (*Phoradendron leucarpum* ssp. *macrophyllum*), which supports the Great Purple Hairstreak.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Saturniidae: A caterpillar plant for the Calleta Silkmoth (*Eupackardia calleta*), a moth not recorded for California, but known from Baja California and southern Arizona.

Sphingidae: Great Ash Sphinx (*Sphinx chersis*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Fremontodendron californicum. **California Flannel Bush**. Malvaceae. Northern White-Skipper was observed at nectar upon its flowers in the Tehachapi Mountains (Orsak) – possibly noted as unusual. Not usually considered a butterfly plant! On June 10, 2001, Jane Strong reported, “There was also a new hatch of Painted Ladies at the Vincent Gap area [of Angeles National Forest]. They were in perfect condition, large and brightly colored. The Fremontia was in glorious full bloom and each plant had forty or fifty Painted Ladies on it settling down for the night or nectaring. They rose up in a fluttering cloud each time a shadow passed over the bushes.” (SoWestLep #1397). April – July.

Until recently, *Fremontodendron* considered Sterculiaceae but now reassigned to the Malvaceae. Malvaceae are often larval hosts for Northern White-Skipper and sometimes for the Painted Lady – perhaps at times the California Flannel Bush so serves.

Gelechiidae: *Chionodes kubai*.

Noctuidae: *Tarache major* (aka *Acontia major*).

Saturniidae: White-streaked Saturnia Moth (*Saturnia albofasciata*); the reddish adult male flies during the day, but does not seek nectar; it has no mouthparts!

Tortricidae: *Decodes catherinae*.

Fruit (generally over-ripe, rotting or damaged). California Sister, Viceroy, California Tortoiseshell, Milbert's Tortoiseshell, Mourning Cloak, Lorquin's Admiral, Red Admiral, Weidemeyer's Admiral, Painted Lady, Green Comma (fq), Hoary Comma, Oreas Comma, Satyr Comma (fq), Ox-eyed Satyr or Common Wood-Nymph, Small Wood-Nymph, Hackberry Emperor, Great Purple Copper (broken, over-ripe grape), Tailed Copper, Ilia Underwing. In *Chasing Monarchs*, Robert Michael Pyle recounts seeing California Sister and Common Buckeye attracted to spilled ullage at wineries. On another occasion, he found California Sister at rotting and dried blackberries. Clark says piles of decaying fruit are an irresistible attraction to woodland butterflies – “particularly grapes ... on these they sometimes feed to a state of advanced intoxication.” (p. 60). In one test, watermelon proved a Red Admiral favorite (NorWestLeps #4667). Scott noted as effective a “fruit bait” made from rotten bananas and peaches with sugar, attracting large numbers especially of Green Comma, Hoary Comma, Oreas Comma and Satyr Comma, besides Common Wood-Nymph, Hackberry Emperor, Mourning Cloak, Red Admiral and a Small Wood-Nymph.

An effective butterfly “bait” recipe from 1952: mashed rotten bananas, canned crushed pineapple, sugar and beer, allow fermenting for a day (Chermock, 1952). Works well for Red Admiral, Mourning Cloak, Commas, Hackberry Emperor.

Copper Underwing (*Amphipyra pyramidoides*, Noctuidae) among “moths ... readily attracted to fermented fruit bait” (Powell & Opler).

Funastrum cynanchoides. **Fringed Twinevine.** Apocynaceae. Nectar: in Arizona, Liz Makings photographs document as nectar-seekers Sleepy Orange, Leda Ministreak, Fatal Metalmark, Palmer's Metalmark.

Funastrum cynanchoides var. *hartwegii* was *Sarcostemma cynanchoides* ssp. *hartwegii*. **Climbing Milkweed.** Apocynaceae. Nectar: Sleepy Orange, Queen (fq), Ladies (Miller), Gray Hairstreak (Anne Reeves), Juniper Hairstreak, Leda Ministreak (Alice Abela), Acmon Blue, Echo Azure, Eastern Tailed Blue, Marine Blue (Anne Reeves), Western Pygmy Blue, Mojave Sootywing, Harpalus Skipper, Fiery Skipper (Anne Reeves photograph), Eufala Skipper (Anne Reeves). Its flowers attract many butterfly species, according to Desert Butterfly Gardening and others. April - July.

Larval host for the Queen and the Monarch.

Sphingidae: Obscure Sphinx (*Erinnyis obscura*).

Funastrum hirtellum was *Sarcostemma hirtellum*. **Smooth Milkvine. Trailing Townula.** Apocynaceae. Nectar: Orange Sulphur, Sleepy Orange, Marine Blue, Reakirt's Blue, Great Purple Hairstreak, Gray Hairstreak, Painted Lady, Monarch, Queen, Northern White-Skipper, Common Checkered-Skipper in southernmost Nevada. Marine Blue seen going to its flowers in the Anza-Borrego area. March - May. Smooth Milkvine thought the primary larval host for the Queen in southern California.

Arctiidae: Clio Tiger Moth (*Ectypia clio*).

Funastrum utahense was *Cynanchum utahense*. **Utah Swallow Wort.** Apocynaceae. Likely nectar plant; Monarch and Common Buckeye have been seen at nectar on flowers of *C. laeve* in Illinois (Hilty). April - September.

Larry (email prefix “ladobe”) on the Butterfly Garden Forum found eggs and larvae of the Queen on 11 May 1997 on this species while “checking a tagged large male desert tortoise that I was recording the life history of for the DOA”. Reported in 1997 Season Summary. Utah Swallow Wort also is likely a foodplant for the Variegated Fritillary.

Sphingidae: Likely foodplant for the Obscure Sphinx (*Erinnyis obscura*).

Fungi. Directly or indirectly various fungi are food for certain moth caterpillars.

Cosmopterigidae: *Periploca juniperi* larvae feed within *Gymnosporangium*-galls on *Juniperus* species (Wikipedia).

Erebidae: American Snout (*Idia americalis*) eats lichen and detritus, such as dead leaves; may live in ant nests. *Idia immaculalis* is thought likely to be a similar detritivore (PNW Moths).

Noctuidae: *Cryphia olivacea* specializes in eating lichens (PNW Moths).

Oecophoridae: *Decantha stonda* reared from sporophores of *Hypoxylon* & *Polyphorus volvatus* (Powell & Opler, p. 62). The Skunk Moth (*Polix coloradella*) feeds in decaying wood, probably on fungal hyphae (Powell & Opler, p. 62) especially Bull’s-eye Rot (*Neofabraea perennans*), a canker in apple, pear, serviceberry (BugGuide).

Tineidae: *Amorophaga cryptophori* – feeds on cortex of sporophores of *Polyphorus volvatus* (Powell & Opler p. 50). *Elatobia carbonella* – feeds on *Polyphorus volvatus*; numerous following fires (p. 48). *Nemapogon molybdanella* – Powell & Opler, p. 50: feeds on “several polyphore fungi on oaks and other hardwoods, particularly *P. gilvus*, but also *Poria*, *Ganoderma*, and infrequently *Fomes* on conifers. The larvae also feed in fresh sporophores of of the ascomycete *Hypoxylon occidentale* (Xylariaceae), where it grows adjacent to *Polyporus*.”

Galium sp. **Bedstraw**. Rubiaceae.

Geometridae: Common Carpet (*Epirrhoe alternata*). *Epirrhoe plebeculata*.

Galium angustifolium. **Narrow-leaved Bedstraw**. Rubiaceae.

Geometridae: *Zenophleps lignicolorata*.

Sphingidae: Marc Kummel photographed a White-lined Sphinx (*Hyles lineata*) caterpillar feeding on it.

Galium aparine. **Goosegrass**. Rubiaceae.

Sphingidae: Bedstraw Hawkmoth (*Hyles gallii*).

Galium boreale. **Northern Bedstraw**. Rubiaceae.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Galium nuttallii. **San Diego Bedstraw**. Rubiaceae.

Geometridae: *Zenophleps lignicolorata*.

Galls.

Tortricidae: Willow Gall Moth (*Cydia gallaesaliciana*) develops on dipterous galls of willows. Lesser Appleworm Moth (*Grapholita prunivora*) develops on aphid galls of oak and elm.

Gambelia speciosa formerly *Galvezia speciosa*. **Showy Island Snapdragon**. Plantaginaceae. February – May.

Proved a hostplant for Variable Checkerspot in a planting at Alum Rock Park, San Jose (Patrick Pizzo and Jan Hintermeister). Richard James finds it a hostplant for Common Buckeye, also.

Gamochaeta ustulata was *Gnaphalium purpureum*. **Featherweed. Purple Everlasting**. Asteraceae. Gnaphalieae. Nectar: Painted Lady, American Lady and Tropical Buckeye. April - July.

Hostplant for Painted Lady, American Lady, and Tropical Buckeye.

Garrya elliptica. **Coast Silktassel**. Garryaceae. January – March.

Tortricidae: An unidentified and possibly unnamed moth from tribe Cochylini, which appears to be an undescribed species of *Saphenista* reported by Powell 2006, noted on the Tortricidae Foodplant Database.

Garrya fremontii. **Fremont's Silk Tassel**. January – April.

Hostplant for an undetermined *Saphenista* sp. (Tortricidae).

Gaultheria shallon. **Salal**. Ericaceae. Nectar: Margined White, Painted Lady, Pacific Fritillary, Brown Elfin, Western Pine Elfin, Echo Azure, and Nelson's Hairstreak. April - July.

Salal is a larval host for the Brown Elfin, and Tatum on southern Vancouver Island finds the flowers are food for the first brood of the Gray Hairstreak, another polyphagus species.

Copromorphidae: *Lotisma trigonana*.

Geometridae: Ten-spotted Rhododendron Moth (*Dysstroma sobria*). Hemlock Looper (*Lambdina fiscellaria*). Brown-lined Looper (*Nealcis californiaria*). October Thorn (*Tetracis jubararia*).

Gracillariidae: *Cameraria gaultheriella* – its larvae create large mines, “half or more of the leaf area”.

Heliozelidae: Madrone Shield-bearer (*Coptodisca arbutiella*).

Noctuidae: Tatum found and reared a caterpillar of the Transparent Quaker (*Orthosia transparens*) on Salal.

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

Gaura coccinea is now *Oenothera suffrutescens*. **Wild Honeysuckle, Linda Tarde**.

Gayophytum diffusum. **Spreading Groundsmoke**. Onagraceae. Two nectar-seeking visits noted by Leona's Little Blue in southern Oregon. May - September.

Sphingidae: Western Snowberry Clearwing (*Hemaris thetis*). Clark's Day Sphinx (*Proserpinus clarkiae*).

Gentiana newberryi. **Alpine Gentian**. Gentianaceae. July - September.

Foodplant for Behr's Sulphur.

Noctuidae: Kellogg's Sallow (*Sympistis kelloggii*).

Gentianella amarella. **Autumn Dwarf Gentian**. Gentianaceae. Clouded Sulphur. July – September.

Geraniaceae. **Geranium Family**. Shapiro says 'a wonderful, beautiful, diurnal noctuid' moth – *Schinia* sp. (= *Melicleptria*) formerly abundant, now rare, specializes on plants of this family, finding nectar mostly on weedy Geraniaceae, especially *Erodium botrys* (longbeak stork's bill). Likely among its native nectar plants are *Geranium carolinianum*, **Carolina Geranium**, possibly other native *Geranium* spp. and *California macrophyllum*, **Roundleaf Filaree** – a now rare native species. Arctic Skipper seeks nectar at wild geraniums in Lane County, Oregon.

Geranium oregonum. **Oregon Geranium**. Geraniaceae. A nectar plant for Fender's Blue in Oregon. March - July.

Geranium richardsonii. **Richardson's Cranesbill**. Geraniaceae. Scott observed Margined White, Dainty Sulphur, Mormon Fritillary at its flowers. Xerces Society notes it a good butterfly plant in its range. May - September.

Geranium viscosissimum. **Sticky Purple Geranium**. Geraniaceae. Observed at nectar in Idaho: Gray Hairstreak. April - September.

Geraea canescens. **Desert Sunflower**. Asteraceae. Heliantheae. Nectar: Painted Lady (Christopher Christie), *Achyra occidentalis* (Pyralidae) (Lynn Monroe). January - May, September - November.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*). Beet Armyworm (*Spodoptera exigua*). Cabbage Looper (*Trichoplusia ni*). (Pearson, et. alia, 1988).

Geum sp. **Avens**. Rosaceae. Colurieae.

Noctuidae: Rosy Dart (*Xestia oblata*).

Geum macrophyllum. **Bigleaf Avens**. Rosaceae. Colurieae. Nectar: Clodius Parnassian, Pacific Fritillary (Yake, NorWestLeps #2031). Arctic Skipper. Pyle found it the only native plant getting butterfly attention in his northeast Washington garden when Buddleia was in flower before Douglas Aster, one of the best native nectar plants in his locale (NorWestLeps #4301). May - August.

A primary hostplant for Two-banded Checkered-Skipper in SW Washington (Pyle, NorWestLeps #3283).

Geometridae: Dark Marbled Carpet (*Dysstroma citrata*). Day Emerald (*Mesothea incertata*), a green day-flying moth.

Noctuidae: Tatum finds Smith's Dart (*Xestia smithii*) on it on southern Vancouver Island.

Geum triflorum var. *ciliatum*. **Old Man's Whiskers**. Rosaceae. Colurieae. Checkered White. Paul Slichter photographed an unidentified moth at nectar, seems to be a noctuid. May - July.

Noctuidae: Army Cutworm (*Euxoa auxiliaris*).

Prodoxidae: a specialized moth, *Tetragma gei* – not known from California but closely associated with this plant.

Gilia spp. **Gilia**. Polemoniaceae. Nectar: Pipevine Swallowtail, Quino Checkerspot (a segregate of Edith's Checkerspot). Monroes: Reakirt's Blue.

Gilia achilleifolia. **Yarrow-leaved Gilia**. Polemoniaceae. Nectar: West Coast Lady, Western Tiger Swallowtail, Gulf Fritillary, *Adela singulella*, Pieridae, 'small butterflies', White-lined Sphinx. March - June.

Arctiidae: Foodplant for a couple of showy small tiger moths, *Kodiosoma fulvum* and *Kodiosoma otero*.

Adelidae: *Adela singulella*.

Gilia angelensis. **Chaparral Gilia**. Polemoniaceae. West Coast Lady, Acmon Blue, Fiery Skipper. February - June.

Gilia cana. **Showy Gilia**. Polemoniaceae. Nectar: West Coast Lady. June - August.

Noctuidae: *Schinia biundulata*.

Gilia capitata. **Blue Globe Gilia**. Polemoniaceae. Nectar: Pipevine Swallowtail, Pale Swallowtail, Orange Sulphur, Harford's Sulphur, Sara Orangetip (fq), Cabbage White, Pine White (fq), Gray Marble (Roger Steeb), an unidentified native white. Edith's Checkerspot, Variable Checkerspot, Gabb's Checkerspot, Field Crescent, Mylitta Crescent, Painted Lady (fq), California Ringlet. Muir's Hairstreak (<https://www.inaturalist.org/observations/12591917>), Nelson's Hairstreak (Dee Warenycia), Lilac-bordered Copper, Acmon Blue, Boisduval's Blue. Propertius Duskywing, Silver-spotted Skipper, Juba Skipper, Rural Skipper, Umber Skipper. Western Snowberry Clearwing (Nature Shutterbug), and Ridings' Forester Moth. Shapiro finds it a good butterfly plant in the Sierran foothill canyons, at about 2,000' elevation, attracting Sara Orangetip, Propertius Duskywing, Ringlet, etc. April - August (September-November).

Incurvariidae: Blue Globe Gilia is a nectar source and caterpillar host for a small diurnal moth, *Adela singulella*.

Easy and showy annual, cultivated throughout the world.

Gilia caruifolia is now *Saltugilia caruifolia*. **Caraway-leaved Gilia**.

Gilia latiflora ssp. *davyi*. **Davy's Broad-flowered Gilia**. Polemoniaceae. White-lined Sphinx. March - May.

Gilia splendens is now *Saltugilia splendens*. **Splendid Woodland-Gilia**.

Gilia tricolor. **Bird's Eye**. Polemoniaceae. Nectar: Orange Sulphur, Mournful Duskywing and White-lined Sphinx. (January - February) March - May.

Commonly cultivated annual, easily naturalized to a garden site.

Incurvariidae: *Adela punctiferella* closely associated.

Glandularia gooddingi see *Verbena gooddingi*.

Glehnia littoralis ssp. *leiocarpa*. **American Silvertop**. Apiaceae. Selineae. May - June.

A larval host for the Anise Swallowtail.

Glyceria spp. **Mannagrass**. Poaceae. Meliceae.

Mannagrass listed by James and Nunnallee among hostplants for Tawny-edged Skipper.

Glycyrrhiza lepidota. **American Licorice**. Fabaceae. Galegeae. Nectar: Cabbage White (fq), Checkered White (fq), Silver-spotted Skipper (fq), Arrowhead Blue, Marine Blue, Reakirt's Blue, Gray Hairstreak. May - July.

Gochfeld, Michael & Joanna Burger. 1996 (2000). "A million white butterflies (Pieridae) at Ouray National Wildlife Refuge, Utah". *Journal of Research on the Lepidoptera* 35:141-142:

<http://lepidopteraresearchfoundation.org/pdf/pdf35/35-141.pdf>

A hostplant for Orange Sulphur, Reakirt's Blue, Melissa Blue, Gray Hairstreak and the Silver-spotted Skipper. It is a hostplant for Marine Blue in the Davis area, in years when it is present. Collecting a county record Harford's Sulphur in Fresno County in July 2011, Paul Johnson noted the female "very interested" in a patch of American Licorice, a likely hostplant for it, too. Thus it is caterpillar forage for at least six, and likely seven, butterfly species!

Gelechiidae: *Filatima glycyrrhizaella* (known from Arizona, specific to this plant, might be present in California).

A deep-rooted rhizomatous perennial growing in bottomlands and along levee slopes. Good for riparian restoration.

Glyptopleura marginata. **Keysia**. Asteraceae. Cichorieae. April - July.

Noctuidae: Possible *Heliolonche pictipennis* hostplant - a diurnal flower-visiting moth, known to eat Desert Dandelion, *Malacothrix glabrata*; a pair was found in copula on this flower.

Gnaphalium spp. and related genera. **Cudweeds** or **Everlastings**. Asteraceae. Gnaphalieae. Nectar: Hoary Comma (Shields), Woodland Skipper (Heath), Mallow Scrub-Hairstreak and Orange Skipperling (Monroes). Many former *Gnaphalium* are now *Pseudognaphalium*.

Larval hosts for American Lady.

Choreutidae: Everlasting Tebenna (*Tebenna gnaphaliella*) reared on several California “*Gnaphalium* spp.” (Powell & Opler, p. 122).

Pyralidae: *Phycitodes mucidella*.

Pterophoridae: Williams’ Plume Moth (*Platyptilia williamsii*).

Gnaphalium bicolor is now *Pseudognaphalium biolettii*. **Two-color Cudweed. Bioletti’s Cudweed. Pungent Cudweed.**

Gnaphalium californicum is now *Pseudognaphalium californicum*. **Green Everlasting.**

Gnaphalium canescens is now *Pseudognaphalium canescens*. **White Everlasting.**

Gnaphalium palustre. **Lowland Cudweed.** Asteraceae. Gnaphalieae.

Larval host for American Lady.

Gnaphalium stramineum is now *Pseudognaphalium stramineum*. **Cottonbatting Plant.**

Grayia spinosa. **Spiny Hopsage.** Chenopodiaceae.

Geometridae: *Perizoma custodiata*.

Grindelia spp. **Gumweeds.** Asteraceae. Astereae. Nectar: Monarch, Cabbage White, Checkered White, Cloudless Sulphur, Orange Sulphur, Common Buckeye, Red Admiral, Painted Lady, West Coast Lady, Mylitta Crescent, Great Copper (fq), Purplish Copper, Coppers, Acmon Blue, Common Checkered-Skipper, Yuma Skipper, Woodland Skipper, Skippers, Darker-spotted Straw Moth (*Heliothis phloxiphaga*). *Grindelia* spp. are strongly preferred nectar sources for the Great Copper. *Growing Native* suggests “especially the taller ones” are good butterfly nectar plants.

Noctuidae: Bertha Armyworm (*Mamestra configurata*).

Pterophoridae: Williams’ Plume Moth (*Platyptilia williamsii*).

Pyralidae: *Phycitodes mucidella*.

Grindelia camporum. **Valley Gumplant.** Asteraceae. Astereae. Nectar: Pipevine Swallowtail, Orange Sulphur (fq), Variable Checkerspot, West Coast Lady, Common Buckeye (fq), Field Crescent, Coronis Fritillary, Gorgon Copper, Great Copper (fq), Acmon Blue, skippers, Darker Spotted Straw Moth (*Heliothis phloxiphaga*) (Lynn Watson), *Schinia mortua* (Noctuidae). May – November.

Gracillariidae: *Cremastobombycia grindeliella*.

Noctuidae: Darker-spotted Straw Moth (*Heliothis phloxiphaga*), a diurnal moth. *Schinia mortua*, another diurnal moth – many adults associated with it on 6 September 1975, Contra Costa County (1975 Season Summary). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pyralidae: American Sunflower Moth (*Homoeosoma electella*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Eucosma amphorana*. Omnivorous Leafroller (*Platynota stultana*).

Zones 7-9, 14-16, 19-21.

Grindelia hallii. **San Diego Gumplant**. Asteraceae. Astereae. Nectar: Orange Sulphur, Purplish Copper (B.J. Stacey photographs on iNaturalist). July – October.

Grindelia hirsutula. **Hairy Gumplant**. Asteraceae. Astereae. Nectar: Painted Lady, Myrtle's Silverspot, Gorgon Copper, Mission Blue [a segregate of Boisduval's Blue]. "Great" for butterflies – Las Pilitas Nursery. April – June.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Eucosma amphorana*. Snakeweed Borer (*Pelochrista ridingsana*), a root borer. Omnivorous Leafroller (*Platynota stultana*).

Zones 15-17, 22-24.

Grindelia nana. **Low Gumweed**. Asteraceae. Astereae. Nectar: Juba Skipper, Western Branded Skipper (fq), others. June – September.

Grindelia stricta. **Coastal Gumweed**. Asteraceae. Astereae. Nectar – *The Butterfly Gardener's Guide*. Larner Seeds says it is an excellent fall nectar plant for butterflies. Red Admiral, Zerene Fritillary, Oregon Silverspot, Silverspots, Field Crescent, Mylitta Crescent, Duskywings.

Var. *angustifolia*. Cabbage White. May – December. var. *platyphylla*. (This taxon includes the former designation *Grindelia arenicola*). Nectar: Field Crescent, Myrtle's Zerene Fritillary, Great Copper, Purplish Copper, Acmon Blue, grass skipper. Metallic Green Bee. Flowers all year.

Scott notes a *G. stricta* 'yellow' flower visits by Great Copper (fq), and Common Buckeye.

Tortricidae: *Epinotia infuscana*.

See the 1993 edition of *The Jepson Manual* for cultivation notes on varieties.

Guillenia lasiophylla is now *Caulanthus lasiophyllus*. **California Mustard**.

Gutierrezia californica. **San Joaquin Snakeweed**. Asteraceae. Astereae. Nectar: Western Pygmy Blue, Mormon Metalmark (Kevin Hints). Nectar plant for endangered Lange's Metalmark. July – November.

Tortricidae: *Epiblema rudei*. Snakeweed Borer (*Pelochrista ridingsana*), a root-borer. *Sonia vovana*, a root-borer. Rabbitbrush Webbing Moth (*Synnoma lynosyrana*).

Zones 8, 9, 14-16, 19-24.

Gutierrezia microcephala. **Sticky Snakeweed**. Asteraceae. Astereae. Palmer's Metalmark (Rich Hoyer). July – November.

Geometridae: Green Broomweed Looper (*Fernaldella fimetaria*). Night-feeding caterpillars common on the plants in a Joshua Tree - Creosote association, Mojave Desert, San Bernardino County, Apple Valley (McFarland, 1975).

Tortricidae: *Epiblema rudei*. Snakeweed Borer (*Pelochrista ridingsana*). *Sonia vovana*.

Gutierrezia sarothrae. **Broom Snakeweed**. Asteraceae. Astereae. Nectar: Rocky Mountain Parnassian, Becker's White, Dainty Sulphur, Orange Sulphur, Clouded Sulphur, Red Admiral, Painted Lady, Field Crescent, Mylitta Crescent, Variegated Fritillary, Gray Hairstreak, Lupine Blue, Melissa Blue, Common Checkered-Skipper, Common Branded Skipper, and Juba Skipper. Generally rather secondary. May-October.

Geometridae: Green Broomweed Looper (*Fernaldella fimetaria*). [aka *Narraga f.*] Essig database specimens all forma *partitaria*.

Noctuidae: *Cucullia dammersi*. *Schinia ciliata*.

Pyralidae: Dusky Raisin Moth (*Ephesiodes gilvescentella*). American Sunflower Moth (*Homoeosoma electella*).

Tortricidae: *Pelochrista aurilineana* as a root borer is considered possible (BugGuide). Snakeweed Borer (*Pelochrista ridingsana*) (Moths of North Dakota). *Sonia vovana*. Rabbitbrush Webbing Moth (*Synnoma lynosyrana*) – can be a significant herbivore, more common in grazed populations: Wisdom, C. S., C. S. Crawford, and E. F. Aldon. 1989. "Influence of Insect Herbivory on Photosynthetic Area and Reproduction in *Gutierrezia* Species." *Journal of Ecology* 77 (3): 685-92. doi:10.2307/2260978 .

Zones 7-11, 14-16, 18-24.

Hackelia californica. **California Stickseed**. Boraginaceae. Nectar: Mylitta Crescent, Pacific Fritillary, Pine Elf. A lone flowering specimen under brief observation seemed very popular on a Butte County field trip. Sierran Pericopid (fq). June – August.

Arctiidae: Sierran Pericopid (*Gnophaela latipennis*) (fq).

Hackelia floribunda. **Manyflower Stickseed**. Boraginaceae. Nectar: Scott notes a flower visit by Indra Swallowtail. Sierran Pericopid (*Gnophaela latipennis*, Noctuidae) (fq). June – August.

Arctiidae: Sierran Pericopid (*Gnophaela latipennis*) (fq).

Hackelia micrantha. **Jessica's Stickseed**. Boraginaceae. Moldenke found the Northern Blue, Nevada Cloudywing, and two species of diurnal moths in association with its flowers. June – August.

Hackelia velutina. **Velvety Stickseed**. Boraginaceae. Nectar: Clouded Sulphur (Ron Wolf). June – August.

Hastingsia alba. **White Rush Lily**. Agavaceae. Nectar: Pine White (Glenn Fine). Mylitta Crescent – the only nectar plant it was observed to use in a Lassen County study; the nectar is very dilute, likely an important factor in the choice in this hot, dry habitat (Gut, Larry J., Robert A. Schlising, and Carol E. Stopher. 1977. “Nectar-sugar concentrations and flower visitors in the western Great Basin.” *The Great Basin Naturalist* 37(4): 523–529. *JSTOR*, www.jstor.org/stable/41711603). Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae) (fq) – noted as a favored nectar source in Siskiyou County by Glenn Fine; in his Siskiyou County study he notes 13 Lepidoptera species as flower visitors.

Hazardia squarrosa. **Saw-toothed Goldenbush**. Asteraceae. Astereae. Nectar: Harford’s Sulphur, Common Buckeye, American Lady, Gabb’s Checkerspot, Behr’s Metalmark, Mormon Metalmark, Funereal Duskywing, Western Branded Skipper, Woodland Skipper (fq). The Monroes found it a nectar plant for five species of butterflies in the Anza-Borrego area. On Butterworth’s list of important nectar plants in San Luis Obispo County. August – October.

Larval host for Gabb’s Checkerspot.

Noctuidae: *Cucullia astigma*.

Tortricidae: *Argyrotaenia* sp.

Zones 14-17.

Hazardia squarrosa var. *grindelioides*. **Gum Plant Goldenbush**. Asteraceae. Astereae. June – October.

Developing ovules fed on by five species of microlepidoptera. 79% of the larvae found were of three of them:

Gelechiidae: *Sophronia* sp.

Cochylidae: un-named.

Tortricidae: Garden Tortrix (*Clepsis peritana*).

Louda, S. M. 1982. "Limitation of the Recruitment of the Shrub *Haplopappus squarrosus* (Asteraceae) by Flower- and Seed-Feeding Insects." *Journal of Ecology* 70 (1): 43-53. doi:10.2307/2259863.

Hedeoma drummondii. **Drummond’s False Pennyroyal**. Lamiaceae. Nectar: Becker’s White (Ron Wolf photograph). May – June.

Hedeoma nanum subsp. *californica*. **Dwarf False Pennyroyal**. Lamiaceae. A “good butterfly nectar source” (Desert Survivors Nursery). Showy. May – June.

A perennial herb of Joshua Tree Woodland and Pinyon Juniper Woodland.

Helenium autumnale. **Sneezeweed**. Asteraceae. Helenieae. Nectar: Pine White, Pearl Crescent, Common Checkered-Skipper, Juba Skipper, Sandhill Skipper. August – October.

Foodplant for Dainty Sulphur.

Helenium bigelovii. **Bigelow’s Sneezeweed**. Asteraceae. Helenieae. Nectar: Pale Swallowtail (Marlin Harms). Pine White (Klamath Siskiyou Native Seeds). Painted Lady, West Coast Lady (David Horner),

American Lady (David Horner), Coronis Fritillary, Hydaspe Fritillary. “One plant with eight Callippe Fritillaries” (Alison Sheehey). Mormon Fritillary (Hartmut Wisch photograph, Las Pilitas Nursery), Zerene Fritillary (David S. Horner). Mylitta Crescent (David S. Horner photograph). Nelson’s Hairstreak (Ali Sheehey). In the Trinity Alps area Bigelow’s Sneezeweed is a favorite nectar plant for the Mariposa Copper – though otherwise there “rarely visited by butterflies” (Shapiro). Ron Wolf photographed a Melissa Blue at nectar on it in Yosemite National Park. Common Checkered-Skipper (David Horner). Glenn Fine notes 9 species of Lepidoptera visiting its flowers in Siskiyou County. July – August.

Foodplant for Dainty Sulphur.

Zones 4-6, 15-17.

Helenium puberulum. **Rosilla**. Asteraceae. Helenieae. Nectar: Field Crescent, Mylitta Crescent. June – August.

Hepialidae: A secondary larval host for the Lupine Ghost Moth (*Phymatopus californicus*) at Bodega Bay.

Used in revegetation.

Helianthella californica. **California Helianthella**. Asteraceae. Heliantheae. Nectar: California Ringlet, Variable Checkerspot, Northern Checkerspot, Lindsey’s Skipper. April – June.

Pterophoridae: *Hellinsia sulphureodactylus*, a plume moth with a bright yellow forewing.

Zones 6, 7, 9, 14-17.

Helianthella californica var. *shastensis*. **Shasta Helianthella**. Glenn Fine notes Columbian Skipper. April – July.

Helianthella castanea. **Mount Diablo Sunflower**. Asteraceae. Heliantheae. Nectar: Western Brown Elfin (Mount Diablo Interpretive Association). April – June.

Helianthus. **Sunflowers**. Asteraceae. Heliantheae. Nectar: Yuma Skipper.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Geometridae: Oblique-striped Emerald (*Synchlora bistrifaria*).

Noctuidae: Bertha Armyworm (*Mamestra configurata*). Stephen’s Gem (*Megalographa biloba*).

Helianthus annuus. **Sunflower**. Asteraceae. Heliantheae. Nectar: Anise Swallowtail, Pipevine Swallowtail, Cabbage White, Checkered White, Orange Sulphur, Clouded Sulphur, Sleepy Orange, Monarch (fq), Queen, Great Spangled Fritillary, Nokomis Fritillary, Painted Lady, West Coast Lady, American Lady, Lorquin’s Admiral, Red Admiral, Common Buckeye, California Patch, Bordered Patch (secondary source), Gabb’s Checkerspot, Field Crescent, Mylitta Crescent, Pearl Crescent, Hedgerow Hairstreak, California Hairstreak, Leda Ministreak, Gray Hairstreak, Great Purple Hairstreak, Eastern Tailed Blue, Western Pygmy Blue, Purplish Copper. Fatal Metalmark (Liz Makings). Funereal Duskywing, Mournful Duskywing, Common Checkered-Skipper, Umber Skipper, Woodland Skipper,

Tawny-edged Skipper, Sachem, Western Branded Skipper, Orange Skipperling, Rural Skipper, Eufala Skipper. “Excellent source of nectar for many adult butterflies” – *Plants of the San Gabriel Mountains*. Also the White-lined Sphinx. Even so, sunflower may be a secondary nectar source in many areas. June – October.

A Bordered Patch hostplant in the extreme SE corner of California, especially in agricultural areas where commercially grown (Heath); also in Clark County, Nevada. The preferred host for Bordered Patch (Gorodenski). Sunflower is among hostplants for Painted Lady and occasionally California Patch (Scott).

Arctiidae: Isabella Tiger Moth (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Southern Emerald (*Synchlora frondaria*).

Lyonetiidae: *Bucculatrix longula*, a stem gall former.

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Soybean Looper (*Chrysodeixis includens*). *Euxoa albipennis*. Clear Dart (*Euxoa declarata*). Dark-sided Cutworm (*Euxoa messoria*). Red-backed Cutworm (*Euxoa ochrogaster*). Dingy Cutworm (*Feltia jaculifera*). Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*). Frothy Moth (*Plagiomimicus spumosum*). Armyworm (*Mythimna unipuncta*). Gray Looper Moth (*Rachiplusia ou*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*).

Sphingidae: Rustic Sphinx (*Manduca rustica*).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*, Tortricidae). *Pelochrista rorana*. Sunflower Bud Moth (*Suleima helianthana*). *Suleima lagopana*.

Zones 6-24.

Helianthus bolanderi. **Bolander’s Sunflower**. Asteraceae. Heliantheae. Nectar: Hedgerow Farms blog shows a Mournful Duskywing visiting its flowers. Darker Spotted Straw Moth (*Heliothis phloxiphaga*, Noctuidae) (Lynn Watson). Bolander’s Sunflower considered closely related to *Helianthus exilis*. June–October.

Zones 7-17, 19-24.

Helianthus californicus. **California Sunflower**. Asteraceae. Heliantheae. Nectar: Western Tiger Swallowtail, Orange Sulphur, Lady, likely West Coast Lady, Monarch (fq) (T.J. Gehling, others). I observed a female Fiery Skipper so intently at nectar on this plant that I pulled down a flower it was on and got my face a few inches away from it to examine it! Nectar – *The Butterfly Gardener’s Guide*. July – October.

Pterophoridae: *Hellinsia sulphureodactylus* -- a plume moth with a bright yellow forewing.
Zones 7-17, 19-24.

Helianthus cusickii. **Cusick’s Sunflower**. Asteraceae. Heliantheae. Nectar: Juba Skipper. May – July.

Helianthus exilis. **Serpentine Sunflower**. Asteraceae. Heliantheae. Butterflies among its pollinators. Shapiro: "I agree. Best is the Columbian Skipper." Nectar plant as well for a *Schinia* sp. and for the Darker-spotted Straw Moth (*Heliothis phloxiphaga*, Noctuidae). June – October.

Gelechiidae: *Dichomeris baxa* (Insects page, McLaughlin Natural Preserve).

Helianthus gracilentus. **Slender Sunflower**. Asteraceae. Heliantheae. Nectar: Pale Swallowtail, Orange Sulphur (B.J. Stacey), Harford's Sulphur (Hartmut Wisch). Monarch, Queen, Variable Checkerspot. Hermes Copper, Marine Blue. Funereal Duskywing, Sachem, Harbison's Dun Skipper. "Butterflies adore it for a nectar source" – Las Pilitas Nursery. Said to attract 'many species' of butterflies. April – October.

Pterophoridae: *Hellinsia sulphureodactylus*, a plume moth with a bright yellow forewing.

Zones 7, 14-16, 18-24.

Helianthus niveus. **Desert Sunflower**. Asteraceae. Heliantheae. An attractive species surely of value to Lepidoptera. March – May, October – January.

Tortricidae: Supports a *Suleima* species.

Helianthus nuttallii ssp. *nuttallii*. **Nuttall's Sunflower. Marsh Sunflower**. Asteraceae. Heliantheae. Nectar: Southern Dogface, Painted Lady, Monarch, Gray Hairstreak. June – October.

Helianthus petiolaris. **Prairie Sunflower**. Asteraceae. Heliantheae. Nectar: Orange Sulphur, Clouded Sulphur, Painted Lady, Weidemeyer's Admiral (Scott), Callippe Fritillary, Great Spangled Fritillary, Field Crescent, Bordered Patch, Ruddy Copper, Boisduval's Blue. May – October. Hostplant for the Bordered Patch.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Heliomeris multiflora var. *nevadensis*. **Nevada Goldeneye**. Asteraceae. Heliantheae. Nectar: Checkered White, Orange Sulphur, Dainty Sulphur, Western Pygmy Blue, Reakirt's Blue, Acmon Blue, Echo Azure, Juniper Hairstreak, Northern Checkerspot, Arachne Checkerspot, Meridian Duskywing and Common Checkered-Skipper in Clark County, Nevada. Keith Graves: Queen, Texan Crescent. Scott's Colorado-centric observations include Cabbage White, Clouded Sulphur, Northwestern Fritillary, Small Wood-Nymph, Gray Hairstreak, Tailed Copper, Melissa Blue, Common Checkered-Skipper, and Woodland Skipper. May – September.

Pterophoridae: a plume moth with a bright yellow forewing, *Hellinsia sulphureodactylus*.

Tortricidae: *Pelochrista metariana* species complex, a root borer.

Heliotropium convolvulaceum var. *californicum*. **Morning-glory Heliotrope or Sweet-scented Heliotrope**. Boraginaceae. "Native California Nectar Sources for Butterflies (starter list)." (Leslie Saul). April – October.

A beautiful desert annual with yet mostly unexploited horticultural possibilities.

Heliotropium curassavicum. **Salt Heliotrope**. Boraginaceae. Nectar: Desert Black Swallowtail. Checkered White, Cabbage White, Orange Sulphur, Dainty Sulphur. Queen (fq), Monarch, Painted Lady, West Coast Lady, American Lady, Common Buckeye, Gulf Fritillary, Variegated Fritillary, cf. Callippe Fritillary, Field Crescent, Mylitta Crescent, Bordered Patch, California Patch, Variable Checkerspot, Edith's Checkerspot, Tiny Checkerspot (Liz Makings). Mormon Metalmark, Palmer's Metalmark. Gray Hairstreak, California Hairstreak, Gold-hunter's Hairstreak, Sylvan Hairstreak, Leda Ministreak, Purplish Copper, Great Copper (fq), Ceraunus Blue, Echo Azure, Marine Blue, Melissa Blue, Western Pygmy Blue (fq), Eastern Tailed Blue, Acmon Blue, Lupine Blue, Bernardino Dotted-Blue, San Emigdio Blue, Silvery Blue. Common Sootywing, MacNeill's Sootywing (fq), Mojave Sootywing, Funereal Duskywing, Mournful Duskywing, Common Checkered-Skipper, White Checkered-Skipper, Small Checkered-Skipper, Northern White-Skipper, Alkali Skipper ("their favorite flower" – Jim Brock), Eufala Skipper (fq), Fiery Skipper, Hammock Skipper, Harbison's Dun Skipper, Rural Skipper, Sandhill Skipper (fq), Woodland Skipper, Yuma Skipper, Umber Skipper, Wandering Skipper (fq), Orange Skipperling. Brown Ctenucha, a day-flying moth. Salt Heliotrope is a prime butterfly nectar plant! February – October.

Arctiidae: Caterpillar of Salt Marsh Moth (*Estigmene acrea*) photographed on it. Caterpillars often seen on it at the Ballona Wetlands. Apparently a hostplant.

Pyrallidae: Eight-barred Lygropia (*Lygropia octonalis*) (Powell & Opler, p. 180).

Hemizonella minima (formerly aka *Madia minima*). **Opposite-leaved Tarweed**. Asteraceae. Nectar: important for Leona's Little Blue, a localized species of Klamath County, Oregon (James, Seymour, and James). April – August.

Hemizonia sp. yellow. **Tarweeds**. Asteraceae. Madieae. Butterfly flower visitors: 'Many' (NABA). *H. corymbosa* [now *Deinandra corymbosa*] or *H. fasciculata* [now *Deinandra fasciculata*] possibly the species referred to here.

Hemizonia congesta. **Hayfield Tarweed**. Asteraceae. Madieae. Nectar: Skipper, possibly a Woodland Skipper (Alice Cummings). *Heliathodes diminutiva* (Noctuidae), a diurnal moth (T.J. Gehling).

Hemizonia congesta subsp. *lutescens*. **Hayfield Tarweed**. Asteraceae. Madieae. Nectar: Acmon Blue. April - December.

Hemizonia congesta ssp. *luzulifolia*. **Hayfield Tarweed**. Asteraceae. Madieae. Nectar: Bay Checkerspot (a segregate of Edith's Checkerspot), Acmon Blue, Gray Hairstreak, Woodland Skipper (Alice Cummings). March – December.

Noctuidae: Darker-sided Straw Moth (*Heliothis phloxiphaga*), a day-flying species.

Recently this common native plant is beginning to be more widely cultivated.

Hemizonia fasciculata is now *Deinandra fasciculata*. **Common Tarweed**.

Hemizonia parryi ssp. *australis* is now *Centromadia parryi* ssp. *australis*. **Parry's Spikeweed**.

Hemizonia pungens is now *Centromadia pungens*. **Common Spikeweed**.

Heracleum maximum. **Cow Parsnip**. Apiaceae. Tordylieae. Nectar: Pipevine Swallowtail, Chryxus Arctic, Common Wood-Nymph, Variable Checkerspot (fq), Lorquin's Admiral, Weidemeyer's Admiral,

California Tortoiseshell, Coronis Fritillary, Hydaspe Fritillary, Northwestern Fritillary, Pacific Fritillary, Viceroy, Moss's Elfin, Hedgerow Hairstreak. 'Many lycaenids' (Shapiro) – blues, coppers, hairstreaks, metalmarks. A Jon D. Anderson photograph shows five Variable Checkerspots on one umbel. April - July.

Larval host for Anise Swallowtail. Also among larval hosts for Black Swallowtail and Machaon Swallowtail.

Epermeniidae: *Epermenia californica*.

Geometridae: White-spotted Pug (*Eupithecia tripunctaria*).

Noctuidae: Large Gray Pinion (*Lithophane georgii*). Cow Parsnip Borer (*Papaipema harrisii*). Figwort Stem Borer (*Papaipema sauzalitae*).

Juice is extremely irritating, notes Shapiro – exercise caution to avoid skin contact.

Herbaceous plants. Non-woody plants of low stature. There are many “generalist” moths that may feed on a variety of such plants, even on both monocots like grasses or dicot “soft” plants. Some have been found on a great variety of plants. There are also many species suspected of eating herbaceous plants based on closely related taxa or their usual habitats of abundance.

Noctuidae: Shaded Gold Spot (*Autographa metallica*) – probable (PNW Moths). *Cucullia mcdunnoughi* – desert herbaceous Asteraceae such as *Stephanomeria* spp. Sordid Dart (*Euxoa adumbrata*) – probably a generalist cutworm (PNW Moths). *Euxoa agema* – probably an herbaceous generalist (PNW Moths). *Euxoa altens* – likely an herbaceous generalist (PNW Moths). *Euxoa annulipes* – probably herbaceous generalist (PNW Moths). *Euxoa bicollaris* – likely herbaceous generalist (PNW Moths). *Euxoa bochus* – PNW Moths thinks it probably an herbaceous generalist, may include grasses; E.H. Strickland Museum reports it reared on clover, plantain & *Hypochaeris radicata* but larval pattern suggests it is mostly a grass feeder. *Euxoa choris* – probable herbaceous generalist (PNW Moths). *Euxoa cinereopallidus* – probably eats herbaceous plants (PNW Moths). *Euxoa cryptica* – likely herbaceous feeder (PNW Moths). *Euxoa difformis* – likely herbaceous feeder (PNW Moths). *Euxoa edictalis* – likely eats herbaceous plants (PNW Moths). *Euxoa henrietta* – likely eats herbaceous plants (PNW Moths). *Euxoa hollemani* – probably eats herbaceous vegetation (PNW Moths). *Euxoa idahoensis* – another likely herbaceous feeder; Adults hide in caves in the daytime (Peck, S.B., 1981. The invertebrate fauna of the caves of the Uinta Mountains, northeastern Utah. *The Great Basin Naturalist* (PNW Moths). *Euxoa intermontana* – another probable herbaceous feeder (PNW Moths). *Euxoa misturata* – PNW Moths note massive outbreaks where small weedy mustards dominate degraded range. *Euxoa perexcellens* is a soil surface cutworm eating herbaceous vegetation (PNW Moths). *Euxoa pluralis* – observed as abundant on degraded range dominated by low weedy mustards (PNW Moths). *Resapamea innota* – likely a borer of stems and roots of herbaceous vegetation (PNW Moths).

Herissantia crispa. **Curly Abutilon. Bladder Mallow.** Malvaceae. August – September.

A larval host for the Gray Hairstreak, Mallow Scrub-Hairstreak, Laviana Skipper and Erichson's Skipper.

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Hesperovax caulescens. **Hogwallow Starfish**. Asteraceae. Gnaphalieae. March – June.

Later instar Painted Lady larvae found on it in Solano County after the 1992 dispersion event (Witham).

Hesperocallis undulata. **Desert Lily**. Agavaceae. Flowers visited by hawkmoths. February – May.

Hesperocnide tenella. **Black-hair Nettle**. **Western Nettle**. Urticaceae.

An obscure native annual -- likely hostplant for Red Admiral, West Coast Lady, Painted Lady other nettle feeders.

Hesperocyparis forbesii was *Cupressus forbesii*. **Tecate Cypress**. Cupressaceae.

Foodplant for Thorne's Juniper Hairstreak in their mutually native range.

Geometridae: Curve-lined Angle (*Digrammia continuata*). *Eupithecia macrocarpata*.

Lasiocampidae: *Gloveria arizonensis*.

Tortricidae: *Argyrotaenia cupressae*.

Hesperocyparis goveniana was *Cupressus goveniana*. **Gowen Cypress**. Cupressaceae.

Tortricidae: *Argyrotaenia cupressae*.

Hesperocyparis macnabiana was *Cupressus macnabiana*. **MacNab Cypress**. Cupressaceae.

Foodplant for John Muir's Hairstreak.

Hesperocyparis macrocarpa was *Cupressus macrocarpa*. **Monterey Cypress**. Cupressaceae.

A Monarch winter roosting tree species on the central California coast.

Gelechiidae: *Coleotechnites stanfordia*.

Geometridae: The Cypress Pug (*Eupithecia cupressata*) described in 1892 from a specimen reared from a larva on a cypress in Monterey, likely the Monterey Cypress (Richard F. Pearsall, "Vagrant Eupithecias", *Proceedings of the Entomological Society of Washington*, Volume 12, p. 142).

Pyralidae: *Pseudasophia phoezalis* (said to be a scavenger, associated with this species).

Tortricidae: *Argyrotaenia cupressae*. Orange Tortrix (*Argyrotaenia franciscana*). *Cochylis carmelana* (?) *Cydia cupressana*. *Epinotia hopkinsana*. *Epinotia subviridis*. *Henricus macrocarpana* -- feeds in its cones (Powell & Opler, p. 157).

Yponomeutidae: Cypress Tip Moth (*Argyresthia cupressella*). *Argyresthia franciscella*. *Argyresthia trifasciae*.

Hesperocyparis sargentii was *Cupressus sargentii*. **Sargent Cypress**. Cupressaceae.

Foodplant for John Muir's Hairstreak at Cedar Mountain Ridge, Alameda County. John Lane also finds an association with it and MacNab Cypress in Lake County near Colusa County (vicinity of Walker Ridge, Bartlett Springs Road), where it nectars on Yerba Santa. He also found the same associations in the 1980s near Occidental, Sonoma County, and reports that Chris Tenney recently noted an association of John Muir's Hairstreak with Sargent Cypress in Monterey County in the Santa Lucia Range facing the ocean, at nectar on Woolly Yerba Santa.

Geometridae: Brown-lined Looper (*Neocalcis californiaria*).

Tortricidae: *Argyrotaenia cupressae*. *Cydia cupressana*.

Hesperocyparis stephensonii. **Cuyamaca Cypress**. Cupressaceae.

1991 Season Summary reports a strong association with Nelson's Hairstreak, surely a host for it.

Hesperoyucca whipplei. **Chaparral Yucca**. Agavaceae. Flowers April – May.

Koji Shiraiwa observed Leda Ministreak coming to the sap of the fruits.

Koji Shiraiwa fed a captive Bramble Green Hairstreak a flower stalk of Chaparral Yucca, which it avidly consumed.

Autostichidae: *Deoclona yuccasella*, bores into viable seed trapped in seed capsules which remain on the plant for years (Powell & Opler, p. 74; family assignment from BugGuide).

Blastobasidae: *Hococera gigantella* – the largest species of this family in Nearctic. (Powell, J. A. 1976. "The giant blastobasid moths of *Yucca* (Gelechioidea)." *Journal of the Lepidopterists' Society* 30:3:219-229).

Prodoxidae: *P. aenescens*. *Prodoxus cinereus*. *P. marginatus*. *P. pulverulentus*. Yucca Moth (*Tegeticula maculata*). Caterpillars of these occur in great numbers in the huge fast-growing flowering portions of the plant in March – May.

Heteromeles arbutifolia. **Toyon**. Rosaceae. Maleae. Nectar: Western Tiger Swallowtail. Cabbage White (JAC), Pine White (Barry Breckling, CalPhotos). Monarch, Variable Checkerspot, American Lady (Hints), Common Buckeye, Field Crescent, California Sister, Unsilvered Fritillary, Coronis Fritillary, Lorquin's Admiral, Red Admiral, Mourning Cloak, California Tortoiseshell, Common Wood-Nymph (*boopsis*, Hints). Gray Hairstreak, Great Purple Hairstreak, Hedgerow Hairstreak, Mountain Mahogany Hairstreak (fq), Gold-hunter's Hairstreak, Tailed Copper, Acmon Blue (fq), Echo Azure, Rural Skipper. Hints finds it one of the best butterfly nectar plants on Mt. Diablo.

Shapiro finds only Mountain Mahogany Hairstreak consistently in his central California study areas, with the same affinity reported by others from southern California.

I observed numbers of migrating California Tortoiseshell at nectar on one I was growing at an industrial plant in the heart of 'Silicon Valley'! I also observed a clearwing moth at nectar on one in a Cupertino backyard – tentatively identified as the Western Poplar Clearwing (*Paranthrene robiniae*, Sesiidae). Powell & Opler say its flowers draw Brown Ctenucha (*Ctenucha brunnea*, Arctiidae) in the Santa Monica Mountains, and McFarland confirms Toyon flowers as preferred by it. June – August.

Toyon is a foodplant for the Echo Azure and the Gray Hairstreak.

Toyon itself is a hostplant for California Dodder (*Cuscuta californica*) a nectar and hostplant for various butterflies.

Gelechiidae: *Coleotechnites* sp.

Geometridae: Pink-margined Green (*Nemoria leptalea*). Omnivorous Looper (*Sabulodes a*

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Nepticulidae: Toyon Leafminer (*Stigmella heteromelis*). Sometimes abundant.

Noctuidae: *Acronicta othello*. February Miller (*Feralia februalis*) reared from it – from San Bruno Mountain, 1987 Season Summary. Protector Quaker (*Orthosia praeses*).

Pyralidae: Destructive Pruneworm (*Acrobasis tricolorella*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Western Avocado Leafroller (*Amorbia cuneanum*).

Heterotheca spp. **Goldenaster**. Asteraceae. Astereae. Nectar: ‘butterflies’.

Heterotheca grandiflora. **Telegraph Weed**. Asteraceae. Astereae. Nectar: Checkered White, Acmon Blue, Fiery Skipper, Wandering Skipper, Corn Earworm (*Helicoverpa zea*, Noctuidae). Nectar for ‘a variety of adult butterflies’ – *Plants of the San Gabriel Mountains*. Shapiro does not see butterflies coming to it in his northern California study areas. Flowers most of the time, especially June – October.

Larval host for Gabb’s Checkerspot (Heath).

Noctuidae: Paradoxical Grass Moth (*Heliocheilus paradoxus*).

Zones 14-17, 19-24. May seed aggressively in the garden.

Heterotheca oregona var. *compacta*. **Oregon Goldenaster**. Asteraceae. Astereae. Shapiro: “Orange Sulphur, Checkered White, Hairstreaks, Blues, a favorite of the Field Skipper (Sachem). Good general nectar source in autumn, but very unshowy.” July – October.

Heterotheca sessiliflora ssp. *bolanderi*. **Hairy Goldenaster**. Asteraceae. Astereae. Nectar: Cabbage White, West Coast Lady, Painted Lady, Checkerspots, Gray Hairstreak, Coppers, Mission Blue [a segregate of Boisduval’s Blue], Umber Skipper. Shapiro finds it rather secondary. In East Bay gardens, Pete Veilleux often notices butterflies on it – in cultivation he finds it in flower most of the year. June – September.

Zones 14-17, 19-24.

Heterotheca sessiliflora subsp. *echioides*. **Hairy Goldenaster**. Asteraceae. Astereae. Nectar: Gabb's Checkerspot, Mormon Metalmark, Woodland Skipper; Alice Cummings photo shows what appears to be either a Juba Skipper or a Sachem. July – October.

Paul Johnson finds it a hostplant for Gabb's Checkerspot in Pinnacles National Monument.

Heterotheca sessiliflora subsp. *sessiliflora*. **Beach Goldenaster**. Asteraceae. Astereae. Nectar: Cabbage White. June – September.

Heterotheca subaxillaris. **Camphorweed**. Asteraceae. Astereae. Nectar: Queen. Many butterflies on few remaining flowers on (21 Nov 2012, Arizona) Dainty Sulphur (fq) and Fatal Metalmark (fq) (Heath & Klinkel, DesertLeps) August – October.

Heterotheca villosa. **Goldenaster**. Asteraceae. Astereae. Nectar: Western White, Callippe Fritillary, Painted Lady, Tailed Copper, Boisduval's Blue, Pahaska Skipper, Woodland Skipper. Good butterfly nectar plant – *Growing Native*. See notes from Colorado observations below.

Var. *minor*. June – August.

Var. *scabra*. April – May, October – November.

Popular with Colorado butterflies, Scott records Anise Swallowtail, Black Swallowtail, Rocky Mountain Parnassian, Cabbage White, Checkered White (fq), Pine White, Large Marble, Queen Alexandra's Sulphur, Orange Sulphur (fq), Clouded Sulphur, Painted Lady (fq), Milbert's Tortoiseshell, Field Crescent, Leanira Checkerspot, Callippe Fritillary, Coronis Fritillary, Hydaspe Fritillary, Northwestern Fritillary, Arachne Checkerspot, Zerene Fritillary, Variegated Fritillary, Hoary Comma, Common Wood-Nymph, Small Wood-Nymph (fq), Ridings's Satyr, Mormon Metalmark, Bramble Green Hairstreak, Gray Hairstreak, Behr's Hairstreak, Coral Hairstreak, Hedgerow Hairstreak, Juniper Hairstreak, Tailed Copper (fq), Blue Copper, Great Copper, Ruddy Copper, Boisduval's Blue, Lupine Blue, Melissa Blue (fq), Reakirt's Blue, Shasta Blue. Common Sootywing, Common Checkered-Skipper (fq), Small Checkered-Skipper, Afranius Duskywing, Pacuvius Duskywing, Persius Duskywing, Common Roadside-Skipper, Dun Skipper, Juba Skipper, Pahaska Skipper, Uncas Skipper, Western Branded Skipper, Woodland Skipper (fq).

Tortricidae: Snakeweed Borer (*Eucosma ridingsana*), a root borer.

Heuchera micrantha. **Alum Root**. Saxifragaceae. May – July.

Geometridae: *Eupithecia misturata* – larvae found on it and reared, San Bruno Mountain, 1988 Season Summary.

Heuchera rubescens. **Pink Alumroot**. Saxifragaceae. Nectar: *Zenodoxus heucherae* (Sesiidae) (fq) throughout its range; hostplant unknown, possibly this plant (Duckworth & Eichlin). Hummingbirds. May – September.

Hibiscus denudatus. **Rock Hibiscus. Pale Face**. Malvaceae. February-May.

Larval host for Mallow Scrub Hairstreak, Gray Hairstreak, Arizona Powdered-Skipper and Northern White-Skipper.

Hieracium spp. **Hawkbits**. Asteraceae. Cichorieae. Nectar: Cabbage White. Bill Yates reports Hydaspe Fritillary, Zerene Fritillary – hawkbits are the flowers they nectar at in his Oregon prairie study site. Woodland Skipper.

Hieracium albiflorum. **White Hawkweed**. Asteraceae. Cichorieae. Nectar: Edith's Checkerspot. May – September.

Hieracium scouleri. **Western Hawkweed**. Asteraceae. Cichorieae. Nectar: Anna's Blue (Tanya Harvey), Juba Skipper (Tanya Harvey). May – September.

Hippuris vulgaris. **Mare's-tail**. Plantaginaceae. May – August.

Larval host for the Common Buckeye, discovered in photographs by Kathy Biggs taken in her backyard wildlife pond. Various pond owners had previously seen its caterpillars on it, but did not realize it was not a known host.

Shapiro, Arthur M. and Kathy Biggs. 2010. "Use of *Hippuris*, an emergent aquatic plant, as a larval host by the buckeye, *Junonia coenia*, in northern California". *The Journal of Research on the Lepidoptera* 42:81-83.

Hoita macrostachya. **Large Leather Root**. Fabaceae. Psoraleae. June – July.

Formerly known as *Psoralea macrostachya*, this is the "scurf-pea (*Psoralea*), a native perennial resembling a giant alfalfa plant" which Shapiro notes as a hostplant for the Northern Cloudywing in his *Field guide to butterflies of the San Francisco Bay and Sacramento Valley regions*. The "Psoralea" among Orange Sulphur hostplants?

Noctuidae: Angelica Borer (*Papaipema angelica*).

Oecophoridae: *Agonopterix posticella*. *Agonopterix psoraliella*.

Hoita orbicularis. **Giant Clover**. Fabaceae. Psoraleae. Las Pilitas Nursery recommends for butterfly gardens. April – August.

Holodiscus discolor. **Oceanspray**. Rosaceae. Spiraeae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Painted Lady, Lorquin's Admiral, Behr's Hairstreak, California Hairstreak (fq), Sylvan Hairstreak, Coral Hairstreak, Tailed Copper, Lilac-bordered Copper, Blue Copper, Echo Azure, Western Tailed Blue (Gary Pearson), Brown Elfin and Oceanspray Fairy Moth (*Adela septentrionella*). A nocturnal moth is associated with flowers (Moldenke).

As of 16 June 2007, Pyle had never observed any butterflies at nectar on it – apparently secondary as a butterfly nectar source (NorWestLeps #4000). May – August.

Oceanspray is a Pale Swallowtail hostplant, but less so in California, where Rhamnaceae are preferred; also a foodplant for Lorquin's Admiral and Weidemeyer's Admiral, Echo Azure and Brown Elfin. Jeremy Tatum finds it a frequent hostplant for Lorquin's Admiral on southern Vancouver Island, British Columbia, and he finds Western Tiger Swallowtail caterpillars eating it, too.

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*). Brown Tiger Moth (*Spilosoma pteridis*). Yellow Woollybear (*Spilosoma virginica*).

Eriocraniidae: Purplish Birch Miner (*Eriocrania semipurpurella*) (fq).

Geometridae: Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Banks' Emerald Moth (*Chlorosea banksaria*). Northwest Phoenix (*Eulithis xyliana*). *Eupithecia maestosa*. *Eupithecia misturata*. *Hesperumia latipennis* (Oceanspray is the typical host on southern Vancouver Island according to Tatum). Sulphur Wave (*Hesperumia sulphuraria*). Hemlock Looper (*Lambdina fiscellaria*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Neocalcis californiaria*). Bruce Spanworm (*Operophtera bruceata*). *Operophtera danybi*. *Perizoma costiguttata*. *Perizoma curvilinea*. *Pero giganteus*. Rindge's Pero (*Pero mizon*). American Barred Umber (*Plagodis pulveraria*). Omnivorous Looper (*Sabulodes aegrotata*). Sharp-lined Yellow (*Sicya macularia* [Tatum]). October Thorn (*Tetracis jubararia*).

Gracillariidae: Oceanspray Leafminer (*Phyllonorycter holodisci*).

Incurvariidae: Oceanspray Fairy Moth (*Adela septentrionella*).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Noctuidae: *Abagrotis reedi*. *Acerra normalis*. *Adelphagrotis indeterminata*. *Adelphagrotis stellaris*. Copper Underwing (*Amphipyra pyramidoides*). *Andropolia aedon*. *Andropolia theodori*. *Anhimella perbrunnea*. Rusty Shoulder Knot (*Aseptis binotata*) (fq). *Egira hiemalis* (caterpillars often found in the flower clusters [Tatum]). Brown Woodling (*Egira perlubens*). Western Woodling (*Egira rubrica*). Three-spotted Sallow (*Eupsilia tristigmata*). Soothsayer (*Graphiphora augur*). Speckled Cutworm (*Lacanobia subjuncta*). Western Oak Pinion (*Lithophane contenta*). Large Gray Pinion (*Lithophane georgii*). Nameless Pinion (*Lithophane innominata*). *Lithophane pertorrada*. Speckled Green Cutworm (*Orthosia hibisci*). Protector Quaker (*Orthosia praeses*). *Pseudorthodes irrorata*. *Sympistis columbia*. Leaping Caterpillar (*Sympistis dunbari*). *Sympistis homogena*. *Sympistis youngi*. Gray Swordgrass Moth (*Xylena cineritia*). American Swordgrass Moth (*Xylena nupera*).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Tortricidae: *Argyrotaenia* sp. *Epinotia hopkinsana*. *Epinotia johnsonana*. Mosaic Sparganothis (*Sparganothis xanthoides inconditana*).

Holodiscus microphyllus is now *Holodiscus discolor* var. *microphyllus*. **Rock Spiraea**.

Holodiscus discolor var. *microphyllus* was *Holodiscus microphyllus*. **Rock Spiraea**. Rosaceae. Spiraeaceae. June – September.

Weidemeyer's Admiral oviposited on Rock Spiraea in Mono County (Emmel, Shields, and Breedlove).

Saturniidae: Nuttall's Sheepmoth (*Hemileuca nuttalli*) – first instar larvae, Mono County (1987 Season Summary).

Honeydew. In at least one instance David James saw a preference by migrating California Tortoiseshell for feeding on the honeydew of a pine-feeding aphid – ignoring abundant flower nectar resources (NorWestLeps #4292, #7210). James: "Perhaps aphid excreta is better 'jet fuel' than nectar?" After becoming aware of the phenomenon, he observed it more commonly (NorWestLeps #7210). A Mourning Cloak engaged in similar behavior on a Lomatium (NorWestLeps #7201) and Robert Pyle reports first seeing the behavior with Weidemeyer's Admiral (NorWestLeps #7216) and otherwise on surfaces where

insect honeydew has dropped. A Canadian conservation assessment indicated it an important resource for Weidemeyer's Admiral.

Scott notes at aphid or leafhopper honeydew Viceroy, California Sister, Hoary Comma, Hackberry Emperor, and Boisduval's Blue.

R. Craig Hensley, in February in central Texas observed several species feeding on aphid honeydew on the rosette of a thistle: Southern Dogface, Sleepy Orange, Gray Hairstreak, Great Purple Hairstreak, Juniper Hairstreak, Variegated Fritillary, Red Admiral, Common Buckeye, American Snout, Common/White Checkered Skipper. He notes the behavior subtle and easily overlooked [R. Craig Hensley. 2019. "Use of honeydew by day-flying Lepidoptera during Winter months in south-central Texas: rare occurrence or simply little observed?" *News of the Lepidopterists' Society* 63:3:143-145).

The ant-tended caterpillars of Lycaenidae (hairstreaks, coppers and blues) actually produce honeydew the ants eat.

Honeydew of an aphid that feeds on Big Sagebrush, *Zyaphis canae* (Homoptera) is an adult food for *Aseptis characta* (Noctuidae) and *Parabagrotis exertistigma* (Noctuidae) [Johnson & Stafford, 1985]. *Moths of Western North America* says many micro-moths feed on honeydew secreted by aphids and other Homoptera

An important resource for Weidemeyer's Admiral: Risa H. Rosenberg. 1989. "Behavior of the territorial species *Limenitis weidemeyeri* (Nymphalidae) within temporary feeding areas." *Journal of the Lepidopterists' Society* 43(2):102-107.

[http://images.peabody.yale.edu/lepsoc/jls/1980s/1989/1989-43\(2\)102-Rosenberg.pdf](http://images.peabody.yale.edu/lepsoc/jls/1980s/1989/1989-43(2)102-Rosenberg.pdf)

In the U.K. noted on honeydew: European Yellow Underwing (*Noctua pronuba*, Noctuidae), Setaceous Hebrew Character (*Xestia c-nigrum*, Noctuidae), and others. ugata

Hordeum. **Barley**. Poaceae. Hordeae.

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Hordeum jubatum. **Foxtail Barley**. Poaceae. Hordeae.

Oviposition by Sandhill Skipper recorded in Colorado by Scott.

Noctuidae: Glassy Cutworm (*Apamea devastator*).

Horkelia sp. **Horkelia**. Rosaceae. Potentilleae. Flowers attract Purplish Copper, Two-banded Checkered-Skipper (Butterworth).

Horkelia bolanderi. **Bolander's Horkelia**. Rosaceae. Potentilleae. May – September.

Larval host for Two-banded Checkered-Skipper.

Horkelia californica. **California Horkelia**. Rosaceae. Potentilleae. Flower visitors: Variable Checkerspot, Callippe Fritillary, and the Mission Blue [a segregate of Boisduval's Blue] (San Francisco, San Bruno Mountain). Varieties flower in the range of March – October.

Two-banded Checkered-Skipper larval host (Shapiro).

Arctiidae: Powell & Opler report raising the Sierran Pericopid (*Gnophaela latipennis*, Arctiidae) from Trinity County on California Horkelia, though the usual hostplant is hound's tongue, *Cynoglossum* (Boraginaceae).

Gelechiidae: *Scrobipalpula potentella*.

Hepialidae: *Phymatopus hectoides*.

Pterophoridae: *Trichoptilus potentellus*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Clepsis fucana*. *Sparganothis senecionana*.

Horkelia clevelandii var. *clevelandii*. **Cleveland's Horkelia**. Rosaceae. Potentilleae. Nectar: Hedgerow Hairstreak (Jay Keller), 'Laguna' Two-banded Checkered-Skipper. May – August.

Foodplant for 'Laguna' Two-banded Checkered-Skipper.

Horkelia cuneata. **Wedge-leaf Horkelia**. Rosaceae. Potentilleae. Nectar: Cabbage White, American Lady (Kummel), Variable Checkerspot, Gabb's Checkerspot (Kummel), Brown Elfin, California Hairstreak (Kummel), Gold-hunter's Hairstreak (Kummel), Acmon Blue (Kummel), Silvery Blue (Lynn Watson). March – July.

Horkelia daucifolia. **Carrotleaf Horkelia**. Rosaceae. Potentilleae. April – July.

Reported as a larval host for Edith's Copper.

Horkelia fusca var. *parviflora*. **Smallflower Horkelia**. **Pinewoods Horkelia**. Rosaceae. Potentilleae. June – September.

Larval host for Two-banded Checkered-Skipper and Edith's Copper.

Tortricidae: *Sparganothis senecionana*.

Horkelia tenuiloba. **Thin-lobed Horkelia**. Rosaceae. Potentilleae. April – July.

Larval host for Two-banded Checkered-Skipper and Edith's Copper.

Horkelia tridentata var. *tridentata*. **Threetooth Horkelia**. Rosaceae. Potentilleae. Nectar: Orange Sulphur, Pacific Fritillary, Purplish Copper, Gray Hairstreak, Nelson's Hairstreak, Acmon Blue, Arrowhead Blue, Boisduval's Blue, Greenish Blue, Lupine Blue, Silvery Blue, Leanira Checkerspot, Northern Checkerspot, Mylitta Crescent, Pacific Fritillary, Common Ringlet [Ochre}, Brown Elfin, Western Pine Elfin, Persius Duskywing, Two-banded Checkered Skipper, Cerulean Looper (*Caenurgina caerulea*, Noctuidae), *Drasteria ochracea* (Noctuidae), *Euclidia arditia* (Noctuidae). These observations from a Siskiyou County study by Glenn Fine. April – August.

Horsfordia newberryi. **Yellow Feltplant**. Malvaceae. March – April, November – December.

Larval host for Arizona Powdered-Skipper.

Hosackia crassifolia was *Lotus crassifolius*. **Big Deervetch**. Fabaceae. Loteae. Nectar: Pale Swallowtail, Monarch, Pacific Fritillary (Mike Patterson), Silver-spotted Skipper (Mike Patterson, Alice Cummings), Northern Cloudywing. May-August.

Big Deervetch is an important hostplant for Silver-spotted Skipper, Northern Cloudywing, Persius Duskywing, Bramble Green Hairstreak, Harford's Sulphur, and Western Sulphur, possibly others (Shapiro) – whose reproductive urges draw them to the plant. Marc Kummel photographed Marine Blue ovipositing on it. Warren says “clearly the preferred larval foodplant” for Silver-spotted Skipper.

Geometridae: Californian Granite (*Digrammia californiaria*).

Zones 7-9, 14-24.

Hosackia gracilis was *Lotus formosissimus*. **Seaside Bird's Foot Trefoil**. Fabaceae. Loteae. March-July.

This wetland native perennial, a species with showy flowers, thought to be the caterpillar plant for the Lotis Blue, a butterfly listed as endangered in 1976, and now thought extinct.

Zones 15 -17.

Hosackia oblongifolia var. *oblongifolia* was *Lotus oblongifolius* var. *oblongifolius*. **Streambank Bird's-foot Trefoil**. Fabaceae. Loteae. Nectar: Anna's Blue, and likely for others for which it is a hostplant. Glenn Fine notes 4 species of Lepidoptera visiting its flowers in Siskiyou County. May-September.

Hostplant for Coastal Green Hairstreak, Anna Blue. Acmon Blue has also oviposited on it (Scott).

Hosackia rosea (formerly *Lotus aboriginus*). **Rose Flowered Lotus**. Fabaceae. Loteae. May – July.

Hostplant: Silver-spotted Skipper, Bramble Green Hairstreak (DesertLeps #9843, Ken Hansen), Coastal Green Hairstreak (*Callophrys dumetorum*).

Hulsea algida. **High Mountain Hulsea**. Asteraceae. Madieae. Moldenke captured a diurnal moth on its flowers. July – August.

Hulsea californica. **San Diego Alpinegold**. Asteraceae. Madieae. Rare but showy, likely a nectar source. May – August.

Hulsea nana. **Dwarf Hulsea**. Asteraceae. Madieae. Nectar: Callippe Fritillary (Wildflowers of the Pacific Northwest). June – September.

Hydrophyllum. **Waterleaf**. Four taxa of this genus are native to California. Observers in states to the north have noted Propertius Duskywing at nectar on *Hydrophyllum capitatum* var. *capitatum*, Dwarf Waterleaf.

Hydrophyllum fendleri. **Fendler's Waterleaf**. Boraginaceae. Scott notes a visit by Red Admiral, rates it unpopular as a butterfly nectar source. Flowers are “copiously” nectarous, pollinated by bumblebees. Ours flowers May – July.

Hydrophyllum tenuipes. **Pacific Waterleaf**. Boraginaceae. Nectar: Margined White (Patterson, NorWestLeps #3961). May – July.

Hymenoclea salsola is now *Ambrosia salsola*. **Burrobush**.

Hymenopappus filifolius. **Fineleaf Hymenopappus**. Asteraceae. Bahiaea. Scott noted flower visits by Checkered White, Mimosa Yellow, Field Crescent, Variegated Fritillary, Common Ringlet, Ridings's Satyr, Western Pine Elfin, California Hairstreak, Juniper Hairstreak, Melissa Blue, Reakirt's Blue, Silvery Blue, Common Checkered-Skipper, Pahaska Skipper, Uncas Skipper. Most varieties flower in the range of May – August.

Hymenothrix wrightii. **Wright's Thimblehead. Wright Beeflower**. Asteraceae. Bahiaea. Attractive in flower, possible nectar plant. *H. wislizeni* is a good butterfly nectar plant in Arizona (as for Palmer's Metalmark [The Firefly Forest]), also attracting interesting beetles, such as the colorful net-winged beetle, *Lycus fernandezi*. August – October.

Wright's Thimblehead is among the many larval hosts for the Dainty Sulphur.

Hymenoxys acaulis var. *arizonica* is now *Tetraneris acaulis* var. *arizonica*. **Sundancer Daisy. Angelita Daisy**. Asteraceae. Helenieae. Said to attract butterflies; appropriate especially for the high desert. April – September.

Hymenoxys cooperi. **Cooper's Goldflower**. Asteraceae. Helenieae. Nectar: Gray Hairstreak in Clark County, Nevada. Juba Skipper (Sighting 697517 Butterflies and Moths of North America website). *Sympistis mirificalis* (Noctuidae) in BugGuide photograph. May – September.

Hymenoxys hoopesii. **Owl's Claws**. Asteraceae. Helenieae. Nectar: Mormon Fritillary (David Horner), Field Crescent, Small Wood-Nymph, Blue Copper, Lilac-bordered Copper (David Horner). Recommended for butterfly nectar by the Flagstaff Native Plant & Seed Company. May – November.

Hymenoxys lemmonii. **Lemmon's Bitterweed**. Asteraceae. Helenieae. Nectar: a rare subspecies of the Shasta Blue in Nevada; the plant occurs in California. June – September.

Hypericum sp. **St. John's Wort**. Hypericaceae.

Noctuidae: *Hypericum* listed among larval hosts of the polyphagous Lunate Zale (*Zale lunata*).

Hyptis emoryi is now *Condea emoryi*. **Desert Lavender**.

Iliamna rivularis. **Streambank Wild Hollyhock**. Malvaceae. Nectar: Clodius Parnassian (Gerry Queener). Swallowtails (Gerry Queener). June – August.

The plant, possibly extirpated in California, a hostplant for Northern White-Skipper, at least in Washington.

Ipomopsis aggregata. **Scarlet Gilia**. Polemoniaceae. Nectar: Western Tiger Swallowtail, Two-tailed Swallowtail, Pale Swallowtail and White-lined Sphinx are occasional users. Hummingbirds commonly. June – September.

Noctuidae: Darker-spotted Straw Moth, (*Heliothis phloxiphaga*).

Ipomopsis arizonica. **Arizona Firecracker**. Polemoniaceae. Nectar: long-tongued moths. May – October.

Ipomopsis congesta. **Ballhead Ipomopsis**. Polemoniaceae. Nectar: Sagebrush Checkerspot. May – September.

Ipomopsis tenuifolia. **Slender-leaved Ipomopsis**. Polemoniaceae. Nectar: long-tongued moths. April – June.

Ipomopsis tenuituba. **Slender-tube Skyrocket**. Polemoniaceae. Nectar: White-lined Sphinx. June – September.

Iris spp. **Iris**. Iridaceae. Nectar: Pipevine Swallowtail (Nancy Asquith), Arctic Skipper, Thicket Hairstreak (Steiner).

Noctuidae: Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). American Swordgrass Moth (*Xylena nupera*).

Iris douglasiana. **Douglas Iris**. Iridaceae. Nectar: Checkerspot, copper and swallowtail butterflies (*Backyard Birding*). Shapiro doubts that butterflies were really getting nectar, particularly the copper, with its short proboscis. The book was the sole source for this record – perhaps butterflies were merely investigating the flowers? He notes that typically freshly emerged adult butterflies ‘try’ many flowers. May – July.

Iris macrosiphon. **Ground Iris**. Iridaceae. Nectar: Pipevine Swallowtail (Larry Miller). March - May.

Tortricidae: *Endothenia rubipunctana*. Develops in seedpods and flies April – July (Powell & Opler).

Iris missouriensis. **Western Blue Flag**. Iridaceae. Nectar: Two-tailed Swallowtail, Western Tiger Swallowtail, Orange Sulphur, Painted Lady, American Lady, Variegated Fritillary, Melissa Blue, Gray Hairstreak, Dreamy Duskywing, Silver-spotted Skipper, Western Snowberry Clearwing, and White-lined Sphinx. May – July.

Noctuidae: Keifer’s Ear Moth (*Amphipoea keiferi*).

Isocoma spp. **Goldenbush**. Asteraceae. Astereae. Nectar: ‘Siva’ and ‘Loki’ Juniper Hairstreak.

Tortricidae: Snakeweed Borer (*Pelochrista ridingsana*) – Powell & Opler report it being reared from species of this genus (p. 134).

Isocoma acradenia. **Alkali Goldenbush**. Asteraceae. Astereae. Nectar: Checkered White, Sleepy Orange, American Snout, Queen, Variegated Fritillary, Painted Lady, California Patch (B.J. Stacey), Great Purple Hairstreak (fq), Leda Ministreak, Western Pygmy Blue, Desert Metalmark, Palmer’s Metalmark, Mojave Sootywing (fq), Northern White-Skipper, Funereal Duskywing, Common Checkered-Skipper, Juba Skipper, and Sandhill Skipper. In Anza-Borrego, the Monroes find 14 butterfly species at Alkali Goldenbush flowers, one of their best nectar plants. August-November.

Noctuidae: The Alkali Goldenbush is the only known larval host for *Schinia erosa*.

Tortricidae: *Eucosma sandiego*, a root borer. *Sonia comstocki*, a root borer. *Sonia filiana*, a root borer.

Isocoma arguta. **Carquinez Goldenbush**. Asteraceae. Astereae. Nectar: Acmon Blue (Doug Wirtz photograph). August- December.

Isocoma menziesii. **Coast Golden Bush**. Asteraceae. Astereae. Nectar: Monarch, Queen, Mylitta Crescent (Bob Sikora photograph), California Patch, Behr's Metalmark, Fatal Metalmark (J. Maughn, Tom Barnes), Mormon Metalmark, Western Pygmy Blue, Northern White-Skipper (Marc Kummel photograph), possible White Checkered-Skipper (another Marc Kummel photograph), Sandhill Skipper (B.J. Stacey photograph), Wandering Skipper (Mickey Long). Tree of Life Nursery recommends for butterfly nectar. June – November.

Pyralidae: *Diastictis sperryorum* (Powell & Opler, p. 180).

Tineidae: *Amydria obliquella* – reared from *Eucosma*-infested root crowns (Powell & Opler, p. 52).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Eucosma sandiego*, a root borer. *Sonia filiana*, a root borer. *Sonia vovana*, a root borer.

Isocoma menziesii var. *sedoides*. **Prostrate Coastal Goldenbush**. Asteraceae. Astereae. A butterfly magnet in the East Bay Wilds Nursery. June – December.

An excellent garden plant, says Pete Veilleux – “looks so good when everything else is kind of beat and brown”.

Isocoma menziesii var. *vernonioides*. **Green-leaved Dune Goldenbush**. Asteraceae. Astereae. Nectar: Orsak notes it a favorite at Upper Newport Bay with the Sachem, Woodland Skipper, Wandering Skipper, and Sandhill Skipper. Marc Kummel photographed Common Buckeye, Mormon Metalmark, Acmon Blue, Western Pygmy Blue and Northern White-Skipper at nectar on it. June – December.

A plume moth was an important seed predator in San Diego County: Louda, Svat'a M. "Seed Predation and Seedling Mortality in the Recruitment of a Shrub, *Haplopappus Venetus* (Asteraceae), along a Climatic Gradient." *Ecology* 64, no. 3 (1983): 511-21. doi:10.2307/1939971.

Zones 15-24.

Isomeris arborea is now *Peritoma arborea*. **Bladderpod**.

Iva axillaris. **Poverty Weed**. Asteraceae. Heliantheae. Ambrosiinae.

Bucculatricidae: *Bucculatrix columbiana*.

Ivesia spp. **Yellow Ivesia**. Rosaceae. Potentilleae. Flowers visited by a number of butterflies in their range, including Mountain Mahogany Hairstreak and Tailed Copper.

Jamesia americana. **Fivepetal Cliffbush**. Hydrangeaceae. Scott considers the species “very popular” as a butterfly nectar plant based on observations centered in Colorado. He notes as flower visitors Anise Swallowtail, Pale Swallowtail (fq), Two-tailed Swallowtail, Western Tiger Swallowtail, Indra Swallowtail (fq), Rocky Mountain Parnassian. Painted Lady, Red Admiral, Weidemeyer's Admiral, Callippe Fritillary (fq), Coronis Fritillary, Northwestern Fritillary, Northern Checkerspot, Hoary Comma, Milbert's Tortoiseshell, Chryxus Arctic, and Hackberry Emperor. Bramble Green Hairstreak, 'Siva' Juniper Hairstreak, Arrowhead Blue, Greenish Blue. Silver-spotted Skipper, Northern Cloudywing,

Pacuvius Duskywing, Persius Duskywing, Common Roadside-Skipper, Dun Skipper, Pahaska Skipper, and Tawny-edged Skipper.

Our Californian var. *rosea* is attractive enough to be worth cultivating but thought difficult to grow. Flowers are fragrant; leaves turn red in the fall. Whether as attractive to butterflies here, I do not know. July – August.

Larval host for the Echo Azure.

Jaumea carnosa. **Marsh Jaumea. Salty Susan.** Asteraceae. Tageteae. Nectar: Anise Swallowtail (Mike Patterson). Painted Lady, Acmon Blue (Pete Veilleux), Wandering Skipper. Pete Veilleux sees “lots” of skippers on it in the San Francisco Bay Region. April – December.

Juglans californica. **California Walnut.** Juglandaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Vestal Tiger Moth (*Spilosoma vestalis*).

Geometridae: Common Angle Moth (*Macaria aemulataria*). Walnut Spanworm (*Phigalia plumogeraria*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: Penitent Underwing (*Catocala piatrix*) (Powell & Opler, the only California host they specify).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Southern Ugly-nest Caterpillar (*Archips rileyana*). Orange Tortrix (*Argyrotaenia franciscana*). Codling Moth (*Cydia pomonella*). Omnivorous Leafroller (*Platynota stultana*).

Juglans hindsii. **Northern California Black Walnut.** Juglandaceae.

Closely related to *Juglans californica* and classified as a subspecies of it by some, likely serves the same suite of Lepidoptera. Widely cultivated rootstock for English Walnut (*Juglans regia*), hybrids naturalized along streams.

Juncaceae. Rush Family.

Noctuidae: Henry’s Marsh Moth (*Acrionicta insularis*). *Oligia tusa* – probably bores into the stems of rushes or sedges (PNW Moths). Violet Brocade (*Oligia violacea*), a gorgeous moth whose caterpillars bore into the stems of rushes (PNW Moths).

Juncus sp. **Rush.** Juncaceae.

Arctiidae: Yellow-collared Scape Moth (*Cisseps fulvicollis*).

Coleophoridae: *Coleophora viridicuprella* [Wikipedia].

Noctuidae: *Oligia rampartensis* – specializes in boring into stems (PNW Moths). American Swordgrass Moth (*Xylena nupera*).

Tortricidae: *Bactra furfurana*. Javelin Moth (*Bactra verutana*).

Juncus balticus. **Baltic Rush**. Juncaceae.

Coleophoridae: *Coleophora maritella*.

Juncus effusus. **Bog Rush**. Juncaceae.

Coleophoridae: Streaked Coleophora (*Coleophora cratipennella*).

Juncus tenuis. **Slender Rush**. Juncaceae.

Coleophoridae: Streaked Coleophora (*Coleophora cratipennella*).

Juniperus spp. **Juniper**. Cupressaceae.

Tortricidae: **Cockerell's Moth** (*Diedra cockerellana*) (Powell & Opler p. 149).

Juniperus californica. **California Juniper**. Cupressaceae.

California Juniper feeds caterpillars of the 'Loki' and 'Siva' Juniper Hairstreak. Muir's Hairstreak develops on it on Mount Diablo, south, and east in the Inner Coast Ranges.

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*).

Cosmopterigidae: Juniper Cone Moth (*Periploca atrata*).

Geometridae: Orillia Angle (*Digrammia excurvata*).

Lasiocampidae: *Gloveria arizonensis*.

Noctuidae: *Abagrotis henei*. *Abagrotis mirabilis*. *Lithophane subtilis*.

Sphingidae: An important foodplant for the Sequoia Sphinx (*Sphinx sequoiae*).

Tortricidae: *Argyrotaenia cupressae*. Juniper Budworm (*Choristoneura houstonana*).

Juniperus communis. **Common Juniper**. Cupressaceae. Foodplant for:

Geometridae: Juniper Looper (*Eupithecia interruptofasciata*). Freyer's Pug (*Eupithecia intricata*).
Common Pug (*Eupithecia miserulata*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Gelechiidae: Juniper Webworm (*Dichomeris marginella*).

Juniperus occidentalis. **Western Juniper**. Cupressaceae.

Foodplant for Barry's Hairstreak and 'Siva' Juniper Hairstreak. Juniper Mistletoe on it supports Great Purple Hairstreak (1994 Season Summary, Lassen County, JFE and G. Pratt).

Sphingidae: Sequoia Sphinx (*Sphinx sequoiae*) (fq).

Geometridae: *Digrammia napensis*.

Noctuidae: *Abagrotis glenni*. *Lithophane longior*.

Tortricidae: *Argyrotaenia paiuteana*.

Juniperus osteosperma. **Utah Juniper**. Cupressaceae.

Foodplant for 'Siva' Juniper Hairstreak. Supports Juniper Mistletoe, a hostplant for Great Purple Hairstreak.

Sphingidae: Sequoia Sphinx (*Sphinx sequoiae*).

Noctuidae: *Lithophane longior*.

Justicia californica. **Beloperone, Chuparosa, or Hummingbird Bush**. Acanthaceae. Nectar: Pipevine Swallowtail, 'Desert' Black Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Cloudless Sulphur, Mexican Yellow, Monarch (fq), Queen (fq), Painted Lady, West Coast Lady, Texan Crescent, Silvery Blue. Bob Allen finds Monarch and Queen often nectar on it at Fullerton Arboretum (SoWestLep #10578). Hummingbirds. March - June.

Hostplant for Tiny Checkerspot, which, as the Monroes note: "With sufficient winter/spring rains ... may flutter in abundance around Chuparosa." Emmel & Emmel (1973) find a disjunct coastal population hosts Tiny Checkerspot.

Noctuidae: *Cobubatha dividua* (life history documented on Jennifer Bundy's Southwest Moths web site).

Kalmia polifolia. **Mountain Laurel**. Ericaceae. June – August.

Foodplant for the Northern Blue.

Geometridae: "*Kalmia*" given in HOSTS as a larval host for *Eupithecia russeliata*.

Noctuidae: Brown Angle Shades (*Phlogophora periculosa*), listed in HOSTS as "*Kalmia*", may apply here.

Tortricidae: Eye-spotted Bud Moth (*Spilonota ocellana*).

Keckiella antirrhinoides. **Yellow Bush Snapdragon**. Plantaginaceae. Nectar: California Dogface. Probably usually attracts butterflies as a larval host rather than nectar plant. April-May.

Hostplant for Quino Checkerspot (a segregate of Edith's Checkerspot) and especially Variable Checkerspot. Common Buckeye and American Lady also use *Antirrhinum* (Syn. *Keckiella*) as larval hosts. Host for Henne's Checkerspot, a segregate of the Variable Checkerspot (Monroes).

Zones 7, 14-16, 18-23.

Keckiella antirrhinoides var. *microphylla*. **Chaparral Beardtongue**. Plantaginaceae. April-June.

Larval host for Variable Checkerspot.

Geometridae: “*Semiothisa cyda* (Druce, 1893)” = the Mesquite Looper (*Rindgea cyda*).

Noctuidae: *Sympistis fortis* (aka *Homoncognemis f.*). *Sympistis augustus*. *Sympistis occata*.

Keckiella breviflora. **Yawning Penstemon**. Plantaginaceae. May-July.

Larval host for Common Buckeye and Variable Checkerspot.

Sesiidae: *Penstemonia dammersi*.

Zones 7, 14-16, 18-23.

Keckiella cordifolia. **Heart-leaved Penstemon**. Plantaginaceae. Very choice hummingbird plant. May-July.

Larval host for Common Buckeye (Nancy Bauer, Marlin Harms) and Variable Checkerspot.

Noctuidae: *Sympistis singularis* (aka *Oncocnemis s.*).

Sesiidae: *Penstemonia dammersi*.

Zones 14-24.

Keckiella lemmonii. **Lemmon Beardtongue**. Plantaginaceae. June-August.

Larval host for Variable Checkerspot.

Zones 7, 14-16.

Keckiella ternata. **Scarlet Beardtongue** or **Blue-stemmed Keckiella**. Plantaginaceae. June-September.

Larval host for Variable Checkerspot.

Sesiidae: a wasp mimic moth, *Penstemonia dammersi*.

Zones 7, 14-16, 18-23.

Koeberlinia spinosa. **Crown of Thorns**. Koeberliniaceae (formerly Capparaceae). Nectar: Palmer’s Metalmakr (Liz Makings). Leda Ministreak (Liz Makings). Ceraunus Blue (Liz Makings). Saltbush Sootywing (Liz Makings). May - June.

Tortricidae: HOSTS indicates it is a hostplant for a moth known variously as *Cochylina hubbardana*, *Cybillia hubbardana*, “*Phalonia*” *hubbardana*, or *Phtheochroa hubbardana*, mentioned in the most recent publication I can find as currently without a genus designation: “Cochylini new genus 3- “Cybillia”

(unavailable name)21hubbardana (Busck, 1907)” [Metzler, Eric & Brown, John. (2014). An updated check list of the Cochyliina (Tortricidae, Tortricinae, Euliini) of North America North of Mexico including Greenland, with comments on classification and identification. Journal of the Lepidopterists' Society. 68. 274-282. 10.18473/lepi.v68i4.a5, listed on page 278.] Currently #3850 on the Wikipedia List of Moths of North America.

Koeleria macrantha. **Junegrass**. Poaceae. Poaeae.

Foodplant for the Columbian Skipper and the Tawny-edged Skipper.

Krameria sp. **Rhatany**. Krameriaceae.

Likely foodplant for Desert Metalmark. Caterpillars successfully raised on it from a population at Sheephole Pass in San Bernardino County (Pratt & Ballmer) – females seen checking it out.

Krameria erecta. **Littleleaf Rhatany**. Krameriaceae. March – May.

A foodplant for the Mormon Metalmark (HOSTS).

Noctuidae: Littleleaf Krameria Moth (*Oxycnemis fusimacula*).

Ladeania lanceolata was *Psoralidium lanceolatum*. **Lance-leaved Scurf-pea**. Fabaceae. Psoraleae. May – July.

Oecophoridae: *Agonopterix psoraliella*.

Lagophylla glandulosa. **Glandular Hareleaf**. Asteraceae. Madieae. May – November.

Noctuidae: Foodplant for *Microhelia angelica*, a striking small day-flying flower moth.

Lagophylla ramosissima. **Common Hareleaf**. Asteraceae. Madieae. Glenn Fine notes 1 species of Lepidoptera as a flower visitor in his Siskiyou County study. April – October.

Noctuidae: Larval host for *Microhelia angelica*, a striking small day-flying flower moth.

Langloisia setosissima. **Lilac Sunbonnet**. Polemoniaceae. Nectar: Common Checkered-Skipper in Clark County, Nevada (Austins). January-June.

Langloisia setosissima ssp. *punctata*. **Lilac Sunbonnet**. Polemoniaceae. Nectar: White-lined Sphinx (*Hyles lineata*, Sphingidae). February-June.

Larrea tridentata. **Creosote Bush**. Zygophyllaceae. Nectar: Painted Lady (fq). Palmer's Metalmark (Liz Makings), Gray Hairstreak (Anne Reeves). Western Pygmy Blue (Monroes); in Clark County, Nevada: Marine Blue (Austins). Bumblebees. April-May.

Supports Desert Mistletoe and thus potentially Great Purple Hairstreak.

Roosting for Small Blue (Alice Abela) and likely others.

Geometridae: Creosote Moth (*Digrammia colorata*). *Synglochis perumbraria*. These geometrids can be abundant where the plant is common.

Psychidae: Creosote Bush Bagworm (*Thyridopteryx meadi*).

Tortricidae: *Platynota larreana*, with bright green caterpillars.

Zones 8-14, 19-21.

Lasthenia spp. **Goldfields**. Asteraceae. Heliantheae. Nectar: Quino Checkerspot (a segregate of Edith's Checkerspot). "Visited by many species of butterflies in very early spring when little else in flower – Acmon Blue, Silvery Blue, Eastern Tailed Blue, Mylitta Crescent, California Ringlet, Sandhill Skipper, Small Checkered-Skipper, Common Checkered-Skipper, Common Buckeye, Ladies – almost anything flying" (Shapiro). *Adela* and *Schinia* spp. (Thorpe & Leong). *Heliethodes diminutiva* – small dayflying moth.

Lasthenia californica. **Goldfields**. Asteraceae. Heliantheae. Nectar: Edith's Checkerspot, California Tortoiseshell (Hartmut Wisch photograph), Common Ringlet (fq), Brown Elfin (Hartmut Wisch photograph), Skippers, Three-striped Longhorn (*Adela trigrappa*, Incurvariidae), Kern Primrose Sphinx Moth. Paul Johnson got nice photographs of Thicket Hairstreak at nectar (12 March 2011) and Common Flower Moth (*Schinia pulchripennis*, Noctuidae) (20 March 2010). See *Lasthenia* spp. above – this the commonest species. February – June.

A major groundcover in Edith's Checkerspot territory, mid-season bloomer, thus a key nectar source for Edith's Checkerspot (Murphy, 1984).

Noctuidae: *Heliethodes diminutiva*.

Lasthenia fremontii. **Vernal Pool Goldfields. Fremont's Goldfields**. Asteraceae. Heliantheae. I have no specific information about lepidopteran usage. March – May.

In cultivation, thrives in zones 8, 9, 14-17, 19-24.

Lasthenia glabrata. **Saltmarsh Goldfields**. Asteraceae. Heliantheae. Nectar: Common Checkered-Skipper. March – May.

Zones 8, 9, 14-17, 19-24.

Lasthenia gracilis. **Common Goldfields**. Asteraceae. Heliantheae. Powell & Opler note that *Annaphila evansi* (Noctuidae) nectars at its flowers, among others. February - June.

Lasthenia minor. **Coastal Goldfields**. Asteraceae. Heliantheae. Likely nectar plant. March – June. Thrives in zones 8, 9, 14-17, 22-24.

Lathyrus spp. **Wild Peas**. Fabaceae. Fabeae. Nectar: Swallowtails, Arctic Skipper, Common Roadside-Skipper (fq).

Shapiro comments: "The NATIVE species only are larval hosts for Eastern Tailed Blue, Western Tailed Blue, Western Sulphur, Orange Sulphur, Silver-spotted Skipper, and Northern Cloudywing."

Noctuidae: Cerulean Looper (*Caenurgina caerulea*). *Dryotype opina*.

Tortricidae: *Cydia americana*. *Grapholita lunatana*.

Lathyrus japonicus. **Seaside Pea**. Fabaceae. Fabeae. Nectar: Monarch [Michigan], Painted Lady [Michigan], Western Tailed Blue (fq). June-August.

Hostplant for Silvery Blue, Western Tailed Blue [a preferred hostplant for it in the San Juan Islands, Washington].

Noctuidae: Zebra Caterpillar (*Melanchra picta*).

Tortricidae: Black-marked Ancylic (*Ancylic metamelana*).

Zones 16-17. May be somewhat garden invasive.

Lathyrus jepsonii. **Delta Tule Pea**. Fabaceae. Fabeae. April-August.

Larval host for Orange Sulphur, Western-tailed Blue, Silvery Blue.

Lathyrus jepsonii ssp. *californicus*. **California Tule Pea**. Fabaceae. Fabeae. April-August.

Larval host for Orange Sulphur, Silvery Blue, Eastern Tailed Blue, Western Tailed Blue; the Northern Cloudywing is associated with California Tule Pea, a likely hostplant for it, also.

Lathyrus lanszwertii. **Nevada Pea**. Fabaceae. Fabeae. May-July.

Hostplant for Queen Alexandra Sulphur, Orange Sulphur, Western Sulphur, Clouded Sulphur, Western Tailed Blue (Todd Stout), and Mexican Cloudywing.

Lathyrus littoralis. **Silky Beach Pea**. Fabaceae. Fabeae. April-July.

Noted as a hostplant for Painted Lady, Silvery Blue, Western Tailed Blue, Eastern Tailed Blue and Orange Sulphur in Mike Wood's *Annotated Checklist of the Vascular Plants of San Francisco's Natural Areas*.

Arctiidae: preferred hostplant for the polyphagus Ranchman's Tiger Moth (*Arctia virginalis*).

Noctuidae: *Psammopolia arietis*.

Zones 5, 17; needs sand.

Lathyrus nevadensis var. *nevadensis*. **Nevada Pea**. Fabaceae. Fabeae. April-July.

Western Sulphur (James & Nunnallee). A good host plant for the Western Tailed Blue (Mountain Plants of the Western Cascades web site).

Lathyrus palustris. **Marsh Pea**. Fabaceae. Fabeae. May – August.

Hostplant for Silver-spotted Skipper.

Lathyrus polyphyllus. **Oregon Pea**. Fabaceae. Fabeae. Nectar: Western Tiger Swallowtail (Mountain Plants of the Western Cascades). April-August.

Larval host of Western Tailed Blue, Northern Blue.

Zones 6, 14-17.

Lathyrus sulphureus. **Sulphur Pea**. Fabaceae. Fabeae. Nectar: Lupine Blue (Dennis Holmes photo). April – July.

Gelechiidae: *Chionodes braunella*.

Lathyrus torreyi. **Redwood Pea**. Fabaceae. Fabeae. April-July.

Larval host for Northern Blue.

Lathyrus vestitus. **Pacific Pea**. Fabaceae. Fabeae. Nectar: Pipevine Swallowtail (Bert Johnson), Pale Swallowtail (Lynn Watson), Sara Orangetip (Marc Kummel), Common Buckeye (Gena Zolotar photograph). American Lady (Pete Veilleux). Brown Elfin “nectar thief” (Marc Kummel), Umber Skipper (David Horner). Plants of the San Gabriel Mountains: ‘provides nectar for a number of adult butterflies’ February-July.

Koji Shiraiwa consistently found Southern Silvery Blue caterpillars on this plant near Pine Valley in the Laguna Mountains in 2011 and 2012; they were deep green with a purple tint.

Gelechiidae: *Chionodes braunella*.

Zones 7, 9, 14-17. This foodplant (see *Lathyrus* spp. account) and nectar source is easy to grow. Somewhat garden invasive.

Lathyrus vestitus var. *ochropetalus*. **Pacific Pea**. Fabaceae. Fabeae. Nectar: Pale Swallowtail. February – July.

Lavatera assurgentiflora is now *Malva assurgentiflora*. **Tree Mallow**.

Layia carnosa. **Beach Layia**. Asteraceae. Madieae. Nectar: *Lithariapteryx abroniaella* (Heliodinidae) (Alice Abela) and likely other Lepidoptera. March - July.

Layia chrysanthemoides. **Smooth Tidy tips**. Asteraceae. Madieae. Likely a good butterfly flower. March – June.

Zones 8, 9, 14-17, 19-24.

Layia fremontii. **Fremont’s Tidy tips**. Asteraceae. Madieae. Nectar: Common Flower Moth (*Schinia pulchripennis*, Noctuidae). February – May.

Zones 8, 9, 14-17, 19-24.

Layia gaillardoides. **Woodland Layia**. Asteraceae. Madieae. Nectar: Mylitta Crescent. “Popular with butterflies”, says Annie’s Annuals. March – August.

Zones 15-16.

Layia glandulosa. **White Layia**. Asteraceae. Madieae. Nectar: Juniper Hairstreak (Small Blue, Lompoc Blue [segregate of Small Blue] (Alice Abela). This and other showy *Layia* species are likely all good nectar plants. February – July.

Zones 7-10, 14-24.

Layia heterotricha. **Pale Yellow Layia**. Asteraceae. Madieae. Nectar: California Ringlet, Edith’s Checkerspot, *Adela flammeusella*, *Adela* sp., *Schinia* sp. April – June.

Layia jonesii. **Jones’ Tidy tips**. Asteraceae. Madieae. Nectar: California Ringlet, Edith’s Checkerspot, *Adela flammeusella*, *Adela* sp., *Schinia* sp. March – May.

Layia munzii. **Munz’s Tidy tips**. Asteraceae. Madieae. Marc Kummel photographed an unidentified female Blue at nectar on these in the Carrizo Plain. “There were lots of them.” CalPhotos shows a flower with an apparent flower moth (*Schinia* sp., Noctuidae) resting on it (Howard Orman Clark, Jr.). March – April.

Zones 8, 9, 14, 19-24.

Layia pentachaeta subsp. *pentachaeta*. **Sierra Tidy tips**. Asteraceae. Madieae. Northern Checkerspot (Barry Breckling, CalPhotos).

Ssp. *albida*: Flowers March – May. Zones 7-9, 14-24.

Ssp. *pentachaeta*: Flowers March – June. Zones 7-9, 18-24.

Layia platyglossa. **Tidy-tips**. Asteraceae. Madieae. Nectar: Edith’s Checkerspot, Common Ringlet, Painted Lady, American Lady, Common Buckeye, Purplish Copper, Acmon Blue, Arrowhead Blue, Silvery Blue, Eastern Tailed Blue, Mylitta Crescent, Ladies, Sandhill Skipper, Northern White-Skipper, Common Checkered-Skipper, Small Checkered-Skipper, White Checkered-Skipper. Various moths (Moldenke), such as an *Adela* sp., and Common Flower Moth (*Schinia pulchripennis*, Noctuidae), a day-flying moth. *Heliolonche modicella* (Noctuidae) (Paul Johnson). Shapiro: visited very early spring by almost anything then flying. February – July. Murphy considered it a key nectar source for Edith’s Checkerspot at Jasper Ridge despite the plants being scattered (Murphy, 1984).

Noctuidae: Tidy-tips is a larval host for *Heliothodes diminutiva*, a day-flying noctuid.

Showy, easy annual, popular in cultivation far beyond our shores. Deserves wider garden usage! Zones 7-9, 14-23.

Layia septentrionalis. **Colusa Tidy tips**. Asteraceae. Madieae. A showy species, a likely nectar plant. April – June.

Zones 7, 8, 14, 19-24.

Ledum glandulosum is now *Rhododendron columbianum*. **Western Labrador Tea**.

Lepechinia calycina. **Pitcher Sage**. Lamiaceae. A Stanford student study by Hobday noted flower visits by the Variable Checkerspot. Shapiro: "Never seen a butterfly visit it." In this case, it may have gotten access to the nectar by getting in through carpenter bee bites. A good bee plant, also frequented by interesting beetles. April – June.

Cosmopterigidae: *Anoncia conia*. *Anoncia sphacelina*.

Lepidium densiflorum. **Common Peppergrass**. Brassicaceae. May – July.

Larval host for Western White, Checkered White and Cabbage White.

Lepidium fremontii. **Bush Peppergrass**. Brassicaceae. Nectar: Checkered White, West Coast Lady, Western Pygmy Blue. March-June.

Larval host for Pearly Marble, Western White, Checkered White (fq).

Considered worthy of cultivation.

Lepidium lasiocarpum. **Shaggyfruit Pepperweed**. Brassicaceae. March – June.

Larval host for Checkered White in Clark County, Nevada. "Nearctic" says HOSTS.

Lepidium montanum. **Western Peppergrass**. Brassicaceae. Nectar: Cabbage White, Checkered White, Pine White, Thicket Hairstreak (Bryan Reynolds), Ceraunus Blue, Reakirt's Blue. Good butterfly plant. April-August.

Jeremy Tatum found and reared caterpillars of Cabbage White from it on southern Vancouver Island. He also found Sara Orangetip caterpillars on Western Peppergrass.

Lepidium nitidum. **Shining Peppergrass**. Brassicaceae. Bay Checkerspot (a segregate of Edith's Checkerspot) seeks its nectar. February-March.

Lepidium ramosissimum (formerly *Lepidium ramosissimum* var. *bourgeauanum*). **Branched Pepper Grass**. Brassicaceae. March – September.

Larval host for the Western White and the Large Marble (Shapiro, 1976, noted in Fairbanks, Alaska).

Lepidium thurberi. **Thurber's Pepperweed**. **Thurber's Peppergrass**. Brassicaceae. Nectar: Cabbage White (Liz Makings), Western Pygmy-Blue (Liz Makings), Fatal Metalmark (Liz Makings), Common Sootywing (Liz Makings), White Checkered-Skipper (Liz Makings), Orange Skipperling (Liz Makings).

Lepidium virginicum. **Wild Peppergrass**. Brassicaceae. Nectar: Large Marble, Cabbage White, Checkered White, Purplish Copper. March-September.

Hostplant: Pearly Marble, Boisduval's Marble, Becker's White, Western White, Gray-veined White (Margined White), and Checkered White.

Lepidium virginicum subsp. *menziesii*. **Robinson's Peppergrass**. Brassicaceae. Nectar for Large Marble (Xerces Society). March - June.

Shapiro records it [under the synonym *Lepidium virginicum* var. *pubescens*] as a hostplant for Checkered White and Western White. Shapiro, Arthur M. 1992. "Twenty Years of Fluctuating Parapatry and the Question of Competitive Exclusion in the Butterflies *Pontia Occidentalis* and *P. Protodice* (Lepidoptera: Pieridae)." *Journal of the New York Entomological Society* 100 (2): 311–319.

Lepidospartum squamatum. **Scale Broom**. Asteraceae. Senecioneae. Nectar: Checkered White. Monarch, Queen (fq), American Lady, Painted Lady, Common Buckeye, Lorquin's Admiral, Sagebrush Checkerspot (neumoegeni, David S. Horner), Common Ringlet. Fatal Metalmark, Mormon Metalmark. Brown Elfin, Gray Hairstreak, Great Purple Hairstreak (fq), Thicket Hairstreak (Aaron Schusteff), Acmon Blue, Western Pygmy Blue, Pacific Dotted Blue. Northern White-Skipper, Lindsey's Skipper (BugGuide), Umber Skipper, Sandhill Skipper, Orange Skipperling. Diurnal moths seeking nectar include the showy *Lycomorpha regulus* (Arctiidae), especially females (fq). Also gets Tarantula Hawk wasp, other wasps and notable predatory flies. (Heath, SoWestLep #2806). An avidly sought nectar plant, documented in many fine photographs by Marc Kummel. August – November.

Noctuidae: *Schinia velaris*.

Recommended for cultivation in Zones 7-9, 14-16, and 18-21. It is a toxic plant but tastes very bad.

Leptochloa dubia. **Green Sprangletop**. Poaceae. Zoysieae.

Reported as an Orange Skipperling host in Arizona in the 1991 Season Summary (by Jim P. Brock).

Leptodactylon californicum is now *Linanthus californicus*. **Prickly Phlox**.

Leptodactylon pungens is now *Linanthus pungens*. **Granite Prickly Phlox**.

Leptosiphon androsaceus was *Linanthus androsaceus*. **Baby Stars**. Polemoniaceae. Flower visitors include Edith's Checkerspot, Common Ringlet, and Mylitta Crescent, *Adela* sp. April-June.

A key nectar source for Edith's Checkerspot, with an "early and extended blooming season" (Murphy, 1984).

Incurvariidae: Powell & Hogue note Baby Stars is a larval host for Three-striped Longhorn (*Adela trigrapha*).

Leptosiphon breviculus. **Mojave Linanthus**. Polemoniaceae. May-August.

Noctuidae: *Annaphila evansi*.

Leptosiphon grandiflorus was *Linanthus grandiflorus*. **California Phlox**. Polemoniaceae. Nectar: unidentified Lady (Grant). Sara Orangetip (my notes from Henry Coe State Park, 9 May 1986). U.C. Riverside Botanic Garden confirms this species attractive to butterflies. April – July.

An easy, popular and adaptable annual. Best in Zones 4-7, 14-17, 10-24.

Leptosiphon jepsonii. **Jepson's Linanthus**. Polemoniaceae. Nectar: Beeflies and bees are primary visitors seen in a study, with three visits by a Pierid butterfly noted (Weber, Jennifer J., and Carol Goodwillie. 2007. "Timing of Self-Compatibility, Flower Longevity, and Potential for Male Outcross Success in *Leptosiphon jepsonii* (Polemoniaceae)." *American Journal of Botany* 94 (8): 1338-343. <http://www.jstor.org/stable/27733303> .

Leptosiphon montanus was *Linanthus montanus*. **Mustang Clover**. Polemoniaceae. April-July.

Noctuidae: *Annaphila spila*, a striking day-flying moth with a red underwing.

Zones 7, 14-24.

Leptosiphon nuttallii was *Linanthus nuttallii*. **Bushy Linanthus** or **Nuttall's Linanthus**. Polemoniaceae. Nectar: Propertius Duskywing and Artful Duskywing (a segregate of Pacuvius Duskywing) by day, and at night The Canary Thorn (*Neoterpes trianguliferata*, Geometridae), Dusky Raisin Moth (*Ephesiodes gilvescentella*, Pyralidae) and a moth identified as *Crambus pascuella* (Pyralidae). June – August.

Leptosiphon parviflorus was *Linanthus parviflorus*. **False Babystars**. Polemoniaceae. Nectar: Edith's Checkerspot and *Cauchas simplicella* (aka *Adela singulella*) are among its flower visitors. March-June.

Incurvariidae: Three-striped Longhorn (*Adela trigrapha*).

Leptosiphon pygmaeus ssp. *pygmaeus*. **Pygmy Leptosiphon**. Polemoniaceae. Nectar: California Ringlet, Edith's Checkerspot, Mylitta Crescent, *Adela* sp., *Schinia* sp. April.

Leptosiphon serrulatus. **Madera Leptosiphon**. Polemoniaceae. Nectar: California Ringlet, Edith's Checkerspot, Mylitta Crescent, *Adela* sp., *Schinia* sp. April-May.

Leptosyne bigelovii was *Coreopsis bigelovii*. **Bigelow's Tickseed**. Asteraceae. Coreopsidae. Nectar: Mylitta Crescent, Arrowhead Blue (David S. Horner). Recommended by Rancho Santa Ana Botanic Garden as a nectar plant for butterflies. February - June.

Sphingidae: Phaeton Primrose Sphinx (*Euproserpinus phaeton*).

Lenz (1956) commends it as an annual bedding plant. Zones 8, 9, 12, 13, 18-24.

Leptosyne californica was *Coreopsis californica*. **California Tickseed**. Asteraceae. Coreopsidae. Nectar: Painted Lady photographed by Frank Model on 9 Jan 2012. February - June.

Considered worthy of cultivation.

Leptosyne calliopsidea was *Coreopsis calliopsidea*. **Leafstem Tickseed**. Asteraceae. Coreopsidae. Showy species likely of value as a butterfly nectar plant. February - June. Considered worthy of cultivation; Lenz (1956) commends is as an annual bedding plant.

Leptosyne douglasii was *Coreopsis douglasii*. **Douglas' Coreopsis**. Asteraceae. Coreopsidae. A showy species, likely a good butterfly nectar plant. March - May.

Noctuidae: *Xanthothrix ranunculi*.

Considered worthy of cultivation.

Leptosyne gigantea was *Coreopsis gigantea*. **Giant Coreopsis**. Asteraceae. Coreopsidae. Good nectar plant – *Growing Native*. January - May.

Zones 15-17, 20-24.

Leptosyne maritima was *Coreopsis maritima*. **Sea Dahlia**. Asteraceae. Coreopsidae. Showy species, likely a good nectar plant. February - June.

Leptosyne stillmanii was *Coreopsis stillmanii*. **Stillman's Tickseed**. Asteraceae. Coreopsidae. 'Good butterfly nectar plant' -- even in England. March - May.

Noctuidae: *Xanthothrix ranunculi* forma *albipuncta*.

Zones 8, 9, 14-17, 19-24.

Lessingia spp. **Lessingia**. Asteraceae. Astereae. Nectar: 'butterflies'.

Lessingia filaginifolia is now *Corethrogyne filaginifolia*. **California Corethrogyne**.

Lessingia germanorum. **San Francisco Lessingia**. Asteraceae. Astereae. Nectar: Orange Sulphur, Acmon Blue. June – November.

Lessingia glandulifera var. *glandulifera*. **Valley Lessingia**. Asteraceae. Astereae. Nectar: Acmon Blue. May – October.

Lessingia hololeuca. **Woolly-headed Lessingia**. Asteraceae. Astereae. Flower visitors: Orange Sulphur, Acmon Blue, Common Checkered-Skipper, Fiery Skipper, Umber Skipper (Alice Cummings), Woodland Skipper (Avis Boutell), Sandhill Skipper. June – October.

Lessingia leptoclada. **Sierra Lessingia**. Asteraceae. Astereae. Said to be "popular with skippers". July – October.

Lewisia rediviva var. *rediviva*. **Bitterroot**. Montiaceae. Nectar: Juba Skipper. March – June.

Leymus cinereus is now *Elymus cinereus*. **Basin Wildrye**.

Leymus condensatus is now *Elymus condensatus*. **Giant Wildrye**.

Leymus triticoides is now *Elymus triticoides*. **Valley Wild Rye**.

Ligusticum apiifolium. **Celery-leafed Lovage**. Apiaceae. Selineae. Nectar: Brown Elfin, Bramble Green Hairstreak, Echo Azure. Reputedly a "pollinator magnet", "excellent nectar plant". June – July. Anise Swallowtail larval host.

Oecophoridae: *Agonopterix chrautis*. *Agonopterix rosaciliella*.

Ligusticum grayi. **Gray's Lovage**. Apiaceae. Selineae. Nectar: at least two species of diurnal moths. June - September.

Larval host for Anise Swallowtail.

Lilium spp. **Lilies**. Liliaceae. Nectar: Swallowtails. Pale Swallowtail.

Lilium columbianum. **Columbia Lily**. Liliaceae. Nectar: Anise Swallowtail, Pale Swallowtail, Clodius Parnassian, Western Sulphur. "Excellent swallowtail nectar plant". June – July.

Lilium humboldtii ssp. *humboldtii*. **Humboldt's Lily**. Liliaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail. June – August.

Lilium humboldtii ssp. *ocellatum*. **Ocellated Lily**. Liliaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail. Marc Kummel photographs document swallowtail pollination! He also photographed California Dogface at nectar on it. May – August.

Lilium kelleyanum. **Kelley's Lily**. Liliaceae. Nectar: Pale Swallowtail (NABA Sightings 27 July 2015, photographs by Steven Glynn; and Ron Wolf). Western Tiger Swallowtail (Las Pilitas Nursery, David Horner). July-August.

Lilium pardalinum. **Leopard Lily**. Liliaceae. Nectar: Western Tiger Swallowtail (Marlin Harms) (fq), Pale Swallowtail (fq), Two-tailed Swallowtail (fq), Monarch, Mourning Cloak, Admirals, a Checkerspot. Noted as especially attractive to female swallowtails in Shasta County. Glenn Fine notes 4 species of Lepidoptera as visiting its flowers in his Siskiyou County study. May – August.

Ssp. *pardalinum*: Zones 7, 14-17. An easy lily to grow deserves wider usage!

Lilium parryi. **Lemon Lily**. Liliaceae. Much visited by White-lined Sphinx, an important pollinator for this rare lily. Also gets Elegant Sphinx (*Sphinx perelegans*) June – September.

Lilium parvum. **Sierra Tiger Lily**. Liliaceae. Pale Swallowtail. June – August.

Lilium washingtonianum. **Washington Lily**. Liliaceae. Nectar: Western Tiger Swallowtail. Pale Swallowtail favorite. June – August.

Limnanthes spp. **Meadowfoam**. Limnanthaceae. Flower visitors include Hesperidae (duskywings, skippers), Lycaenidae (hairstreaks, coppers, blues) and Satyridae (satyrs, ringlets) and diurnal moths of the *Adela* and *Schinia* genera (Thorp & Leong).

Limnanthes douglasii. **Meadowfoam**. Limnanthaceae. Butterfly nectar plant. March – May.

Popular annual in England. With moist soil, grows very well in Zones 7-9, 14-17, 20-24.

Limnanthes douglasii subsp. *rosea*. **Rosy Douglas' Meadowfoam**. Limnanthaceae. Skippers observed among its many flower visitors. [Runquist, Ryan Briscoe. "Community Phenology and Its Consequences for Plant-Pollinator Interactions and Pollen Limitation in a Vernal Pool Plant." 2013. *International Journal of Plant Sciences* 174 (6): 853-62. doi:10.1086/670369]. March – July.

Limnanthes gracilis ssp. *parishii*. **Parish's Meadowfoam**. Limnanthaceae. Nectar: Boisduval's Blue and a newly described tiny subspecies (*peninsularis*) of the Mormon Metalmark in eastern San Diego County (Monroes).

Limonium californicum. **California Sea-lavender**. Plumbaginaceae. Nectar: Wandering Skipper. The Xerces Society and others have noted California Sea Lavender as a good butterfly nectar plant. July – December.

Found at the edges of brackish marsh. With moisture, grows particularly well in Zones 17, 22-24.

Linanthus androsaceus is now *Leptosiphon androsaceus*. **Baby Stars**.

Linanthus bigelovii. **Bigelow's Linanthus**. Polemoniaceae. Nectar: no records but flowers at night, "powerfully sweet-fragrant, sometime nauseously sweet" (Flora and Vegetation of the Mohawk Dunes, Arizona). March – May.

Linanthus californicus was *Leptodactylon californicum*. **Prickly Phlox**. Polemoniaceae. Western Tiger Swallowtail is a consistent pollinator; others at flowers include Pale Swallowtail (a pollinator) (fq), Anise Swallowtail (also a pollinator as documented by Marc Kummel photographs), California Dogface, Variable Checkerspot (Lynn Watson), a hairstreak, Northern Cloudywing, a duskywing, Umber Skipper, Woodland Skipper, Snowberry Clearwing (*Hemaris thetis*), Clark's Day Sphinx, White-lined Sphinx. January – July.

Noctuidae: *Schinia velaris*.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Horticulturist Ted Kipping says: "It should be in the trade everywhere, as it is choice." Requires very good drainage.

Linanthus dianthiflorus. **Ground Pink**. Polemoniaceae. Nectar: Quino Checkerspot (a segregate of Edith's Checkerspot). February – June.

Beautiful flowers, worthy of cultivation.

Linanthus dichotomus. **Evening Snow**. Polemoniaceae. A California study found the formerly recognized northern California subspecies *meridianus*, whose flowers open at noon, receives daytime visits from California Ringlet and Clark's Day Sphinx, bees, flies, and an unidentified butterfly. Noctuid moths visit at night. Rate of visitation found relatively low (Chess, Raguso and LeBuhn). White-lined Sphinx. April – June.

Chess, Sally K.R., Robert A. Raguso, and Gretchen LeBuhn. 2008. "Geographic Divergence in Floral Morphology and Scent in *Linanthus dichotomus* (Polemoniaceae)." *American Journal of Botany* 95 (12): 1652-659. <http://www.jstor.org/stable/41923050> .

Linanthus grandiflorus is now *Leptosiphon grandiflorus*. **California Phlox**.

Linanthus nuttallii is now *Leptosiphon nuttallii*. **Bushy Linanthus** or **Nuttall's Linanthus**.

Linanthus montanus is now *Leptosiphon montanus*. **Mustang Clover**.

Linanthus parviflorus is now *Leptosiphon parviflorus*. **False Babystars**.

Linanthus pungens was *Leptodactylon pungens*. **Granite Prickly Phlox**. Polemoniaceae. Very fragrant flowers attract butterflies, especially Pierid and Lycaenid species, and White-lined Sphinx (*Hyles lineata*, Sphingidae) and possibly other moths. May – August.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Linaria canadensis var. *texana* is now *Nuttallanthus texanus*. **Blue Toadflax**.

Lindernia dubia. **False Pimpernel**. Plantaginaceae. Nectar: Little Yellow, Clouded Sulphur, Eastern Tailed Blue. June – August.

Linnea borealis. **Twin Flower**. Linnaeaceae. Nectar: Dun Skipper. June – August.

John Davis photographed a *Pyrausta subsequalis* possibly ovipositing on it, 24 June:
https://www.flickr.com/photos/johns_pics/41363895980/in/contacts/

Linum lewisii. **Blue Flax**. Linaceae. Nectar: Checkered White, Orange Sulphur, American Lady, Variegated Fritillary, Juniper Hairstreak, Boisduval's Blue, Melissa Blue, Silvery Blue, and Common Checkered-Skipper. Likely, rather secondary as a nectar plant in most locales – Shapiro did not recall seeing a butterfly visit it, Scott notes many visits brief or one only, rates it not popular with butterflies, though showy and common. April – July.

Widely cultivated. Zones 4-6, 15-17, and with attention to irrigation: Zones 7, 14, 18-24.

Linum puberulum. **Plains Flax**. May - July.

Hostplant for Variegated Fritillary (Butterflies of America web site shows a photograph of a caterpillar on it).

Lippa sp. (Syn. for *Phyla*, see). **Frogfruit**.

Lithocarpus densiflorus is now *Notholithocarpus densiflorus*. **Tanoak**. Fagaceae.

Lithophragma sp. Saxifragaceae. Nectar: Margined White.

Geometridae: *Dysstroma mancipata*.

Noctuidae: *Oligia marina*.

Lithophragma affine. **Woodland Star**. Saxifragaceae. March – April.

Prodoxidae: Foodplant for *Greya politella*, a moth that passively pollinates it in the process of oviposition on the flower's ovary (the caterpillars, when very small, eat some of the seeds). *Greya obscura* works the same.

Lithophragma bolanderi. **Bolander's Woodland Star**. Saxifragaceae. February – July.
Prodoxidae: *Greya politella*.

Lithophragma cymbalaria. **Mission Star**. Saxifragaceae. March – May.

Prodoxidae: *Greya obscura*. *Greya politella*.

Lithophragma glabrum. **Bulbous Woodland Star**. Saxifragaceae. March – July. Travis Owen observed and photographed small moths visiting the flowers.

Lithophragma heterophyllum. **Hill Star**. Saxifragaceae. Nectar: Margined White. February – June.

Prodoxidae: *Greya obscura*. *Greya politella*.

Lithophragma parviflorum. **Prairie Star**. Saxifragaceae. Nectar: Sara Orangetip. March – July.

Prodoxidae: *Greya obscura*. *Greya politella*. The latter and this plant the subject of: Thompson, John N., and Catherine C. Fernandez. "Temporal Dynamics of Antagonism and Mutualism in a Geographically Variable Plant-Insect Interaction." *Ecology* 87, no. 1 (2006): 103-12.
<http://www.jstor.org/stable/20068914>.

Lithophragma tenellum. **Slender Woodland Star**. Saxifragaceae. May – July.

Prodoxidae: *Greya politella*.

Lithospermum spp. **Gromwell**. Boraginaceae.

Depressariidae: Gray Ethmia (*Ethmia monticola*) eats *Lithospermum canescens* elsewhere with other *Lithospermum* species likely hosts for it (Moths of North Dakota).

Lithospermum californicum. **California Gromwell**. **California Stoneseed**. Boraginaceae. Rob Santry photographed an Indra Swallowtail at nectar on what appears to be California Stoneseed. Shapiro finds it “an excellent all-around butterfly plant in the Sierra Nevada – all families but a special favorite of checkerspot.” April – June.

Lithospermum ruderale. **Western Gromwell**. **Lemonweed**. Boraginaceae. Nectar: Large Marble, Gray Hairstreak, Silvery Blue. Calliope Hummingbird also visits flowers. April – June.

Sesiidae: *Carmenta verecunda*. The moths mostly found at elevations much higher than Lemonweed ranges, where, likely, an unknown more preferred host lives.

Tortricidae: *Sparganothis tunicana*.

Lobaria pulmonaria. **Lungwort**. Lobariaceae. Not a vascular plant, but a large foliose lichen. It often grows on trees, especially oaks, and is a foodplant for the Little White Lichen Moth (*Clemensia albata*, Arctiidae).

Lobelia cardinalis var. *pseudosplendens*. **Cardinal Flower**. Campanulaceae. Nectar: Pipevine Swallowtail, Black Swallowtail, Two-tailed Swallowtail, Cloudless Sulphur, Large Orange Sulphur, Sleepy Orange, Checkered White, Gulf Fritillary, American Snout, and White-lined Sphinx. Great for hummingbirds. August – October.

Lobelia dunnii var. *serrata*. **Blue Lobelia**. Campanulaceae. Nectar: Western Tiger Swallowtail (fq), Pale Swallowtail, Orange Sulphur, Monarch, Painted Lady (fq), Northern White-Skipper, Achemon Sphinx (*Eumorpha achemon*). Las Pilitas Nursery: “butterflies large and small love it”. Hummingbirds, too. July – October.

Performed well in heavy clay in a client’s garden, spreading readily. Zones 14-17, 19-24.

Lomatium spp. **Biscuitroot**. Apiaceae. Selineae. Nectar: Anise Swallowtail, Common Buckeye, Field Crescent, Common Ringlet, Western Pine Elfin, Moss’s Elfin, Brown Elfin, Bramble Green Hairstreak, Gray Hairstreak, Thicket Hairstreak, Silvery Blue, Mission Blue [a segregate of Boisduval’s Blue], Sonoran Blue, Two-banded Checkered-Skipper, Dreamy Duskywing, Three-striped Longhorn (*Adela trigrapha*), diurnally active moths related to *Neoscythris confinis* (Scythrididae) (Powell & Opler, p. 80).

Larval hosts for Anise Swallowtail and Indra Swallowtail.

Lomatium californicum. **Chu-chu-pate**. Apiaceae. Selineae. April - June.

Important hostplant for Anise Swallowtail and Indra Swallowtail.

Tortricidae: *Sparganothis senecionana*.

Oecophoridae: *Depressaria constancei*.

Large, attractive, in cultivation.

Lomatium canbyi. **Canby’s Lomatium**. Apiaceae. Selineae. April – May.

Lomatium caruifolium. **Alkali Parsnip**. Apiaceae. Selineae. March – May.

Oecophoridae: *Agonopterix oregonensis*.

Lomatium congdonii. **Congdon’s Lomatium**. Apiaceae. Selineae.

A photograph by Jennifer Poore on CalPhotos shows Anise Swallowtail caterpillars on what is identified as this species.

Lomatium dasycarpum. **Woollyfruit Desertparsley**. Apiaceae. Selineae. Nectar: Edith’s Checkerspot, Bramble Green Hairstreak, San Bruno Elfin (a segregate of Moss’s Elfin), Brown Elfin, Mylitta Crescent, Three-striped Longhorn (*Adela trigrapha*), .

subsp. *dasycarpum*. March - June.

subsp. *tomentosum*. March - May.

Larval host for Anise Swallowtail.

Lomatium dissectum. **Desert Parsley**. Apiaceae. Selineae. Nectar: Western Pine Elfin (John Davis), Sheridan’s Hairstreak, no doubt others.

var. *dissectum*. May – July.

var. *multifidum*. April - July.

Larval host for Anise Swallowtail and Indra Swallowtail.

Oecophoridae: *Depressaria betina*.

Prodoxidae: *Greya subalba*.

Lomatium grayi. **Gray's Lomatium**. Apiaceae. Selineae. Nectar: Indra Swallowtail, Mourning Cloak, Brown Elfin, Western Pine Elfin, Gray Hairstreak, Thicket Hairstreak, Sheridan's Hairstreak, Common Sootywing, Propertius Duskywing (Caitlin LeBar, some question as to species of Lomatium ID). May - June.

Gray's Lomatium is a hostplant for one of the smallest Indra Swallowtail races (Whaley).

Prodoxidae: *Greya subalba*.

Lomatium hallii. **Hall's Lomatium**. Apiaceae. Selineae. Nectar: Anise Swallowtail, Brown Elfin, Western Pine Elfin, Moss's Elfin (fq) – and “Lomatiums in general” (Eugene-Springfield Oregon NABA chapter). May - August.

Lomatium howellii. **Howell's Biscuit Root**. Apiaceae. Selineae. May - June.

Larval host for Anise Swallowtail and Indra Swallowtail.

Lomatium insulare. **San Nicolas Island Biscuitroot**. Apiaceae. Selineae. Nectar: Edith's Checkerspot, and a moth. February - April.

Lomatium lucidum. **Shiny Biscuitroot**. Apiaceae. Selineae. April- May.

A larval host for Indra Swallowtail (Edward's).

Lomatium macrocarpum. **Bigseed Biscuitroot**. Apiaceae. Selineae. Nectar: Edith's Checkerspot, Western Pine Elfin, Echo Azure, Boisduval's Blue (Yake). Earliest blooming, a key nectar source on Jasper Ridge for Edith's Checkerspot: Murphy, Dennis D. "Butterflies and Their Nectar Plants: The Role of the Checkerspot Butterfly *Euphydryas Editha* as a Pollen Vector." 1984. *Oikos* 43 (1): 113-17. doi:10.2307/3544252. April - June.

Larval host for Anise Swallowtail and Indra Swallowtail.

Depressariidae: *Depressaria whitmani* (Wikipedia).

Prodoxidae: *Greya subalba*.

Lomatium marginatum. **Butte Desert-parsley**. Apiaceae. Selineae. Nectar: Spring White (Scott). March – May.

Larval host for Indra Swallowtail and Anise Swallowtail.

Oecophoridae: *Agonopterix oregonensis*.

Lomatium martindalei. **Coast Range Lomatium**. Apiaceae. Selineae. May – June.

Larval host for Anise Swallowtail (Mountain Plants of the Western Cascades). Probably a host for Indra Swallowtail (Warren, 2005).

Lomatium nudicaule. **Pestle Parsnip**. Apiaceae. Selineae. Nectar: Brown Elfin, Sheridan's Green Hairstreak (Slichter photographs). April - June.

Hostplant for Anise Swallowtail.

Oecophoridae: *Agonopterix oregonensis*. *Depressaria betina*.

Tortricidae: *Sparganothis tunicana*.

Lomatium parryi. **Parry's Lomatium**. Apiaceae. Selineae. Nectar: Anise Swallowtail, Indra Swallowtail [aka Martin's Swallowtail – also gets nectar from thistles (*Cirsium* spp.)], Painted Lady. May - June.

Hostplant for Anise Swallowtail and Indra Swallowtail [Martin's Swallowtail].

Lomatium torreyi. **Sierra Biscuitroot**. Apiaceae. Selineae. May - August.

Arctiidae: Red-shouldered Ctenucha (*Ctenucha multifaria*), a colorful species.

Lomatium triternatum. **Nineleaf Biscuitroot**. Apiaceae. Selineae. Nectar: Important for Taylor's Checkerspot (a segregate of Edith's Checkerspot) in western Oregon (B. Newhouse) and in Washington (Hays). Brown Elfin (Paul Slichter). Bramble Green Hairstreak. Sheridan's Hairstreak. Puget Blue (segregate of Boisduval's Blue). April - July.

Hostplant for Anise Swallowtail. Larval host for Indra Swallowtail, but not documented for California populations (Whaley).

Oecophoridae: *Depressaria betina*.

Prodoxidae: *Greya subalba*.

Lomatium utriculatum. **Bladder Parsnip**. Apiaceae. Selineae. Nectar: Common Buckeye, Common Ringlet, Edith's Checkerspot (fq), Northern Checkerspot (Alice Cummings), Mylitta Crescent, Western Brown Elfin, Moss's Elfin, San Bruno Elfin (a primary nectar source), Gray Hairstreak, Juniper Hairstreak, Thicket Hairstreak, Nelson's Hairstreak, Dotted Blue, Acmon Blue, Sonoran Blue, Flame Longhorn and two other day-flying moths. (Likely serves all species listed under "Lomatium spp" above). February - May.

Larval host for Anise Swallowtail.

Oecophoridae: *Agonopterix oregonensis*. *Depressaria besma*.

Tortricidae: *Sparganothis tunicana*.

In cultivation.

Lomatium vaginatum. **Broadsheaf Desertparsley**. Apiaceae. Selineae. April – May.

Oecophoridae: *Depressaria moya*.

Lonicera spp. **Honeysuckle**. Caprifoliaceae. Nectar: Pipevine Swallowtail, Variable Checkerspot, Edith's Checkerspot, Silver-spotted Skipper, Western Snowberry Clearwing.

Sphingidae: Western Snowberry Clearwing (*Hemaris thetis* [Haggard]).

Geometridae: *Pero radiosaria*.

Noctuidae: *Pleromelloida conserta*.

Tortricidae: *Argyrotaenia* sp. Oblique-banded Leafroller (*Choristoneura rosaceana*). Dusky Leafroller (*Orthotaenia undulana*). Pandemis Leafroller (*Pandemis pyrusana*).

Uraniidae: Gray Scoopwing (*Callizzia amorata*).

Ypsolophidae: *Euceratia castella* – a leaf tier (Powell & Opler, p. 108). *Ypsolopha dentiferella* – a suspected hostplant (Powell & Opler, p. 107).

Lonicera ciliosa. **Orange Honeysuckle**. Caprifoliaceae. Western Tiger Swallowtail and Pale Swallowtail visit the flowers. Bumblebees. Hummingbird pollinated. May – June.

Noctuidae: Rusty Shoulder Knot (*Aseptis binotata*). Speckled Green Cutworm (*Orthosia hibisci*).

Best in Zones 4-6.

Lonicera hispidula. **California Honeysuckle**. Caprifoliaceae. Nectar: Swallowtails, Pale Swallowtail (fq), Pipevine Swallowtail, Painted Lady, Variable Checkerspot, Mournful Duskywing, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae). Bumblebees. May – June.

Arctiidae: Painted Tiger Moth (*Arachnis picta*) photographed ovipositing on a stem of it (Marc Kummel).

Elachistidae: *Perittia passula*, a leaf-blotch miner (Powell & Opler, p. 71).

Sphingidae: Western Snowberry Clearwing (*Hemaris thetis*) caterpillar found eating a plant rescued from a road construction site in Grass Valley (Cindy Rubin); Haggard finds California Honeysuckle a hostplant for it.

Geometridae: *Tetracis moresiani* [Sala].

Sala, Frank P. 1971. "*Synaxis moresiani* Sala; a new *Synaxis* from southern California." *Journal of Research on the Lepidoptera* 9 (3): 185 -190.

Note: best garden performance in Zones 7 and 14. Often sub-par in Zones 15-16.

Lonicera interrupta. **Chaparral Honeysuckle**. Caprifoliaceae. April – May.

Larval host for Edith's Checkerspot. Zones 7, 14-17.

Lonicera involucrata. **Twin Berry**. Caprifoliaceae. Nectar: Anise Swallowtail, Western Tiger Swallowtail, Silvery Blue. Bumblebees. Great for hummingbirds. May – July.

After a severe storm (October 2009), butterfly gardener Barbara Deutsch, at Tomales Bay, saw Anglewing [Comma] butterflies lined up along cracks in its battered stems avidly feeding on liquids in the injured portions of the plants.

Among larval hosts for Edith's Checkerspot (likely secondary or for later instars). Mike Patterson noted oviposition by Mourning Cloak on it (NorWestLeps #2542).

Sphingidae: Schmidt (2009), British Columbia, reports "oviposition flight behavior" of female Western Snowberry Clearwing (*Hemaris thetis*), indicating Twin Berry a likely hostplant.

Uraniidae: Tatum found small colonies of Gray Scoopwing (*Callizzia amorata*) caterpillars on "well-eaten leaves" of Twin Berry on southern Vancouver Island.

Pterophoridae: Snapdragon Plume Moth (*Amblyptilia pica*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Zones 5, 14-17.

Lonicera subspicata. **Santa Barbara Honeysuckle**. Caprifoliaceae. . Likely, the "honeysuckle" Bouton finds being "swarmed upon" by California Dogface (SoWestLep #2021). Nectar: Gray Hairstreak (Kummel). Acmon Blue, Lupine Blue, Boisduval's Blue, Melissa Blue -- about 25 specimens of these blues on one plant, var. *denudata*, in full flower! (SoWestLep #782). Mournful Duskywing (Nature Shutterbug). Rancho Santa Ana Botanic Garden lists as a butterfly plant. "Nectar for a number of butterflies" – Plants of the San Gabriel Mountains. Fragrant.

Var. *denudata*. June- July. Zones 7, 14-24.

Var. *subspicata*. April – May. Zones 14-24.

Sphingidae: Western Snowberry Clearwing (*Hemaris thetis*).

Noctuidae: *Behrensia conchiformis*. Ashy Pleromelloida (*Pleromelloida cinerea*). *Sympistis ragani*.

Lotus sp. **Lotus**. Fabaceae. Loteae. Nectar: Quino Checkerspot (a segregate of Edith's Checkerspot), looking for early season flowers.

Most of our former *Lotus* species now re-assigned to *Acmispon* and *Hosackia*.

Lotus aboriginus is now *Hosackia rosea*. **Rose Flowered Lotus**.

Lotus argophyllus is now *Acmispon argophyllus*. **Silver Bird's-foot Trefoil**.

Lotus argophyllus var. *adsurgens* is now *Acmispon argophyllus* var. *adsurgens*. **San Clemente Island Bird's-foot Trefoil**.

Lotus crassifolius is now *Hosackia crassifolia*. **Big Deervetch.**

Lotus denticulatus is now *Acmispon denticulatus*. **Toothed Lotus.**

Lotus formosissimus now *Hosackia gracilis*. **Seaside Bird's Foot Trefoil.**

Lotus grandiflorus now *Acmispon grandiflorus*. **Large Leaved Lotus.**

Lotus humistratus now *Acmispon brachycarpus*. **Colchita.**

Lotus micranthus now *Acmispon parviflorus*. **Hill Lotus.**

Lotus nevadensis now *Acmispon nevadensis*. **Nevada Deervetch.**

Lotus nuttallianus now *Acmispon prostratus*. **Beach Lotus.**

Lotus oblongifolius var. *oblongifolius* now *Hosackia oblongifolia* var. *oblongifolia*. **Streambank Bird's-foot Trefoil.**

Lotus procumbens now *Acmispon procumbens*. **Silky California Broom.**

Lotus purshianus now *Acmispon americanus*. **Spanish Clover.**

Lotus rigidus now *Acmispon rigidus*. **Desert Lotus.**

Lotus scoparius now *Acmispon glaber*. **Chaparral Broom. Deerweed.**

Lotus strigosus now *Acmispon strigosus*. **Bishop Lotus.**

Lotus unifoliolatus. **American Bird's-foot Trefoil.** Fabaceae. Loteae. June-August. [Not in the 2012 print *Jepson Manual* but treated online at CalFlora.]

Larval host for Afranius Duskywing and Acmon Blue.

Pyralidae: Limabean Pod Borer (*Etiella zinckenella*).

Lotus wrangelianus is now *Acmispon wrangelianus*. **Calf Lotus.**

Ludwigia peploides. **Water Primrose.** Onagraceae. Nectar: Acmon Blue (Alice Cummings), Sachem, Eufala Skipper – slight value. May-November.

Sphingidae: Banded Sphinx (*Eumorpha fasciatus*), as, likely, all the other *Ludwigia* species.

Luina hypoleuca. **Silverback Luina.** Asteraceae. Senecioneae. Late flowers patronized by butterflies – photographs show a white and a skipper on one plant and a Juba or Common Branded Skipper on another (Mountain Plants of the Western Cascades web site). June – September.

Lupinus spp. **Lupines.** Fabaceae. Genisteae. Nectar: Pipevine Swallowtail, Anise Swallowtail, Orange Sulphur, American Lady, Painted Lady, West Coast Lady, Common Ringlet, Boisduval's Blue, Echo Azure, Gray Hairstreak, Thicket Hairstreak, and Skippers. Scott rates Lupines generally unpopular as butterfly nectar plants, the nectar difficult to obtain; nevertheless, visited to some extent. Shapiro agrees.

Many species are likely caterpillar plants especially for Painted Lady, Gray Hairstreak and Acmon Blue. Some are hosts for Western Sooty Hairstreak and Sagebrush Sooty Hairstreak.

An analysis of Boisduval's Blue feeding on lupine here:

[http://images.peabody.yale.edu/lepsoc/jls/1960s/1961/1961-15\(1\)34-Downey.pdf](http://images.peabody.yale.edu/lepsoc/jls/1960s/1961/1961-15(1)34-Downey.pdf)

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*). Painted Tiger Moth (*Arachnis picta*).

Cossidae: Lupine Borer (*Comadia bertholdi*). *Comadia intrusa*.

Erebidae: *Lygephila victoria* lab-reared on lupines, but seems to be a snowberry feeder.

Noctuidae: Lupine Dagger (*Acronicta lupini*). *Acronicta spinea*. *Euxoa declarata*. Garden Cutworm (*Fishia discors*). *Hydraecia obliqua* (Crumb, Samuel Ebb. *The Larvae of the Phalaenidae [Noctuidae]*. U.S. Department of Agriculture Technical Bulletin 1135: 1-356, 1956).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leaf-tier (*Cnephasia longana*). *Cydia prosperana* – Powell & Opler note it associated with bush lupines, p. 143). *Epinotia infuscana*. *Grapholita lana*. *Hystrichophora stygiana* associated with lupines; possibly hostplants for it.

Lupinus albicaulis. **Sickle-keeled Lupine**. Fabaceae. Genisteae. Nectar: Boisduval's Blue. Bumblebees. May – July.

A hostplant for Western Sulphur (James & Nunnallee), Boisduval's Blue and Western Sooty Hairstreak. Garden worthy but little known in cultivation.

Lupinus albifrons. **Silver Bush Lupine**. Fabaceae. Genisteae. Nectar: Brown Elfin, Boisduval's Blue, California Ringlet, Mournful Duskywing (Paul Johnson). 'Great' for butterflies (Las Pilitas Nursery). Blues, painted ladies, gray hairstreaks, skippers (Yerba Buena Nursery). Bumblebees. March – June.

A favored hostplant for the Mission Blue [a segregate of Boisduval's Blue] on Mt. San Bruno, var. *collinus*, Twin Peaks, 1972. Larval host for Boisduval's Blue (Berkeley), Arrowhead Blue and Painted Lady. "Great as a host plant" (Shapiro).

Zones 7, 15-16 for var. *abramsii*. Zones 7, 14-17, 19-24 for var. *albifrons*. Zones 7, 14-24 for var. *collinus*. Zones 14-17, 22-24 for var. *douglasii*.

Gelechiidae: *Proaerema nigrella*. *Chionodes braunella*.

Pyralidae: *Interjectio denticulella* (Powell & Opler, p. 190) – feeds on flowers.

Scythrididae: *Rhamphura ochristriata*.

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*). *Epinotia infuscana*. *Grapholita imitativa*. *Sparganothis senecionana*. Tortricidae Foodplant Database says San Francisco Tree Lupine Moth (*Grapholita edwardsiana*) possible; reared from a lupine of uncertain identity, thought to be Silver Bush Lupine.

Lupinus andersonii. **Anderson's Lupine**. Fabaceae. Genisteae. June – September.

Larval host for Boisduval's Blue and Sooty Gossamer-wing.

Lupinus arboreus. **Yellow Bush Lupine**. Fabaceae. Genisteae. Bumblebees. April – July.

Larval host for Silvery Blue, Mission Blue [a segregate of Boisduval's Blue], West Coast Lady, Painted Lady also the extinct Xerces Blue.

Arctiidae: Ranchman's Tiger Moth (*Arctia virginalis*) – a large, colorful early summer day-flying moth. Wandering Tiger Moth (*Spilosoma vagans*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Pyralidae: Limabean Pod Borer (*Etiella zinckenella*). Genista Broom Moth (*Uresiphita reversalis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia infuscana* (bores into growing tips). San Francisco Tree Lupine Moth (*Grapholita edwardsiana*).

Hepialidae: Lupine Ghost Moth (*Phymatopus californicus* – its primary hostplant at Bodega Bay).

Cosmopterigidae: Sweetclover Root Borer Moth (*Walshia miscecolorella*).

Gelechiidae: *Chionodes braunella*. *Chionodes nanodella* – eats decaying leaves at the base of the plant.

Zones 4-5, 15-17, 22-23. Used in revegetation, spreads readily.

Lupinus arbustus. **Spur Lupine**. Fabaceae. Genisteae. Nectar: Boisduval's Blue. May – July.

Hostplant for Boisduval's Blue, Shasta Blue, Half-Moon Hairstreak (Kenneth Davenport), and Western Sooty Gossamer-wing. Considered garden worthy.

Lupinus argenteus. **Silvery Lupine**. Fabaceae. Genisteae. Scott notes flower visits by Queen Alexandra's Sulphur, American Lady, Weidemeyer's Admiral, Reakirt's Blue, Common Sootywing, Silver-spotted Skipper, Afranius Duskywing, Persius Duskywing, Tawny-edged Skipper, Uncas Skipper, most noted only once. Bumblebees. May – October.

Foodplant for Painted Lady, Gray Hairstreak, Half-Moon Hairstreak (Kenneth Davenport), Echo Azure, Silvery Blue, Arrowhead Blue, Melissa Blue, Boisduval's Blue, Afranius Duskywing, Persius Duskywing.

Lupinus argenteus var. *heteranthus* also known as *Lupinus caudatus* and *Lupinus inyoensis*. **Silvery Lupine**. An Arrowhead Blue appears to be at nectar on it in a photograph by Christopher Christie. May – September.

Painted Lady hostplant, noted in 1992.

1997 Season Summary reports an association with Sooty Gossamer-wing in Lassen County, early in the season. Boisduval's Blue in Lee Vining, CA.

Lupinus argenteus var. *meionanthus* was *Lupinus meionanthus*. **Lake Tahoe Lupine**. Fabaceae. Genisteae. July- August.

Foodplant for Sooty Gossamer-Wing and Boisduval's Blue (Lake Tahoe, Sonora Pass).

Lupinus arizonicus. **Arizona Lupine**. Fabaceae. Genisteae. March-May.

A larval host for Painted Lady (Monroes).

Sphingidae: White-lined Sphinx (*Hyles lineata*) (*Flora and Vegetation of the Mohawk Dunes, Arizona*, Fig. 10).

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*). Beet Armyworm (*Spodoptera exigua*). Cabbage Looper (*Trichoplusia ni*). Considered garden worthy.

Lupinus bicolor. **Miniature Lupine**. Fabaceae. Genisteae. Nectar: Silvery Blue (<https://www.inaturalist.org/observations/10491291>). Kern Primrose Sphinx Moth. Bumblebees. March – June.

Larval host for Orange Sulphur, Painted Lady, Acmon Blue, Eastern Tailed Blue, Silvery Blue, Mission Blue [a segregate of Boisduval's Blue], and Boisduval's Blue.

Tortricidae: *Grapholita caeruleana*.

Zones 7-9, 14-17, 20-24. Used in revegetation.

Lupinus breweri. **Brewer's Lupine**. Fabaceae. Genisteae. Bumblebees. June – August.

Foodplant for Shasta Blue.

Lupinus chamissonis. **Dune Bush Lupine**. Fabaceae. Genisteae. March – July.

Larval host for Echo Azure and for Boisduval's Blue (*Plebejus icarioides moroensis*) in the Morro Bay area and the beach in San Francisco.

Arctiidae: Painted Tiger Moth (*Arachnis picta*).

Cosmopterigidae: Sweetclover Root Borer Moth (*Walshia miscecolorella*).

Gelechiidae: *Aproaerema nigrella*. *Chionodes braunella*. *Syncopacma metadesma*.

Pyalidae: Genista Broom Moth (*Uresiphita reversalis*).

Scythrididae: Sand-dune Grasshopper Moth (*Areniscythris brachypteris*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia infuscana* noted on a plant thought to be Dune Bush Lupine, with identity of the plant uncertain.

Zones 15-17, 22-24.

Lupinus concinnus subsp. *orcuttii*. **Orcutt's Lupine**. Fabaceae. Genisteae.

Hostplant for Painted Lady, noted in 1992.

Lupinus croceus. **Mt. Eddy Lupine**. Fabaceae. Genisteae. Bumblebees. May – August.

Larval host for the Sooty Hairstreak (aka Sooty Gossamer-wing). Mostly found in the Trinities and Mt. Eddy region.

Considered worthy of cultivation.

Lupinus densiflorus var. *glareosus* is now *Lupinus microcarpus* var. *horizontalis*. **Chick Lupine**.

Lupinus elatus. **Silky Lupine**. Fabaceae. Genisteae. June – August.

Foodplant for Boisduval's Blue.

Lupinus elatus. **Silky Lupine**. Fabaceae. Genisteae. David Horner photographed a 'San Gabriel Mountains' Arrowhead Blue in association with it, Mount Islip, Los Angeles National Forest, Los Angeles County. July - August.

Lupinus excubitus. **Grape Soda Lupine**. Fabaceae. Genisteae. Ken Davenport finds Lupine Blue infrequently at nectar on Grape Soda Lupine, a possible hostplant for this misnamed species whose caterpillars usually eat buckwheats (Davenport, NorWestLeps #3953, #3957). Bumblebees. Varieties flower in the range of April – July.

Jane Strong notes many Boisduval's Blues [Evius] "hovering and dancing around the *Lupinus excubitus* var. *austromontanum* in June 2001 in Angeles National Forest at about 7,000 feet (SoWestLep #1397). An association with Boisduval's Blue (evius) noted in 1974 Season Summary.

Grape Soda Lupine a consistent Painted Lady hostplant in Inyo County in the 1991 migration year. Hostplant for Boisduval's Blue (Evius Blue, Santana Blue), Arrowhead Blue. Monroes: Silvery Blue and Melissa Blue, also.

L. e. var. *excubitus* and others: considered garden-worthy. *L. e.* var. *hallii*: Zones 14-16, 18-24.

Lupinus flavoculatus. **Yelloweyes**. Fabaceae. Genisteae. April – June.

Hostplant for Painted Lady, noted in 1992.

Lupinus formosus. **Summer Lupine**. Fabaceae. Genisteae. Hedgerow Farms find it particularly good bumblebee forage in July. April – September.

Hostplant for Painted Lady, Boisduval's Blue, Silvery Blue and Arrowhead Blue. A favorite Mission Blue [segregate of Boisduval's Blue] hostplant on Mt. San Bruno.

Zones 7, 14-16, 22-24.

Lupinus fulcratus. **Greenstipule Lupine**. Fabaceae. Genisteae. Bumblebees. May – September. Larval host for Boisduval's Blue (Meyers and Fallen Leaf Lake).

Lupinus hirsutissimus. **Stinging Lupine. Nettle Lupine**. Fabaceae. Genisteae. Bumblebees. March – May.

Larval host for Arrowhead Blue.

Zones 7-9, 14, 18-23. Used in revegetation.

Lupinus latifolius. **Broad-leaved Lupine**. Fabaceae. Genisteae. Pale Swallowtail, Persius Duskywing among butterflies may sometimes visit its fragrant flowers. Pojar (1970) finds them “nectarless”, pollinated by bumblebees. Varieties in flower from April – September; the most widespread, var. *latifolius*, flowers April – July.

Hostplant for Western Sulphur, Boisduval's Blue (Weaverville and Boggs Lake, Lake County) and Persius Duskywing. Likely for Silvery Blue, also.

Choreutidae: *Caloreas augustella*.

Tortricidae: San Francisco Tree Lupine Moth (*Grapholita edwardsiana*). *Grapholita lana*.

Zones 4-6, 15-18.

Lupinus lepidus. **Pacific Lupine** or Tidy Lupine. Fabaceae. Genisteae. July - August.

Kenneth Davenport reports it is a host plant for Half-Moon Hairstreak.

Lupinus lepidus var. *lobbii* was *Lupinus lyallii*. **Lobb's Lupine**. Fabaceae. Genisteae. July – August.

Hostplant for the Shasta Blue.

Lupinus leucophyllus. **Velvet Lupine**. Fabaceae. Genisteae. May – August.

Foodplant for Boisduval's Blue.

Lupinus littoralis. **Seashore Lupine**. Fabaceae. Genisteae. Nectar: Echo Azure, Silvery Blue. Bumblebees. May – August.

Noctuidae: *Euxoa wilsoni* (PNW Moths).

Lupinus longifolius. **Bush Lupine**. Fabaceae. Genisteae. Bumblebees. April – June.

Larval host for Painted Lady and Arrowhead Blue.

Zones 14-17.

Lupinus lyallii is now *Lupinus lepidus* var. *lobbii*. **Lobb's Lupine**.

Lupinus magnificus. **Magnificent Lupine**. Fabaceae. Genisteae. April – June.

Hostplant for Painted Lady, noted in 1992.

Lupinus meionanthus is now *Lupinus argenteus* var. *meionanthus*. **Lake Tahoe Lupine**.

Lupinus microcarpus var. *densiflorus*. **Chick Lupine**. Fabaceae. Genisteae. Behr's Silvery Blue. April – June.

Lupinus microcarpus is becoming *Lupinus subvexus*. **Chick Lupine**. Fabaceae. Genisteae. March – June.

Larval host for Painted Lady (noted as unusual in 1986 Season Summary), Echo Azure, Silvery Blue, Boisduval's Blue.

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: Hop Vine Borer (*Hydraecia immanis*).

For var. *densiflorus*: zones 7-11, 14-17, and 19-24. For *L. m.* var. *microcarpus*: Zones 7-9, 14-17, 19-24.

Lupinus microcarpus var. *horizontalis*. **Chick Lupine**. Fabaceae. Genisteae. April - May.

Hostplant for Echo Azure, Boisduval's Blue (Frazier Park), Silvery Blue.

Lupinus nanus. **Sky Lupine**. Fabaceae. Genisteae. Mylitta Crescent (Ron Wolf), Mission Blue (segregate of Boisduval's Blue) photographed at its flowers, Sleepy Duskywing (iNaturalist). Bumblebees. March – June.

Foodplant for Eastern Tailed Blue.

Lupinus onustus. **Northern Lupine**. Fabaceae. Genisteae. April – September.

Silvery Blue in association with it, Del Norte County, reported in 2011 Season Summary.

Lupinus polyphyllus. **Bigleaf Lupine**. Fabaceae. Genisteae. Paul Severns finds rare nectar visits by Western Tiger Swallowtail, Propertius Duskywing, and Persius Duskywing. Likely the draw fragrance, not nectar. Bumblebees. May – August.

Hostplant for Orange Sulphur (Haggard); also Half-Moon Hairsteak, at least in Nevada (Kenneth Davenport), Anna Blue in Sierra Nevada (Shapiro); and Silvery Blue (HOSTS). Likely as well for Painted Lady, Gray Hairstreak, Acmon Blue, Western Tailed Blue and Echo Azure.

L. p. var. *burkei*: Zones 7, 15-16, 18. *L. p.* var. *pallidipes*: garden-worthy. *L. p.* var. *polyphyllus*: Zones 6-7, 15-17.

Lupinus polyphyllus var. *burkei* was *L. p.* subsp. *superbus*. **Burke's Lupine**. Fabaceae. Genisteae.

Associated with Silvery Blue (*behrii*): Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." 1977. *The Great Basin Naturalist* 37 (4): 443-52.
<http://www.jstor.org/stable/41711594>.

Lupinus pusillus var. *intermontanus*. **Intermountain Lupine**. Fabaceae. Genisteae. May – June.

Hostplant for Painted Lady, noted in 1992.

Lupinus rivularis. **Riverbank Lupine**. Fabaceae. Genisteae. Nectar: Anise Swallowtail, Silvery Blue. Bumblebees. March – June.

Stewart Wechsler observed oviposition on it by Painted Lady (NorWestLeps #2536).

Zones 4-5, 15-17.

Lupinus sericatus. **Cobb Mountain Lupine**. Fabaceae. Genisteae. March – June.

Pyralidae: Many caterpillars of the Genista Broom Moth (*Uresiphita reversalis*, Crambidae) on it in a San Jose garden. A native snout-moth that specializes in eating legumes, including the invasive introduced French Broom, *Genista monspessulana* – thus the unlikely common name for a native moth. Likely on other legumes.

Annie's Annuals notes Cobb Mountain Lupine is a beautiful species that is easily cultivated.

Lupinus sparsiflorus. **Coulter's Lupine**. Fabaceae. Genisteae. Bumblebees. March – May.

A favored Painted Lady larval host on Cedros Island.

Used in revegetation.

Lupinus subvexus aka *Lupinus microcarpus*. **Chick Lupine**. Fabaceae. Genisteae. Bumblebees.

Noctuidae: Hop Vine Borer (*Hydraecia immanis*).

Lupinus succulentus. **Arroyo Lupine**. Fabaceae. Genisteae. Nectar: "many" butterflies – Plants of the San Gabriel Mountains. Bumblebees. February – May.

Hostplant for Orange Sulphur, Painted Lady, West Coast Lady, Silvery Blue (Behr's), and Boisduval's Blue.

Arctiidae: a preferred hostplant for the striking Painted Tiger Moth (*Arachnis picta*) (Powell & Opler). An easily cultivated annual for Zones 7-9, 14-24. Commonly grown in gardens and for revegetation.

Lupinus truncatus. **Collar Lupine**. Fabaceae. Genisteae. March – May.

Koji Shiraiwa saw Smoky Arrowhead Blue ovipositing on Collar Lupine in the Laguna Mountains and two weeks later found several of its caterpillars feeding on its flowers.

Zone 18. Considered exacting in its cultural requirements.

Lupinus variicolor is becoming *Lupinus versicolor*. **Manycolor Lupine, Varied Lupine.** Fabaceae. Genisteae. Bumblebees. April-July.

Foodplant for Boisduval's Blue, Silvery Blue. A secondary larval host for the Mission Blue [a segregate of Boisduval's Blue] on Mt. San Bruno.

Gelechiidae: *Approaerema nigrella*. *Chionodes braunella*.

Lycium sp. **Wolfberry.** Solanaceae. Nectar: Orange Sulphur (Austins, Clark County, Nevada).

Lycium andersonii. **Anderson Thornbush.** Solanaceae. Nectar: Ford's Swallowtail, Painted Lady, Sagebrush Checkerspot, Desert False Underwing (*Drasteria tejonica*, Noctuidae). Bob Allen: Ridings' Forester (*Alypia ridingsi*, Noctuidae) (fq), *Annaphila astrologa* (Noctuidae) (fq), and Phaeton Sphinx (*Euproserpinus phaeton*, Sphingidae) (fq). Black-chinned Hummingbird. March – May.

Lycium brevipes. **Baja Wolfberry.** Solanaceae. Nectar: Pipevine Swallowtail (Arizona). Desert Orangetip (Christopher Christie), Southern Dogface. Mexican Yellow. Sleepy Orange. Monarch, Queen (fq). Painted Lady, West Coast Lady, Variegated Fritillary. Great Purple Hairstreak, Reakirt's Blue. Western Pygmy Blue. Funereal Duskywing (fq). White Checkered-Skipper, Fiery Skipper. (Most records, Bryan Pfeiffer, Fred Heath and Mary Klinkel). Anza-Borrego Natural History Association web site, 26 Jan 09 notes it "mobbed by butterflies at Clark Lake". March – April.

Arctiidae: Comstock found *Cisthene deserta* on a lichen, *Vermilacinia combeoides*, growing on it (Powell & Opler).

Lycium californicum. **California Boxthorn.** Solanaceae. March – August.

Scythrididae: *Arotrura longissima* – Powell & Opler found it in December and May collections on Santa Barbara Island (p. 79).

Lycium fremontii. **Fremont's Wolfberry.** Solanaceae. Nectar: White-patched Skipper (*Chiomara georgina*), a Mexican butterfly not yet recorded for California on a cultivated specimen straying to a Pima County, Arizona yard (Philip Kline). Recommended for butterflies by Desert Survivors Nursery. A March – April.

Lycium pallidum var. *oligospermum*. **Pale Desert-thorn.** Solanaceae. A flowering specimen in very early March in Pinal County, Arizona was "attracting a lot of leps" (SoWestLep #9710, Saba & Winslow). March – May.

Lycopus americanus. **American Water Horehound.** Lamiaceae. Nectar: Clouded Sulphur, Viceroy, Melissa Blue, Common Sootywing, Tawny-edged Skipper, and Yellow-Collared Scape Moth. August – September.

Lycopus asper. **Rough Water Horehound**. Lamiaceae. Nectar: Cabbage White, Checkered White, Common Buckeye, Eastern Tailed Blue, Yellow-Collared Scape Moth (from one photographic session). June – October.

Lycopus uniflorus. **Northern Bugleweed**. Lamiaceae. The Illinois Wildflowers web site notes “small butterflies and skippers” as among its “less typical” flower visitors. July – September.

Lyonothamnus floribundus. **Catalina Ironwood**. Rosaceae. Lyonothamneae. Some Echo Azures seen on the flowers on Santa Cruz Island – a likely nectar source and possible larval host for them. Excellent for diverse native bees, and “some butterflies visited it for nectar” (Langston). May – July.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Orange Tortrix (*Argyrotaenia franciscana*).

Ypsolophidae: *Ypsolopha lyonothamnae*.

It is one of our best native trees for gardens. Zones 14-17, 19-24.

Lythrum sp. **Loosestrife**. Lythraceae. Field Crescent. Likely was *Lythrum californicum*.

Lythrum californicum. **California Loosestrife**. Lythraceae. Nectar: Cabbage White, Checkered White, Sleepy Orange (Liz Makings), Southern Dogface, Gray Hairstreak, Funereal Duskywing, Common Checkered-Skipper (<https://www.inaturalist.org/observations/10254477>), “skippers”, Orange Skipperling, Harbison’s Dun Skipper. A top butterfly nectar plant in Coronado National Memorial, Arizona. Planted in the butterfly garden at Lady Bird Johnson Wildflower Center in Austin, Texas.

Recommended for ecological restoration with butterflies in mind (Butler, 2015). April – September.

Attracts honeybees, soldier beetles and green sweat bees, too.

Machaeranthera asteroides is now *Dieteria asteroides*. **Hoary Aster**.

Machaeranthera asteroides var. *lagunensis* is now *Dieteria asteroides* var. *lagunensis*. **Laguna Mountain Aster**.

Machaeranthera canescens is now *Dieteria canescens*. **Hoary Aster**.

Machaeranthera tanacetifolia. **Tanseyleaf Tansy Aster**. Asteraceae. Astereae. Nectar: Checkered White, Orange Sulphur, Clouded Sulphur, Variegated Fritillary, Palmer’s Metalmark, Common Sootywing, Common Checkered-Skipper. “Great butterfly nectar source” (Desert Survivors Nursery). May – July.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Madia spp. **Tarweeds**. Asteraceae. Madieae. Good butterfly nectar plants – Growing Native.

Madia elegans. **Common Madia**. Asteraceae. Madieae. Nectar: California Ringlet, Edith’s Checkerspot, Juba Skipper (Travis Owens). Good nectar plant for butterflies – Growing Native. April – November.

Noctuidae: A Marc Kummel photograph shows a caterpillar of the Darker-spotted Straw Moth (*Heliothis phloxiphaga*) eating it. Feeds caterpillars of *Heliothodes diminutiva*, a day-flying moth.

Zones 7-9, 14-24.

Madia glomerata. **Mountain Tarweed**. Asteraceae. Madieae. June – September.

Noctuidae: Foodplant for the day-flying Darker-spotted Straw Moth (*Heliothis phloxiphaga*).

Madia gracilis. **Slender Tarweed**. Asteraceae. Madieae. April – August.

Bucculatricidae: *Bucculatrix orchstrigella* (BugGuide).

Noctuidae: A larval host for *Heliothodes diminutiva*, a fast-flying diurnal owlet moth. Billy Krimmel says it seems to be the primary larval host for this little moth in the Napa/Solano Counties area.

Madia radiata. **Golden Madia. Showy Madia**. Asteraceae. Madieae. March – May.

Noctuidae: A larval host for *Heliothodes diminutiva*, a fast-flying diurnal owlet moth.

Madia sativa. **Coast Tarweed**. Asteraceae. Madieae. May – October.

HOSTS reports it is among the larval hosts for the Painted Lady in Zimbabwe.

Maianthemum racemosum was *Smilacina racemosa*. **False Solomon's Seal**. Ruscaceae. Nectar: Echo Azure. March – July.

Maianthemum stellatum was *Smilacina stellata*. **Slim Solomon**. Ruscaceae. Nectar: Clodius Parnassian (JC). Cabbage White, Margined White. Echo Azure (JC). Common Checkered-Skipper in Clark County, Nevada (Austins). One photograph shows a Pacific Fritillary on it, likely for it. Not usually noted as a butterfly plant!

At least one nocturnal moth is associated with its flowers (Moldenke). In former times – Slim Solomon, historically much more common, especially along stream courses. Flowering patches in sunny situations, more favorable for diurnal insects, are now rare. April – June.

Malacothamnus spp. **Bush Mallows**. Malvaceae. Nectar: Common Buckeye, Red Admiral, Northern White-Skipper.

“All *Malacothamnus* are hosts” of the Northern White-Skipper, *Heliopetes ericetorum* (Shapiro).

Bucculatricidae: Hollyhock Leaf Skeletonizer (*Bucculatrix quadrigemina*).

Malacothamnus aboringinum. **Indian Valley Bush Mallow**. Malvaceae. May – July.

Hostplant for Common Checkered-Skipper at Pinnacles National Monument (Paul Johnson).

Malacothamnus clementinus. **San Clemente Island Bush Mallow**. Malvaceae. March – May.

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Malacothamnus davidsoni. **Davidson's Bush Mallow**. Malvaceae. May – July.

Larval host for Northern White-Skipper (Garth & Tilden).

Malacothamnus densiflorus. **Shrub Globemallow**. Malvaceae. Nectar source and larval host for Northern White-Skipper in eastern San Diego County (Monroes). May- July, September – October.

Malacothamnus fasciculatus. **Common Bush Mallow**. Malvaceae. Nectar: California Dogface, Northern White-Skipper, Harbison's Dun Skipper. "Painted ladies, buckeyes, skippers, monarchs, red admirals, fiery skippers (other *Malacothamnus* spp. the same)" – Yerba Buena Nursery. 'Great' for butterflies – Las Pilitas Nursery. One of few flowers the Tarantula Hawk (*Pepsis* sp.) visits. May – July.

Hostplant for West Coast Lady and Northern White-Skipper.

Malacothamnus fremontii. **Fremont Bush Mallow**. Malvaceae. Nectar: Northern White Skipper. May – July.

Foodplant for Northern White-Skipper.

Malacothamnus jonesii. **Jones' Bush Mallow**. Malvaceae. May – July.

Oecophoridae: *Exaeretia nechlys*. *Exaeretia thoracefasciella*.

Malacothamnus palmeri. **Santa Lucia Bush Mallow**. Malvaceae. May – July.

Larval host for Common Checkered-Skipper (fq) (Las Pilitas Nursery), White Checkered-Skipper (fq).

Malacothrix spp. **Desertdandelion**. Asteraceae. Cichorieae. Good butterfly nectar plants – Growing Native.

Malacothrix californica. **California Dandelion**. Asteraceae. Cichorieae. March-May.

Noctuidae: *Heliolonche joaquinensis*, a flower moth. Aaron Schusteff calls it the "taco moth" because they stow away in the closing flowers! (See his photographs at BugGuide).

Malacothrix floccifera. **Woolly Dandelion**. Asteraceae. Cichorieae. March-November.

Noctuidae: *Heliolonche celeris*, a day-flying, flower-visiting moth with mostly red wings.

Malacothrix glabrata. **Desert Dandelion**. Asteraceae. Cichorieae. Nectar for Painted Lady. March – June.

Noctuidae: A foodplant for an attractive day-flying moth, *Heliolonche pictipennis*, which Hartmut Wisch often sees mating in the flowers.

Malacothrix saxatilis. **Cliff Desertdandelion**. **Cliff Aster**. Asteraceae. Cichorieae. Nectar: Pale Swallowtail, Dainty Sulphur, Becker's White, Cabbage White, Checkered White, Variable Checkerspot, Northern White-Skipper, Umber Skipper. April – August (October).

Noctuidae: Alfalfa Semilooper (*Autographa californica*).

Malosma laurina. **Laurel Sumac**. Anacardiaceae. Nectar: preferred by Brown Ctenucha (*Ctenucha brunnea*, Arctiidae), a day-flying moth. Rancho Santa Ana Botanic Garden commends it for butterfly nectar. June - July.

Geometridae: Wavy-lined Cochisea (*Cochisea sinuaria*). *Dichorda illustraria* (a mostly green moth).

Gracillariidae: *Caloptilia ovatiella*. A leaf miner (Wikipedia).

Lasiocampidae: *Gloveria medusa*.

Noctuidae: *Acronicta othello*. *Paectes declinata*.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*). Walters' Saturnia Moth (*Saturnia walterorum*). Tuskes finds Electra Buckmoth (*Hemileuca electra*) frequently associated with it in undisturbed habitats; likely a host.

Malus fusca. **Oregon Crab Apple**. Rosaceae. Maleae. Nectar: Western Tiger Swallowtail, Anise Swallowtail and Lorquin's Admiral (occasional). Echo Azure is associated with its flowers. Bumblebees. April – May.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Northwest Phoenix (*Eulithis xylinea*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Abagrotis orbis*.

Notodontidae: Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*).

Tortricidae: Codling Moth (*Cydia pomonella*). Birch Leafroller (*Epinotia solandriana*). *Epinotia vagana*.

Note: a large number of hostplant records merely say "Malus" (the apple genus); likely, many other caterpillars eat Oregon Crab Apple. The list is long, since apples are an important food crop and economically valuable species get more attention! Find the apple account (*Malus domestica*) in the cultivated plants appendix.

Malva assurgentiflora was *Lavatera assurgentiflora*. **Tree Mallow**. Malvaceae. Nectar: Outstanding for hummingbirds. February – July.

Larval host for West Coast Lady (fq) and Painted Lady (Mike Patterson, NorWestLeps #2374).

Zones 14-24.

Malvaceae. **Mallow Family.**

Noctuidae: *Ponomotia fumata* [likely, says PNW Moths]. *Tarache flavipennis* – possibly (PNW Moths).

Malvella leprosa. **Alkali Mallow.** Malvaceae. Nectar: Columella Hairstreak, Common Checkered-Skipper, and, to some extent, for other butterflies which utilize it as a larval host; and Western Pygmy Blue, White-lined Sphinx (*Hyles lineata*, Sphingidae). April – November.

Alkali Mallow is a hostplant for West Coast Lady (fq), Painted Lady, Gray Hairstreak, Mallow Scrub-Hairstreak, Large White Skipper, Common Checkered-Skipper, White Checkered-Skipper, and Small Checkered-Skipper. Shapiro finds it most preferred, among native hosts, by Common Checkered-Skipper and the only hostplant for Small Checkered-Skipper in northern and central California. Suitable lab host for Arizona Powdered-Skipper and Northern White-Skipper (Todd Stout).

Sesiidae: *Zenodoxus canescens*.

Tischeriidae: *Astrotischeria omissa* (fq).

Alkali Mallow a tough plant surviving decades of mowing or cultivation in the low heavy soils it favors, persisting on grounds not treated with herbicides, as in a yard in an older Redwood City neighborhood.

Marah fabacea was *Marah fabaceus*. **Manroot.** Cucurbitaceae. Edith's Checkerspot observed at nectar in Oregon, Green Hairstreak in San Francisco; a nectar plant for the Green Hairstreak Corridor project. "Never seen a butterfly at it myself" (Shapiro). Mylitta Crescent, Silvery Blue. Flowers profusely in the wake of fire. February – April.

Pyralidae: False Greenhouse Leaf-tier (*Udea profundalis*).

Sesiidae: Manroot a foodplant for the Manroot Borer (*Melittia gloriosa*), largest, most spectacular North American wasp mimic moth; its caterpillars are borers.

Marah fabaceus is now *Marah fabacea*. **Manroot.**

Marah macrocarpa was *Marah macrocarpus*. **Cucamonga Manroot. Chilicothe.** Cucurbitaceae. January – April.

Arctiidae: Vestal Tiger Moth (*Spilosoma vestalis*) (fq) – typically gets started on Cucamonga Manroot, then feeds on other plants as it dries up, finishing quite well on California Walnut, *Juglans californica*.

Geometridae: *Eupithecia shirleyata*.

Sesiidae: Manroot Borer (*Melittia gloriosa*) – a female photographed at Bernard Field Station, 17 August 2015, (in Claremont, Los Angeles County) on this plant, suspected to be ovipositing.

Marah macrocarpus is now *Marah macrocarpa*. **Cucamonga Manroot.**

Marah oregana was *Marah oreganus*. **Coast Wild Cucumber.** Cucurbitaceae. Nectar: Mike Patterson in Oregon finds it popular with Pale Swallowtail, Clodius Parnassian and Margined White (NorWestLeps #3068). Michelle D. Brodie photograph, taken in La Honda, shows an Anise Swallowtail at nectar on putatively Coast Wild Cucumber. Stewart Wechsler sees Cabbage White often landing on its flowers in Seattle (where the plant is rare) though unsure they get nectar from it; he saw Red Admiral get nectar.

Field Crescent. Edith's Checkerspot (Daniel Nelson Grosboll). Boisduval's Blue [Puget Blue]. Propertius Duskywing (Ann Potter). Juba Skipper. Robert Pyle finds it a good nectar plant in Washington, especially large flowering masses, serving several species of butterflies "locally and avidly". March - May.

Arctiidae: Vestal Tiger Moth (*Spilosoma vestalis*).

Sesiidae: Manroot Borer (*Melittia gloriosa*), a spectacular wasp mimic.

Tortricidae: *Clepsid fucana*.

Marah oreganus is now *Marah oregana*. **Coast Wild Cucumber**.

Marina parryi was *Dalea parryi*. **Parry Dalea. Parry's False Prairie-clover**. Fabaceae. Amorpheae. Nectar: Dainty Sulphur, Echo Azure, Marine Blue (Christopher Christie), Arizona Powdered-Skipper; "several" says Fred Heath. February – June.

Foodplant for Southern Dogface (*Butterflies of Arizona*). Fred Heath saw oviposition by Reakirt's Blue on it in Arizona, 28 February 2015 (Desert Leps #20076). In a personal communication, he notes it being at least a recent favorite of Southern Dogface, also serving Ceraunus Blue, and Reakirt's Blue.

Maurandella antirrhiniflora. **Violet Twining Snapdragon**. Plantaginaceae. Nectar: Cloudless Sulphur (Liz Makings). February – December.

Larval host for the Common Buckeye.

Melica imperfecta. **Smallflower Melic Grass**. Poaceae. Pooideae. Meliceae.

Smallflower Melic is a hostplant for the Rural Skipper (aka the Farmer). Jim Brock: "I found early instar larvae using aerial nests near Democrat Hot Springs in the lower Kern River Canyon. Subsequently they abandoned these aerial nests. I subsequently found at least two last instars 2.5 miles south of Bodfish, CA rolled up in the center of a large grass clump (*Melica imperfecta*) about three weeks later. I reared them through. I do not know the identity of the original grass from Democrat Hot Springs. It may be something else so it may be a case where the caterpillars pull the old switcheroo! I would guess that there are other native grasses supporting coastal populations of *agricola* since my specimens are from the rather unique *O. agricola verus* populations. The original larvae were not difficult to find, one just had to sort through all the European grasses to see them."

Menodora spinescens. **Spiny Desert Olive**. Oleaceae. Nectar: Checkered White, Painted Lady, Sagebrush Checkerspot, and Leanira Checkerspot in Clark County, Nevada (Austins). April – May.

Mentha spp. **Mint**. Lamiaceae. Nectar: Anise Swallowtail, Western Tiger Swallowtail, Checkered White, Monarch, Red Admiral, Painted Lady, American Painted Lady, Clodius Parnassian, Callippe Fritillary, Field Crescent, Oreas Comma, Pacuvius Duskywing, Common Checkered-Skipper, Dodge's Skipper (fq), Dun Skipper (fq).

HOSTS says it supports Painted Lady caterpillars.

Choreutidae: *Caloreas multimarginata*.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Dark-spotted Looper (*Diachrysis aereoides*). Corn Earworm (*Helicoverpa zea*). Soybean Looper (*Chrysodeixis includens*). Gray Looper (*Rachiplusia ou*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Orange Mint Moth (*Pyrausta orphialis*). Hawaiian Beet Webworm (*Spoladea recurvalis*). Mints are suspected hostplants for *Pyrausta nicalis* and Sociable Pyrausta (*Pyrausta socialis*).

Tortricidae: Verbena Bud Moth (*Endothenia hebesana*). *Endothenia nubilana*.

Mentha canadensis. **Wild Mint**. Lamiaceae. Nectar: Cabbage White, Common Wood-Nymph, Small Wood-Nymph (fq), American Snout, Gray Hairstreak, Purplish Copper, Boisduval's Blue, Western Pygmy Blue, Woodland Skipper. The one true mint species considered native to California. 'Great' for butterflies (Las Pilitas Nursery). Likely are Silver-spotted Skipper, Sachem, and others listed above under *Mentha*. July – October.

Noctuidae: Dark-spotted Looper, (*Diachrysis aereoides*, Noctuidae).

Mentzelia laevicaulis. **Giant Blazingstar**. Loasaceae. Nectar: Two-tailed Swallowtail (fq) (Bentler, NorWestLeps #4313). The flowers emit a delicate sweet scent at dusk, at night drawing White-lined Sphinx (*Hyles lineata*, Sphingidae) and other Sphinx moths. Bumblebees. May – October.

Cosmopterigidae: *Anoncia leucoritis*.

Noctuidae: *Protogygia album*, a whitish moth.

Mentzelia lindleyi. **Lindley's Blazingstar**. Loasaceae. Nectar: Flowers open in the evening until about noon the next day ... fragrant and attract moths. Attract bumblebees, highly recommended by the Urban Bee Project. May – June.

Mentzelia multiflora. **Adonis Blazingstar**. Loasaceae. Bumblebees.

Noctuidae: *Protogygia album*.

Menyanthes trifoliata. **Bogbean**. Menyanthaceae. May – August.

Saturniidae: Nevada Buckmoth (*Hemileuca nevadensis*).

Pyralidae: Pondsides Pyralid Moth (*Elophila icciusalis*).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*).

Menziesia ferruginea. **Mock Azalea**. Ericaceae. June – July.

Mock Azalea is a foodplant for the Hoary Comma.

Geometridae: White-banded Black (*Rheumaptera subhastata*) -- a day-flying moth flower-visiting moth.

Mertensia spp. **Bluebells**. Boraginaceae. Flowers attract butterflies (*Butterfly Gardening in the Pacific Northwest*).

Arctiidae: Bluebell Woolly Bear or Police Car Moth (*Gnophaela vermiculata*), a striking black-and-white midsummer day-flying moth, reported from Tuolumne County.

Mertensia ciliata. **Streamside Bluebells**. Boraginaceae. Nectar: online photograph shows a Monarch on a flowering specimen, presumably a nectar plant for it. June – August.

Listed as a foodplant for the Variable Checkerspot and Anicia Checkerspot.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Cabbage Looper (*Trichoplusia ni*).

Mertensia franciscana. **Franciscan Bluebells**. Boraginaceae. This plant reported from California (El Dorado County), though not confirmed. Somewhat showy, similar to *M. ciliata* but more typically found east of California. William Beck saw many butterflies at nectar on it in early July 2013 near Alpine, Arizona: Two-tailed Swallowtail, Northwestern Fritillary, Milbert's Tortoiseshell, Echo Azure (fq), Northern Cloudywing, and Tawny-edged Skipper; the nectar plant of butterfly interest in the vicinity of observation.

Micranthes californica was *Saxifraga californica*. **California Saxifrage**. Saxifragaceae. Ron Wolf photographed a Spring White at nectar on this species in Mariposa County. Also gets Sonoran Blue. February – May (June).

Micropus californicus. **Cotton Top**. Asteraceae. Gnaphalieae.

Served as a secondary larval host for Painted Lady in the 1992 dispersion event (Witham).

Microseris douglasii. **Douglas' Silverpuffs**. Asteraceae. Cichorieae. Nectar: Bay Checkerspot (a segregate of Edith's Checkerspot). March – June.

Microseris laciniata. **Cutleaf Silverpuffs**. Asteraceae. Cichorieae. May – June.

Numerous adult *Heliolonche modicella* (Noctuidae) associated with it near Santa Rosa, Sonoma County on 2 May (1985 Season Summary).

Microseris nutans. **Nodding Scorzonella**. Asteraceae. Cichorieae. Nectar: Rockslide Checkerspot, Mormon Fritillary, Leto Fritillary. April – July.

Tortricidae: *Sparganothis tunicana*.

Microsteris gracilis was *Phlox gracilis*. **Slender Phlox**. Polemoniaceae. Sara Orangetip – an early spring nectar source on Figueroa Mountain, 2 February 2009 (Nature Shutterbug on Flickr). John Davis reports seeing more than 50 Sara Orangetip at nectar mostly on Slender Phlox in the Columbia River Gorge in southernmost Washington in April 2006 (NorWestLeps #2878). The flowers are tiny. March – August. Slender Phlox is an easy-to-grow annual species.

Mimulus aurantiacus, *M. longiflorus*. **Bush Monkeyflower**. Phrymaceae. Nectar: Sara Orangetip, Variable Checkerspot, Rural Skipper (<https://www.inaturalist.org/observations/13193236>), White-lined Sphinx. Hummingbirds. *Mimulus aurantiacus puniceus* is a favorite of White-lined Sphinx at Torrey Pines State Reserve. Hummingbirds specialize on redder forms, White-lined Sphinx on yellower forms. March – June.

Hostplant for Variable Checkerspot and Common Buckeye. Considered secondary for Common Buckeye in the San Bruno Mountains. A favorite Variable Checkerspot foodplant in the San Francisco Bay region.

Geometridae: Marc Kummel got a photograph of a putative Geometrid caterpillar on a Bush Monkeyflower: <https://www.flickr.com/photos/treebeard/16304297106/>

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Mimulus bicolor. **Yellow and White Monkeyflower**. Phrymaceae. Nectar: White-lined Sphinx occasional on it in the central Sierran foothills (Dena Grossenbacher). April – June.

Mimulus cardinalis. **Scarlet Monkeyflower**. Phrymaceae. Nectar: Western Tiger Swallowtail (Paul Johnson, others). California Dogface (fq) (Clark Thompson); Cabbage White, Checkered White, Checkerspots, Painted Lady, Common Ringlet (NABA Malibu). Scarlet Monkeyflower attracts butterflies in SE Arizona. Hummingbirds.

Arthur Shapiro did not recall seeing a butterfly visit this common plant in 38 years of observation in central California. The mostly southerly records may represent butterfly ‘regional cuisine’! May – September.

Scarlet Monkeyflower is a hostplant for Common Buckeye.

Noctuidae: *Abagrotis variata*. *Autoplusia olivacea*. Stephen’s Gem (*Megalographa biloba*).

Mimulus douglasii. **Purple Mouse Ears**. Phrymaceae. February – April.

Noctuidae: *Annaphila decia*.

Mimulus fremontii var. *vandenbergensis*. **Vandenberg Monkey Flower**. Phrymaceae. Nectar: Variable Checkerspot (Alice Abela). April – June.

Erythranthe guttata (*Mimulus guttatus*). **Yellow Monkeyflower**. Phrymaceae. Nectar: Painted Lady, Chalcidon Checkerspot, White-lined Sphinx. March – August.

Hostplant for the Common Buckeye, Tropical Buckeye, Variable Checkerspot, and Mylitta Crescent.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) (MR 718). *Grammia incorrupta*.

Geometridae: *Herreshoffia gracea* (MR 715) – the only known hostplant. Horned Spanworm (*Nematocampa resistaria*) (in Michigan, where naturalized).

Noctuidae: *Annaphila casta*. *Annaphila lithosina* – the only known hostplant for this day-flying moth. Mouse Moth (*Amphipyra tragopoginis*). *Autographa pasiphaeia* (MR 716). Beet Armyworm (*Spodoptera exigua*) (lab). Yellowstriped Armyworm (*Spodoptera ornithogalli*) (in Michigan, where naturalized). Cabbage Looper (*Trichoplusia ni*) (fq).

Pterophoridae: Snapdragon Plume Moth (*Amblyptilia pica*).

See especially Rotter, Michael C. and Liza M. Holeski. 2017. “The Lepidopteran herbivores of the model plant *Mimulus guttatus*”. *Journal of the Lepidopterists’ Society* 71(3):162-168.

Buckett, J. S. 1966. "Discovery of a larval hostplant for *Annaphila lithosina* with notes on the species (Noctuidae: Amphipyridae)." *Journal of Research on the Lepidoptera* 5(4):262-264. [*Mimulus guttatus*].

Mimulus kelloggii. **Kellogg's Monkeyflower**. Phrymaceae. March – June.

A Karen Callahan photograph (CNPS website) shows a checkerspot caterpillar on Kellogg's Monkeyflower.

Mimulus moschatus. **Musk Monkeyflower**. Phrymaceae. June – August.

Larval host for the Common Buckeye.

Noctuidae: a couple of day-flying moths, *Annaphila casta* and *Annaphila miona*.

Mimulus whitneyi. **Harlequin Monkeyflower**. Phrymaceae. May – September.

Larval host for Edith's Checkerspot.

Mirabilis greenei. **Greene's Four O'clock**. Nyctaginaceae. May – June.

Heliodinidae: *Lithariapteryx mirabilinella*.

Mirabilis laevis var. *crassifolia* was *Mirabilis californica*. **California Four O'clock**. Nyctaginaceae. Flowers attract the White-lined Sphinx (Cathryn Chaney, SF Gate). Mostly December – June.

Heliodinidae: *Embola powellii*. *Lithariapteryx jubarella*.

Sphingidae: White-lined Sphinx (*Hyles lineata*) (BFS and Marc Kummel).

Mirabilis laevis var. *villosa* was *Mirabilis bigelovii*. **Bigelow's Four O'clock**. Nyctaginaceae. Flowers attract White-lined Sphinx (*Hyles lineata*, Arctiidae) and *Lithariapteryx jubarella* (Heliodinidae). More or less all year.

Sphingidae: White-lined Sphinx (*Hyles lineata*) (Connie Vadheim).

Heliodinidae: *Aetole favonia*. *Lithariapteryx jubarella*. *Lithariapteryx mirabilinella*.

Mirabilis multiflora. **Colorado Four O'clock**. Nyctaginaceae. Nectar: Common Sootywing (fq) and other butterflies (Austin, 1978). Achemon Sphinx (*Eumorpha achemon*). Great Ash Sphinx (*Sphinx chersis*). White-lined Sphinx (*Hyles lineata*) (fq). Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Howard Clark photograph shows a narrowish gray moth at nectar (Tulare County May 8, 2008, Flickr). Sweetly scented flowers. April – August.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Heliodinidae: *Aetole favonia*. *Lithariapteryx jubarella*. *Lithariapteryx mirabilinella*.

Mirabilis multiflora var. *pubescens* (formerly *Mirabilis froebelii*). **Wild Four O'clock**. Nyctaginaceae. Nectar: Pahaska Skipper (Scott). Great Ash Sphinx (*Sphinx chersis*), Carolina Sphinx (*Manduca sexta*) White-lined Sphinx (*Hyles lineata*), Ello Sphinx (*Erinnyis ello*), Achemon Sphinx (*Eumorpha achemon*), Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Hummingbirds. April – August.

Mirabilis tenuiloba. **Long-lobed Four O'clock**. Nyctaginaceae. March – May.

Helioidinidae: *Embola powellii*.

Mohavea confertiflora. **Desert Ghost Flower**. Plantaginaceae. Scott says no nectar, mimics blazing star. March – April.

Noctuidae: Cabbage Looper (*Trichoplusia ni*) – documented by Jennifer Bundy on Southwest Moths. She had eggs of Scribbled Sallow (*Sympistis perscripta* aka *Lepipolys perscripta*, Noctuidae) some first instars fed upon offered flower buds of Nuttall's Snapdragon, but others did not with survivors successfully reared out on Desert Ghost Flower. She discovered yet another Oncocnemidinae caterpillar on it, yet to report as I write.

Monarda pectinata. **Pony Beebalm. Plains Bee Balm**. Lamiaceae. Nectar: Northern Cloudywing (fq) -- The Firefly Forest web site says its "white flowers seemed to be very popular with Northern Cloudywing butterflies" -- with photographs. Native to California, possibly extirpated – not collected since 1932. Bumblebees. August – September.

Monardella spp. **Monardella**. Lamiaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Phoebus Parnassian (fq), Becker's White, Southern Dogface, Sleepy Orange, Monarch, Red Admiral, American Painted Lady, Milbert's Tortoiseshell, Hoffman's Checkerspot, Great Basin Wood-Nymph, Great Arctic, Chryxus Arctic, Atlantis Fritillary, Callippe Fritillary, Great Spangled Fritillary, Unsilvered Fritillary, California Hairstreak, Gray Hairstreak, Sooty Hairstreak, Blue Copper Holly and Mark Salvato), Ruddy Copper, Boisduval's Blue, Northern Blue, Northern White-Skipper, Common Checkered-Skipper, Arizona Powdered-Skipper, Common Branded Skipper, Tilden's Skipper, Lindsey's Skipper, Sonoran Skipper, Woodland Skipper. : 'Especially fritillaries and skippers' – Shapiro. He finds "all *Monardella* are great" butterfly nectar plants – likely true for all the showy species. Some rare species with unshowy flowers seem of no interest to butterflies.

Monardella antonina taxonomically now merged with *Monardella villosa*. **San Antonio Hills Monardella** or **Butterfly Mint Bush**. Lamiaceae. This segregate especially fine for butterflies, according to Las Pilitas Nursery, a Monarch favorite. Photo-documented: Pale Swallowtail, Callippe Fritillary, Variable Checkerspot, American Lady.

Monardella australis. **Southern Mountain Monardella**. Lamiaceae. Las Pilitas Nursery: 'a GREAT butterfly plant'! June – September.

Monardella breweri. **Brewer's Monardella**. Lamiaceae. Nectar: Callippe Fritillary. Nectar: a favorite for *Annaphila spila*, a striking day-flying noctuid with red underwings, as near Monticello Dam, Solano County. May – August.

Brewer's *Monardella* is an annual wildflower species.

Monardella breweri ssp. *lanceolata*. **Mustang Mint**. Lamiaceae. Nectar: Pale Swallowtail, Western Tiger

Swallowtail, California Dogface, Orange Sulphur (fq) (Grinnells, 1907), Monarch, American Lady, West Coast Lady (fq), Painted Lady (Lynn Watson), Red Admiral, Callippe Fritillary, Coronis Fritillary (fq) – Grinnells (1907), Hydaspe Fritillary, Boisduval's Blue, Mournful Duskywing, Funereal Duskywing, Umber Skipper, Snowberry Clearwing (fq) (many of these records are from Kummel). Bumblebees. May – October.

Grinnell, Joseph, and Fordyce Grinnell. 1907. "The Butterflies of the San Bernardino Mountains, California." *Journal of the New York Entomological Society* 15 (1): 37-49.
<http://www.jstor.org/stable/25003237>.

An annual with seed available in the trade.

Monardella crispa is now *Monardella undulata* ssp. *crispa*. **Crisp Monardella.**

Monardella follettii. **Follett's Monardella.** Lamiaceae. Suzie Woolhouse studied pollination of this rare serpentine endemic; very few butterflies visited the flowers. June – September.

She observed a moth caterpillar eating the developing flower heads.

Monardella frutescens is now *Monardella undulata* ssp. *undulata*. **San Luis Obispo Monardella.**

Monardella glauca is now *Monardella odoratissima* ssp. *glauca*. **Follett's Monardella.**

Monardella hypoleuca. **Thickleaf Monardella. White-leaf Monardella.** Lamiaceae. Nectar: Pale Swallowtail (fq), Western Tiger Swallowtail, Anise Swallowtail, Checkered White, California Dogface (fq), Harford's Sulphur, Lorquin's Admiral, Common Buckeye, Painted Lady, American Lady, Variable Checkerspot, Callippe Fritillary, Mountain Mahogany Hairstreak, Gorgon Copper, Marine Blue, Northern White-Skipper, Propertius Duskywing, Rural Skipper, Umber Skipper, Woodland Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae) (fq) (Kummel). May – October.

A chaparral species.

Monardella linoides ssp. *viminea* is now *Monardella viminea*. **Willow Monardella.** Lamiaceae. Classed as a good nectar plant; a Funereal Duskywing at nectar is shown in CalPhotos. June – August.

A species of Chaparral and Closed Cone Pine Forest, Orange and San Diego Counties.

Monardella lanceolata is now *Monardella breweri* ssp. *lanceolata*. **Mustang Mint.**

Monardella macrantha. **Hummingbird Coyote Mint.** Lamiaceae. This bright red-flowering species attracts some larger butterflies, such as Western Tiger Swallowtail. Serves mostly hummingbirds. Bumblebees. May – August.

Monardella odoratissima. **Mountain Pennyroyal.** Lamiaceae. Nectar: Anise Swallowtail, Pale Swallowtail, Western Tiger Swallowtail, Clodius Parnassian (fq), Rocky Mountain Parnassian. Orange Sulphur, Clouded Sulphur, Queen Alexandra's Sulphur, Becker's White, Western White. Great Basin Wood-Nymph, Small Wood-Nymph, Chryxus Arctic. West Coast Lady, Painted Lady, Variable Checkerspot (fq), Rockslide Checkerspot, Northern Checkerspot, Hoffman's Checkerspot. Callippe Fritillary, Great Basin Fritillary, Hydaspe Fritillary, Mormon Fritillary, Northwestern Fritillary, Leto Fritillary, Zerene Fritillary, Snyder's Fritillary, Irene Fritillary, Arge Fritillary (fq), Coronis Fritillary, Hoary Comma (fq), "Zephyr" Hoary Comma, Green Comma, Oreas Comma, Satyr Comma, California

Tortoiseshell (fq), Milbert's Tortoiseshell, Mourning Cloak, Lorquin's Admiral. California Hairstreak, Gray Hairstreak, Edith's Copper, Blue Copper, Ruddy Copper, Shasta Blue, Northern Blue. Common Branded Skipper, Juba Skipper. Sandhill Skipper (Ron Wolf). Woodland Skipper. White-lined Sphinx, Sierran Pericopid (*Gnophaela latipennis*, Noctuidae), *Pyrausta fodinalis* (Pyralidae).

Tanya Harvey says, "the best butterfly plant I know"; James (NorWestLeps #3269) saw 19 species at nectar on it at one location! Bumblebees. June – September (much from Emmel & Emmel, 1962).

Pyralidae: *Pyrausta fodinalis* (Powell & Opler, p. 177) – seems very likely given association of adults and that it is known to develop on *Monardella villosa*.

Monardella odoratissima ssp. *glauca*. **Follett's Monardella. Grey Monardella.** Lamiaceae. June-August.

Considered worthy of cultivation.

Monardella odoratissima ssp. *pallida*. **Pallid Mountain Monardella.** Lamiaceae. Nectar: Clodius Parnassian (David Horner), cf. Callippe Fritillary (Pete Veilleux), Great Basin Fritillary (David S. Horner). California Tortoiseshell (Bob and Martha Sikora on Pacific Crest Trail). Western Pine Elfin (Carol Etchebarren). Acmon Blue. Silver-spotted Skipper (David S. Horner), Mexican Cloudywing (Carol Etchebarren), Afranius Duskywing (Ali Sheehey). Flowering in containers, the top early September butterfly draw in Native Revival Nursery, Aptos. June – September.

Northern Curly-leaved Monardella. *Monardella sinuata* subsp. *nigrescens*. Lamiaceae. Nectar: Zerene Fritillary, doubtless others. May – July.

An attractive annual, recommended for butterfly and bee gardens.

Monardella purpurea. **Siskiyou Monardella.** Lamiaceae. Nectar: Anise Swallowtail (Hartmut Wisch). June – July.

Monardella stebbinsii. **Feather River Monardella.** Lamiaceae. Suzie Woolhouse studied the pollination of this rare species, a strict serpentine endemic. Its flowers visited by very few butterflies. July – September.

The developing seed head eaten by a moth caterpillar, seemed to be the same as that eating *Monardella follettii*.

Monardella subglabra. (Now classified as merely a form of *Monardella villosa*, and formerly as *Monardella purpurea*). Lamiaceae. Nectar: Pale Swallowtail, Comstock's Fritillary, and a Duskywing. Very floriferous.

Monardella undulata. **Curly Leaf Monardella.** Lamiaceae. Nectar: Myrtle's Silverspot favorite. April – September.

An annual of various coastal habitats.

Monardella undulata ssp. *crispa*. **Crisp Monardella.** Lamiaceae. Nectar: Checkerspots, Fritillaries, West Coast Lady, Painted Lady, California Tortoiseshell, Acmon Blue, Sandhill Skipper, Hummingbirds. April – November.

Pyralidae: *Pyrausta nexalis* (Powell & Opler, p. 176).

Scythrididae: Sand-dune Grasshopper Moth (*Areniscythris brachypteris*).

Crisp *Monardella* is a coastal species, rhizomatous.

Monardella villosa. **Coyote Mint**. Lamiaceae. Nectar: Western Tiger Swallowtail, Two-tailed Swallowtail (Tony Iwane), Pale Swallowtail, Anise Swallowtail, Pipevine Swallowtail. California Dogface, Orange Sulphur. Monarch, Common Buckeye, Red Admiral, Lorquin's Admiral, Painted Lady, American Lady, West Coast Lady, Mylitta Crescent, Variable Checkerspot (fq), Northern Checkerspot, Leanira Checkerspot, Edith's Checkerspot, Callippe Fritillary (a favorite for it), Unsilvered Fritillary (fq), Myrtle's Silverspot, Gulf Fritillary, California Tortoiseshell, Milbert's Tortoiseshell (fq), Mourning Cloak, Common Wood-Nymph, Common Ringlet. Gray Hairstreak, Great Copper, Acmon Blue, Mission Blue [a segregate of Boisduval's Blue]. Propertius Duskywing, Mournful Duskywing, Northern Cloudywing, Lindsey's Skipper, Sandhill Skipper, Sachem, Rural Skipper, Umber Skipper. Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), White-lined Sphinx. Bumblebees. Excellent! May – August.

Coleophoridae: *Coleophora* sp.

Cosmopterigidae: *Anoncia orites*.

Pterophoridae: *Anstenoptilia marmarodactyla*.

Pyralidae: California *Pyrausta* (*Pyrausta californicalis*). *Salvia* Snout Moth (*Pyrausta dapalis*), diurnal, red underwings. *Pyrausta fodinalis*. Shasta *Pyrausta* (*Pyrausta perrubralis*) – a reddish and yellow patterned species.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Monardella villosa subsp. *franciscana*. **Franciscan Coyote Mint**. Lamiaceae. A good nectar source for Callippe Fritillary (*A Flora of the San Bruno Mountains*). May - August.

Monardella viridis. **Green Monardella**. Lamiaceae. Bumblebees. June – August.

Monolopia lanceolata. **Hillside Daisy**. Asteraceae. Madieae. Butterflies – Pollinator Partnership. February – June.

Zones 7, 14-24.

Monotropa hypopitys. **Pinesap**. Ericaceae. Nectar: Cloudless Sulphur (Rich Hoyer). July – August.

Monotropa uniflora. **Indian Pipe**. Ericaceae. Nectar: Silver-spotted Skipper (Shields; from Clark).

Indian Pipe a “favorite” flower for the Silver-spotted Skipper -- “causes them to exhibit curious irregularities of movement and a greater or lesser degree of stupefaction” (Clark, p. 59)! Similarly a favorite with and so affects the Northern Cloudywing (Clark, p. 205)! In a recent Midwestern reproductive ecology study, its major pollinators and most common flower visitors were bumblebees

(Klooster and Culley, 2009). Likely, the butterflies are mere nectar thieves, often the case when it comes to their role in plant reproduction. June – July.

Indian Pipe is mycotrophic -- parasitic on the hyphae of mycorrhizal fungi of the fungus family Russulaceae (brittle-gills, *Russula*, and milk-caps, *Lactarius*) and other sorts of fungi symbiotic with the roots of such trees as pines, spruces, firs, oaks, aspens, and birches. Thus, indirectly, it gets nutrition from the trees through their association with the fungi. The plant mostly a ghostly white; Indian Pipe has no chlorophyll!

Morella californica was *Myrica californica*. **California Wax Myrtle**. Myricaceae.

Gelechiidae: *Telphusa* sp.

Geometridae: *Aethaloida packardaria*. Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Nealcis californiaria*).

Noctuidae: *Xestia mustelina*.

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Variable Oak Leaf-roller (*Epinotia emarginana*). Other possible tortricids, listed under "*Myrica* sp." include Marbled Dog's-tooth Tortrix (*Acleris maccana*) and Fruit-tree Leafroller (*Archips argyrospila*).

Zones 14-17, 22-24, with irrigation.

Mucronea californica. **California Spineflower**. Polygonaceae. March – August.

Foodplant for Small Blue.

Mud. Many butterflies seek moisture and salts by imbibing moisture from mud or damp sand. Scott believes nearly all butterflies seek mud when dehydrated. Never pass up a muddy spot (or lakeshores, drying but still moist streambeds or ponds) on a sunny day! Hot days with low humidity, especially, bring butterflies to moist spots. Often large numbers, even multispecies groups, congregate on moist soil, especially in sunny exposures.

Noted as having an affinity to mud or damp sand: Pipevine Swallowtail, Western Tiger Swallowtail (fq), Pale Swallowtail (fq), Two-tailed Swallowtail, Indra Swallowtail, Anise Swallowtail (fq), Old World Swallowtail, Phoebus Parnassian, Rocky Mountain Parnassian. Cabbage White (fq), Checkered White, Margined White, Spring White, Large Marble, Sleepy Orange, Clouded Sulphur (fq) [Michigan source: "the Mud Puddle Butterfly"], Orange Sulphur (fq), Queen Alexandra Sulphur, Harford's Sulphur, Western Sulphur, Mexican Yellow, Cloudless Sulphur, Orange-barred Sulphur, Sara Orangetip, Stella Orangetip, California Dogface (fq), Southern Dogface. Monarch, Queen. Viceroy, Red Admiral (fq), Painted Lady, American Lady. Common Buckeye. California Crescent, Mylitta Crescent, Field Crescent, Pearl Crescent (fq). Variable Checkerspot, Edith's Checkerspot, Leanira Checkerspot, Gabb's Checkerspot, Northern Checkerspot, Sagebrush Checkerspot. California Patch, Bordered Patch. Atlantis Fritillary [Michigan], Coronis Fritillary, Callippe Fritillary (fq), Great Basin Fritillary, Great Spangled Fritillary, Hydaspe Fritillary, Mormon Fritillary, Northwestern Fritillary, Nokomis Fritillary, Pacific Fritillary, and Variegated Fritillary. California Sister, Mourning Cloak, California Tortoiseshell, Milbert's Tortoiseshell (fq), Green Comma (fq), Hoary Comma (fq), Oreas Comma, Satyr Comma, Lorquin's

Admiral (fq), Weidemeyer's Admiral (fq). Common Wood-Nymph, Small Wood-Nymph (fq), Chryxus Arctic (fq), Great Arctic, California Ringlet, Common Ringlet, Hackberry Emperor. American Snout. Brown Elfin, Moss's Elfin, Western Pine Elfin. Golden Hairstreak, Thicket Hairstreak (fq), Gray Hairstreak, Behr's Hairstreak, California Hairstreak, Coral Hairstreak, Gold-hunter's Hairstreak, Green Hairstreak, Hedgerow Hairstreak, Muir's Hairstreak, Sagebrush Sooty Hairstreak, Sheridan's Hairstreak, Sylvan Hairstreak, Great Purple Hairstreak, Johnson's Hairstreak, Juniper Hairstreak. American Copper, Lilac-bordered Copper, Purplish Copper, Tailed Copper (fq), Ruddy Copper, Blue Copper (fq). Blue, Echo Azure, Acmon Blue, Lupine Blue, Boisduval's Blue (fq), Greenish Blue (fq), Marine Blue (fq), Melissa Blue (fq), Ceraunus Blue, Eastern Tailed Blue (fq), Reakirt's Blue (fq), Western Tailed Blue (fq), Square-spotted Blue, Dotted Blue, Lupine Blue, Arrowhead Blue (fq), Silvery Blue (fq), Anna's Blue, and Arctic Blue. Common Sootywing, Mexican Sootywing. Silver-spotted Skipper, Erichson's White-Skipper, Northern White-Skipper. Northern Cloudywing (fq), Mexican Cloudywing. Arizona Powdered-Skipper. Afranius Duskywing (fq), Dreamy Duskywing [noted as fq in Michigan, never seen on flowers], Funereal Duskywing, Mournful Duskywing (fq), Pacuvius Duskywing (fq), Persius Duskywing (fq), Sleepy Duskywing (fq), Propertius Duskywing. Common Checkered-Skipper (fq), White Checkered-Skipper, Small Checkered Skipper, Two-banded Checkered-Skipper. Columbian Skipper, Dun Skipper, Juba Skipper (fq), Lindsey's Skipper, Nevada Skipper (fq), Orange Skipperling, Pahaska Skipper, Sachem, Sandhill Skipper, Sonora Skipper, Tawny-edged Skipper (fq – in Michigan, elsewhere), Uncas Skipper, Western Branded Skipper, Woodland Skipper (fq), Golden-headed Scallopwing, Common Roadside-Skipper (fq), Bauer's Giant Skipper (fq), California Giant Skipper (fq), Yucca Giant Skipper.

Fred Heath: "Those California Giant Skippers don't do flowers, but they sure are suckers for mud." (SoWestLep #8117).

There was a huge outbreak of California Tortoiseshell in 1911 in Siskiyou County, generously fed upon by birds, especially at mud puddles. Butterflies are especially vulnerable to predation when congregated at mud puddles. Especially robins and chipmunks observed feeding upon Pale Swallowtail at mud puddles in Montana. California Tortoiseshell in Siskiyou County especially consumed at mud puddles by Brewer's Blackbird, stomach analysis indicated that at that time they ate little else – estimated they were responsible for about 95% of bird predation. Other important avian predators of California Tortoiseshell in that outbreak were Western Meadowlark (estimated at about 2.5% of bird predation. Taking a few were Say's Phoebe and Stellar's Jay. Bryant, Harold C. "The Relation of Birds to an Insect Outbreak in Northern California during the Spring and Summer of 1911." 1911. *The Condor* 13 (6): 195-208. doi:10.2307/1361966.

Many moths visit moist soil situations at night, these are a few:

Gelechiidae: Pink Bollworm (*Pectinophora gossypiella*).

Geometridae: American Barred Umber (*Plagodis pulveraria*). Common Gray (*Anavitrinella pampinaria*). Pepper-and-Salt Geometer (*Biston betularia*). Barberry Geometer (*Coryphista meadii*). Bent-line Carpet (*Costconvexa centrostrigaria*). Orange-barred Carpet (*Dysstroma hersiliata*). Small Engrailed (*Ectropis crepuscularia*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Confused Eusarca (*Eusarca confusaria*). Shattered Hydriomena (*Hydriomena perfracta*). Red-bordered Wave (*Idaea demissaria*). Bent-line Gray (*Iridopsis larvaria*). Powdered Bigwig (*Lobophora nivigerata*). Speckled Granite (*Macaria exauspicata*). White-ribboned Carpet (*Mesoleuca ruficillata*). Yellow-lined Thorn (*Metanema inatomaria*). Horned Spanworm (*Nematocampa resistaria*). Alien Probole (*Probole alienaria*). Friendly Probole (*Probole amicaria*). Large Lace-border (*Scopula limboundata*). Sharp-lined Yellow (*Sicya macularia*). Wavy-lined Emerald (*Synchlora aerata*). Red Twin-Spot (*Xanthorhoe ferrugata*).

Gracillariidae: Poplar Caloptilia (*Caloptilia stigmatella*) (some uncertainty as to species).

Noctuidae: Pale Sallow (*Enargia decolor*). Hop Looper (*Hypena humuli*).

Notodontidae: Common Gluphisia (*Gluphisia septentrionis*).

Pyralidae: Grape Leafroller (*Desmia funeralis*). Bold-feathered Grass Moth (*Herpetogramma pertextalis*). Orange Mint Moth (*Pyrausta orphisalis*).

Pterophoridae: Morning Glory Plume Moth (*Emmelina monodactyla*).

Tortricidae: Black-marked Ancylys (*Ancylys metamelana*). Oblique-banded Leafroller (*Choristoneura rosaceana*).

A useful reference is Downes, J.A., 1973. Also Adler, Peter H., 1982.

Muhlenbergia montana. **Mountain Muly**. Poaceae. Chlorideae.

Scott records it as a hostplant for Common Wood-Nymph (*nephele*) in Colorado.

Muhlenbergia rigens. **Deergrass**. Poaceae. Chlorideae.

Larner Seeds says it supports caterpillars. Barbehenn (1994) reports it “readily accepted” by 15 Umber Skipper caterpillars, but did not support their growth.

Muilla clevelandii is now *Bloomeria clevelandii*. **San Diego Goldenstar**. Themidaceae.

Muilla maritima. **Common Muilla**. Themidaceae. Nectar: important early in the year for the endangered Bay Checkerspot (a segregate of Edith’s Checkerspot), and Flame Longhorn (*Adela flammeusella*), a day-flying moth. March – June.

Myrica californica is now *Morella californica*. **California Wax Myrtle**.

Nassella spp. are now *Stipa* spp. **Needlegrasses**.

Nasturtium officinale was *Rorippa nasturtium-aquaticum*. **Watercress**. Brassicaceae. Nectar: Cabbage White (fq), Gray-veined White (Margined White), Painted Lady, Common Ringlet, Purplish Copper, Juniper Hairstreak, Boisduval’s Blue, Marine Blue, Meridian Duskywing, Northern White-Skipper, Harbison’s Dun Skipper. Sierran Pericopid (*Gnophaela latipennis*, Arctiidae) - a striking black-and-white diurnal moth (David Hoffman photo). Scott rates it “slightly popular”. March – November.

Hostplant for Cabbage White, Gray-veined White (Margined White). Scott noted oviposition by Checkered White.

Navarretia spp. **Navarretia**. Polemoniaceae. Besides those mentioned below, likely others in this phlox-family genus are good butterfly nectar plants, also. Few observers are able to identify the plants!

Navarretia fossalis. **Spreading Navarretia**. Polemoniaceae. USFWS poster shows a Western Pygmy Blue on a flowering specimen. April – June.

Navarretia hamata. **Hooked Pincushionplant**. Polemoniaceae. Nectar: Variable Checkerspot. April – June.

Navarretia heterodoxa. **Calistoga Pincushionplant**. Polemoniaceae. Nectar: Rural Skipper. May – June.

Navarretia leucocephala ssp. *leucocephala*. **White Navarretia**. Polemoniaceae. Nectar: Painted Lady in Tehama County vernal pools, 1992 mass dispersion event: “In some small (<30 sq. meters) pools, as many as 50 individuals were nectaring on this low-growing, white-flowered vernal pool endemic.” Plants of Mather Field web site: “A favorite nectar source for a number of small blue and copper butterflies.” Shapiro reports Ringlet, Sylvan Hairstreak, and California Hairstreak. April – May.

Nemophila sp. Boraginaceae.

Geometridae: *Stamnodes albiapicata*.

Nemophila heterophylla. **Canyon Nemophila**. Boraginaceae. Nectar: *Annaphila lithosina* (Noctuidae) a day-flying moth (Buckett). February – June.

Nemophila maculata. **Fivespot**. Boraginaceae. Nectar: Orange Sulphur. May-July.

Nemophila menziesii. **Baby Blue Eyes**. Boraginaceae. Nectar: California Ringlet (photographed in Napa Co. by Greg Kareofelas). Kern Primrose Sphinx Moth (*Euproserpinus euterpe*, Spingidae), Three-striped Longhorn (*Adela trigrapha*), *Annaphila baueri* and *Annaphila diva* (Noctuidae), all day-flying moths.

Seems rarely visited by Lepidoptera nowadays, but likely more important historically, when it was one of our most abundant wildflowers, in flower very early. In a pollination study a few unspecified Lepidoptera came to its flowers; 84% to 100% of flower visitors in six populations were bees, especially honeybees near cultivated areas. Vars. In flower from January – July; the commonly cultivated var. *menziesii*, February May.

Noctuidae: *Annaphila baueri*. *Annaphila depicta*.

Nemophila parviflora. **Small-flowered Nemophila**. Boraginaceae. Nectar: Gray Hairstreak. In a meadow observation Travis Owens notes this as a favorite of the butterflies (unspecified) present. March – July.

Nemophila pulchella. **Eastwood’s Baby Blue Eyes**. Boraginaceae. Varieties flower from March – June.

Noctuidae: *Annaphila depicta*.

Nicolletia occidentalis. **Hole-in-the-sand Plant**. Asteraceae. Tageteae. Nectar: Checkered White, Small Checkered-Skipper. April-June.

Nicotiana attenuata. **Wild Tobacco**. Solanaceae. Nectar: Carolina Sphinx, White-lined Sphinx (fq), Great Ash Sphinx. Hummingbirds, bumblebees. (Aigner, Paul A., and Peter E. Scott. "Use and Pollination of a Hawkmoth Plant, *Nicotiana attenuata*, by Migrant Hummingbirds." 2002. *The Southwestern Naturalist* 47 (1): 1-11. doi:10.2307/3672796.) May – October.

Spingidae: Five-spotted Hawkmoth (*Manduca quinquemaculatus*) – an important host plant. Oviposits especially on terminal portions of elongating plants: Kessler, André, and Ian T. Baldwin. 2002. "*Manduca*

quinquemaculatus's Optimization of Intra-Plant Oviposition to Predation, Food Quality, and Thermal Constraints." *Ecology* 83 (8): 2346-354. doi:10.2307/3072065. Carolina Sphinx (*Manduca sexta*).

Nicotiana obtusifolia. **Desert Tobacco**. Solanaceae. Nectar: Mojave Sootywing in Organ Pipe National Monument, Arizona. March – June.

Noctuidae: Cabbage Looper (*Trichoplusia ni*).

Noccaea fendleri ssp. *glauca* was *Thalapsi montanum*. **Pennycress**. Brassicaceae. Nectar: Spring White, Painted Lady, Red Admiral, Field Crescent, Hoary Comma, Variegated Fritillary, Western Pine Elfin, Sheridan's Hairstreak, Western Tailed Blue, Silvery Blue, Persius Duskywing (Scott, Colorado-centered observations). Subsp. *californica*. May – June.

Subsp. *glauca*. April – August.

Foodplant for Gray-veined White (Margined White) and the Western White (HOSTS, Todd Stout).

Nolina bigelovii. **Bigelow's Nolina**. Ruscaceae. Butterflies – Pollinator Partnership. Lycaenids, especially hairstreaks, and small moths are likely Lepidoptera flower visitors. May – June.

Prodoxidae: *Mesepiola specca*. This species develops in "Nolina" seeds, possibly this one and/or the next.

Nolina cismontana. **Peninsular Beargrass**. Ruscaceae. May – July.

Notholithocarpus densiflorus was *Lithocarpus densiflorus*. **Tanoak**. Fagaceae.

A foodplant for the Golden Hairstreak – a beautiful butterfly usually perched on its foodplants (reported as such from Upper Stevens Creek Park in 1980 Season Summary; also near Big Basin, Santa Cruz County, 1977 Season Summary, Mendocino County 1970 Season Summary). Haggard records it as a hostplant for California Sister, Propertius Duskywing and Mournful Duskywing. California Sister egg found on it in Marin County – 2002 Season Summary.

Geometridae: *Eupithecia misturata*.

Nepticulidae: Powell & Opler note a species 'similar to *Stigmella variella*' "creates huge mines on tanbark oak" (p. 38).

Noctuidae: Angulate Oak Quaker (*Perigonica angulata*). Pectinate Oak Quaker (*Perigonica pectinata*).

Notodontidae: California Oakworm (*Phryganidia californica*).

Gelechiidae: Oak Groundling (*Telphusa sedulitella*).

Gracillariidae: *Cameraria leucothorax*. *Cameraria marinensis*.

Tortricidae: Tanoak acorns are food for the Filbertworm (*Cydia latiferreana*). Variable Oak Leaf-roller (*Epinotia emarginana*). *Epinotia fumoviridana* (Tortricidae Foodplant Database).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Notholithocarpus densiflorus var. *echinoides*. **Tanoak Shrub**. Fagaceae.

Gracillariidae: *Cameraria walsinghamsi*.

Nuphar polysepala. **Yellow Pond Lily**. Nymphaeaceae. April – September.

Pyralidae: American Lotus Borer Moth (*Ostrinia penitalis*, Crambidae).

Several other North American moth species are possible, but are not found recorded for California. Near most robust relict populations of this plant might be a good place to detect their presence.

Nuttallanthus texanus was *Linaria canadensis* var. *texana*. **Blue Toadflax**. Plantaginaceae. Nectar: Checkered White, Common Buckeye, Gray Hairstreak. NABA: “Good nectar plant.” March-May.

Blue Toadflax is a foodplant for Common Buckeye.

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*). Scribbled Sallow (*Sympistis perscripta*).

Oemleria cerasiformis. **Osoberry**. Rosaceae. Exochordeae. Nectar: Brown Elfin, Echo Azure (observed once by R.M. Pyle). February – April.

Hostplant for Lorquin's Admiral.

Geometridae: Rindge's Pero (*Pero mizon*) [Tatum]. Bruce Spanworm (*Operophtera bruceata*). October Thorn (*Tetracis jubararia*).

Noctuidae: *Adelphagrotis stellaris*. *Agrochola pulchella*. *Agrochloa purpurea*. *Aseptis adnixa* (a prime host, larvae eat young terminal leaves, according to BugGuide.net). Rusty Shoulder Knot (*Aseptis binotata*). Garden Cutworm (*Fishia discors*). Soothsayer (*Graphiphora augur*). Northern Scurfy Quaker (*Homorthodes furfurata*). Speckled Green Cutworm (*Orthosia hibisci*). [Tatum]. *Pseudorthodes irrorata*.

Oenanthe sarmentosa. **Pacific Water Parsley**. Apiaceae. Oenantheae. Nectar: Anise Swallowtail, Margined White, Lorquin's Admiral, Zerene Fritillary, Great Copper (fq), Acmon Blue (T. J. Gehling), Police Car Moth (*Gnophaela vermiculata*, Arctiidae). June - October.

Larval host for Anise Swallowtail – Tatum notes it a favorite host on southern Vancouver Island.

Oecophoridae: *Agonopterix oregonensis*. *Agonopterix rosaciliella*. *Depressaria daucella* reared from it.

I observed an unknown caterpillar on a Pacific Water Parsley flower head in Mountain View.

Oenothera californica. **California Evening Primrose**. Onagraceae. Nectar: moths (Pollinator Partnership). White-lined Sphinx (*Hyles lineata*, Sphingidae) on *O. c.* subsp. *avita* in Red Rock Canyon State Park, Kern County (Ron Wolf photo). White-lined Sphinx an important pollinator for this species (Grant). April – June.
subsp. *avita*.

Sphingidae: White-lined Sphinx (*Hyles lineata*) – Monroes find it an important host.

Sesiidae: Nebraska Clearwing (*Euhagena nebraskae*) – a form with solidly deep orange wings -- a disjunct population in the western Mojave Desert -- feeds on the perennial roots of this and likely related species. Adults found in September and October (Duckworth & Eichlin).

Oenothera cespitosa. **Fragrant Evening Primrose**. Onagraceae. Hawkmoth-pollinated; attracts White-lined Sphinx (*Hyles lineata*) (fq), Five-spotted Hawkmoth (*Manduca quinquemaculatus*), Great Ash Sphinx (*Sphinx chersis*), Carolina Sphinx (*Manduca sexta*), Wild Cherry Sphinx (*Sphinx drupiferarum*), Doll's Sphinx (*Sphinx dollii*), Elegant Sphinx (*Sphinx perelegans*) and Vashti Sphinx (*Sphinx vashti*). Also visited by Noctuid moths. April – September.

White-lined Sphinx and Vashti Sphinx are effective pollinators: Artz, Derek R., Cristian A. Villagra, and Robert A. Raguso. 2010. "Spatiotemporal Variation in the Reproductive Ecology of Two Parapatric Subspecies of *Oenothera cespitosa* (Onagraceae)." *American Journal of Botany* 97 (9): 1498-510. <http://www.jstor.org/stable/27857371>

Another study showed Five-spotted Hawkmoth best adapted to get to the nectar by reason of its longer tongue; and it visited it first in the evening; later came White-lined Sphinx and Great Ash Sphinx: Hodges, Scott A. 1988, "Some Preliminary Observations on Hawkmoth Pollination of *Oenothera caespitosa* and *Mirabilis multiflora*." *Plant Biology of Eastern California: The Mary DeDecker Symposium, 2nd annual* by the White Mountain Research Station. Edited by Clarence A. Hall, Jr. and Victoria Doyle-Jones. Pages 244-249.

Sweetly perfumed flowers; good in relatively deep pots.

Oenothera contorta var. *epiloboides* is now *Camissonia strigulosa*. **Plains Evening Primrose**.

Oenothera deltoides. **Birdcage Evening Primrose** or **Desert Evening Primrose** or **Dune Evening Primrose** and other common names. Onagraceae. Pollinated mainly by White-lined Sphinx (*Hyles lineata*) with visits by Achemon Sphinx (*Eumorpha achemon*) and Five-spotted Hawkmoth (*Manduca quinquemaculatus*). March – May.

Cosmopterigidae: Red-streaked Mompha (*Mompha eloisella*) (Powell & Opler, p. 77). *Mompha murtfeldtella* (Powell & Opler, p. 77).

Sphingidae: Phaeton Primrose Sphinx (*Euproserpinus phaeton*). White-lined Sphinx (*Hyles lineata*).

Noctuidae: *Schinia felicitata*, which rests among the buds and blossoms in the daytime.

Oenothera elata ssp. *hirsutissima*. **Hairy Evening Primrose**. Onagraceae. Nectar: White-lined Sphinx (*Hyles lineata*) (Tony Frates Flickr photograph). June – September.

Oenothera elata ssp. *hookeri*. **Hooker's Evening Primrose**. Onagraceae. Nectar: Cabbage White (Marc Kummel), White-lined Sphinx (*Hyles lineata*) (fq), Great Ash Sphinx (*Sphinx chersis*), Carolina Sphinx (*Manduca sexta*) (fq), Five-spotted Hawkmoth (*Manduca quinquemaculatus*), Elegant Sphinx (*Sphinx perelegans*), Achemon Sphinx (*Eumorpha achemon*) (fq), and several tiger moths and noctuids. Most Lepidoptera visits occur in the three hours after sunset, especially the first hour; sweetly fragrant. Highly recommended for moth gardens! Other pollinators, too. June – September.

Cosmopterigidae: *Mompha murtfeldtella* (Powell & Opler, p. 77).

Sphingidae: Phaeton Primrose Sphinx (*Euproserpinus phaeton*). White-lined Sphinx (*Hyles lineata*).

Noctuidae: in eastern California supports the colorful pink-and-yellow Primrose Moth (*Schinia florida*).

Oenothera suffrutescens was *Gaura coccinea*. **Wild Honeysuckle, Linda Tarde**. Onagraceae. Pollinated by many species of owlet and inchworm moths. April - June.

Olneya tesota. **Desert Ironwood**. Fabaceae. Robinieae. April – May.

Larval host for Funereal Duskywing. Indirectly supports other Lepidoptera species such as Great Purple Hairstreak, as a Desert Mistletoe (*Phoradendron californicum*) host.

Geometridae: *Glaucina eupithecaria* (Powell & Opler).

Opuntia polyacantha var. *hystricina*. **Starvation Prickly Pear**. Cactaceae. Nectar: ‘Siva’ Juniper Hairstreak, Pahaska Skipper (fq), Uncas Skipper. May – June.

Oreostemma alpigenum var. *andersonii* was *Aster alpigenus* var. *andersonii*. **Alpine Aster**. Asteraceae. Astereae. Nectar: Pine White, Pacific Fritillary, Coronis Fritillary, Hydaspe Fritillary, Mountain Crescent, California Crescent, Rockslide Checkerspot [Moldenke], Mariposa Copper (fq) [Shapiro in Trinity Alps], Sierra Nevada Blue, Shasta Blue, Arctic Blue, Lilac-bordered Copper (mostly records from annotated photographs by Ron Wolf), Sonora Skipper (Steve Laymon). June – September.

Zones 4-6.

Orobanche fasciculata is now *Aphyllon fasciculatum*. **Clustered Broomrape**. Orobanchaceae. April – July.

Clustered Broomrape is a Variable Checkerspot hostplant.

This plant is parasitic especially on the roots of shrubs of the genera *Artemisia*, *Eriodictyon*, and *Eriogonum*.

Osmorhiza spp. **Sweet Cicely**. Apiaceae. Scandiceae. Larval hosts for the Anise Swallowtail.

Osmorhiza berteroi was *Osmorhiza chilensis*. **Sweet-cicely**. Apiaceae. Scandiceae. April – July.

Hostplant for Anise Swallowtail.

Oecophoridae: *Agonopterix rosaciliella*.

Prodoxidae: *Greya reticulata*.

Tortricidae: White-triangle Tortrix (*Clepsis persicana forbesii*).

Osmorhiza brachypoda. **California Sweet Cicely**. Apiaceae. Scandiceae. March – May.

Prodoxidae: *Greya suffusca*.

Osmorhiza occidentalis. **Mountain Sweet-cicely**. Apiaceae. Scandiceae. March – May.
Hostplant for Anise Swallowtail.

Oecophoridae: *Agonopterix rosaciliella*.

Oxalis sp. **Wood Sorrel**. Oxalidaceae.

Noctuidae: Wedgeling (*Galgula partita*).

Oxalis oregana. **Redwood Sorrel**. Oxalidaceae. Nectar: a photograph on iNaturalist shows a Margined White apparently at nectar. February – June.

Oxyria digyna. **Mountain Sorrel**. Polygonaceae. July – September.

Foodplant for Ruddy Copper, Lustrous Copper and the American Copper.

Oxytheca perfoliata. **Roundleaf Puncturebract**. Polygonaceae. April – August.

Larval host for Small Blue.

Oxytheca trilobata. **Trilobia**. Polygonaceae.

Larval host for Small Blue.

Oxytropis spp. **False Locoweeds**. Fabaceae. Galegeae. Nectar: Blues and Sulphurs and *Hemaris* sp. (Pyle).

Found mostly in montane and desert regions and serve more as larval hosts than as nectar sources (Shapiro).

Oxytropis parryi. **Parry's Oxytrope**. Fabaceae Galegeae. June – July.

Larval host for Shasta Blue.

Packera breweri was *Senecio breweri*. **Brewer's Ragwort**. Asteraceae. Senecioneae. Nectar: Common Buckeye (J. Maughn). Variable Checkerspot. May – July.

Packera cana was *Senecio canus*. **Woolly Groundsel**. Asteraceae. Senecioneae. Nectar: Anise Swallowtail, Black Swallowtail, Western Tiger Swallowtail, Clodius Parnassian, Phoebus Parnassian, Rocky Mountain Parnassian. Orange Sulphur, Clouded Sulphur, Western Sulphur, Large Marble, Spring White, Western White. Field Crescent (fq), Callippe Fritillary, Mormon Fritillary, Variegated Fritillary, Chryxus Arctic (Scott), Hoary Comma (fq), Milbert's Tortoiseshell, Rockslide Checkerspot, Common Ringlet. Western Pine Elfin, Brown Elfin, Bramble Green Hairstreak, Gray Hairstreak, Juniper Hairstreak, Greenish Blue, Leona's Little Blue. Common Checkered-Skipper, Pacuvius Duskywing, Persius Duskywing, Sleepy Duskywing, Juba Skipper, Nevada Skipper and Tecumsah Skipper. A well-used but possibly secondary nectar source. June – August.

Zones 7, 14-17.

Packera multilobata was *Senecio multilobatus*. **Basin Butterweed**. Asteraceae. Senecioneae. Nectar: Desert Black Swallowtail, Checkered White, Common Buckeye (Roger Steeb), Sagebrush Checkerspot (Roger Steeb), Western Pygmy Blue, Leanira Checkerspot, Common Ringlet, Juniper Hairstreak, Northern White-Skipper, and Meridian Duskywing in southernmost Nevada. Common Checkered-Skipper (Utah, Roger Steeb). A BugGuide photograph shows an unknown plume moth at its flowers, tentatively identified as *Paraplatyptilia fragilis*. May – July.

Packera streptanthifolia. **Rocky Mountain Groundsel**. Asteraceae. Senecioneae. Scott notes flower visits by Common Ringlet. May – August.

Packera subnuda var. *subnuda* was *Senecio cymbalarioides*. **Cleftleaf Groundsel**. Asteraceae. Senecioneae. Nectar: Leto Fritillary, Mormon Fritillary. June – September.

Packera werneriiifolia was *Senecio werneriiifolia*). **Hoary Groundsel**. Asteraceae. Senecioneae. Nectar: Rocky Mountain Parnassian, Chryxus Arctic, Lustrous Copper. July – August.

Rockslide Checkerspot adults associated with it, 14 July and August 7 1974, Mono County (1974 Season Summary).

Paeonia brownii. **Western Peony**. Paeoniaceae. April – May.

Noctuidae: *Euros proprius* (Wikipedia).

Palafoxia arida. **Spanish Needle**. Asteraceae. Bahieae. Nectar: California Dogface, Harford's Sulphur, Dainty Sulphur, Sleepy Orange, Sara Orangetip, Becker's White, Checkered White, Ceraunus Blue, Mormon Metalmark, Mojave Sootywing, White Checkered-Skipper, Fiery Skipper. The Monroes rate Spanish Needle in the top ten of Anza Borrego butterfly nectar plants, listing nine species. January – September.

A hostplant for Dainty Sulphur.

Noctuidae: Spanish Needle is a nectar plant, roosting site and larval host for *Schinia niveicosta*.

Pyralidae: *Honora mellinella*, which lives in its flower heads.

Used for revegetation.

Palafoxia arida var. *gigantea* was *Palafoxia linearis* var. *gigantea*. **Giant Spanish Needle**. Asteraceae. Bahieae. February - May.

Noctuidae: *Schineia niveicosta*.

Panicum spp. **Panicgrass**. Poaceae. Paniceae.

Larval hosts for the Tawny-edged Skipper (Garth & Tilden).

Panicum oligosanthos is now *Dichanthelium oligosanthos* var. *scribnerianum*. **Scribner's Rosette Grass**.

Parietaria hespera var. *hespera*. **Rillita Pellitory**. Urticaceae.

Red Admiral hostplant.

Parkinsonia florida was *Cercidium floridum*. **Blue Palo Verde**. Fabaceae. Caesalpinieae. Nectar: Painted Lady, Ceraunus Blue. April – May.

Blue Palo Verde hosts Desert Mistletoe (*Phoradendron californicum*), hostplant for Great Purple Hairstreak, thus indirectly supporting its populations.

Saturniidae: Hubbard's Small Silkmoth (*Sphingicampa hubbardi*).

Tortricidae: The related southerly *Parkinsonia aculeata* is a hostplant for *Ofatulena duodecemstriata*, *Ofatulena luminosa*, Omnivorous Platynota (*Platynota rostrana*), and Omnivorous Leafroller (*Platynota stultana*).

Parkinsonia microphylla was *Cercidium microphyllum*. **Little-leaved Palo Verde**. Fabaceae. Caesalpinieae. Flowers in April – May, often about two weeks later than Blue Palo Verde.

Saturniidae: Hubbard's Small Silkmoth (*Sphingicampa hubbardi*).

Tortricidae: The related southerly *Parkinsonia aculeata* is a hostplant for *Ofatulena duodecemstriata*, *Ofatulena luminosa*, Omnivorous Platynota (*Platynota rostrana*), and Omnivorous Leafroller (*Platynota stultana*).

Parmelia sp. Lichen. Captive *Lycomorpha regulus* (Arctiidae) reared on this lichen (Powell & Opler). They feed upon it only when it is damp and “are excellent examples of cryptic coloration, resembling the lichen and its surroundings”.

Comstock, John Adams & Christopher Henne. 1967. “Early stages of *Lycomorpha regulus* Grinnell, with notes on the imago. (Lepidoptera: Amatidae) *Journal of Research on the Lepidoptera* 6 (4): 275-280.

Parnassia fimbriata. **Grass-of-Parnassus**. Parnassiaceae. Clodius Parnassian. July – September.

Paxistima myrsinites. **Oregon Boxwood**. Celastraceae. May – July.

Geometridae: Rindge's Pero (*Pero mizon*).

Pectis papposa. **Cinchweed**. Asteraceae. Tageteae. Nectar: Orange Sulphur, Painted Lady, Sagebrush Checkerspot, Common Checkered-Skipper in Clark County, Nevada (Austins). Monroes: White Checkered-Skipper. Flowers after summer rain mostly August – November, but as early as June or as late as January.

Larval host for Dainty Sulphur.

Noctuidae: Cabbage Looper (*Trichoplusia ni*).

Used for revegetation.

Pectocarya heterocarpa. **Mixed-nut Pectocarya**. Boraginaceae. February – May.

Painted Lady hostplant in Inyo County in the 1991 migration year.

Pectocarya recurvata. **Arched-nut Pectocarya**. Boraginaceae. February – May.

1991 Season Summary reports small Painted Lady larvae in huge numbers on it in San Bernardino County (JFE).

Pedicularis centranthera. **Dwarf Lousewort**. Orobanchaceae. May.

Foodplant for Edith's Checkerspot (noted in eastern Nevada; the plant is also native to California).

Pedicularis densiflora. **Indian Warrior**. Orobanchaceae. Photographs by Bill Bouton, Alan Schmierer and others show Pale Swallowtail – a long-tongued butterfly often seen at hummingbird flowers -- at nectar. Propertius Duskywing (Moldenke, "occasional" with 4-10 captures on the flowers). Shapiro: "Pedicularis ... are larval hosts of some populations of Edith's Checkerspot. Flowers are not normally visited by butterflies, which can't get in." Mostly hummingbirds. March – May.

Indian Warrior is among foodplants for Edith's Checkerspot and Variable Checkerspot.

Pedicularis groenlandica. **Elephant's Head**. Orobanchaceae. Moldenke found the Nevada Cloudywing (a segregate of the Mexican Cloudywing) associated with its flowers. June – September.

Pedicularis semibarbata. **Pine Lousewort**. Orobanchaceae. May – July.

Foodplant for Edith's Checkerspot.

Singer, Michael C., and Carolyn S. McBride. 2010. "Multitrait, host-associated divergence among sets of butterfly populations: implications for reproductive isolation and ecological speciation." *Evolution* 64 (4): 921-33. <http://www.jstor.org/stable/27784060>.

Pellaea andromedifolia. **Coffee Fern**. Pteridaceae.

Noctuidae: *Pseudobryomima fallax*, a leaf miner.

Penstemon spp. **Beardtongues**. Plantaginaceae. Anise Swallowtail. Shapiro has mostly noted butterflies at nectar through carpenter bee bites at the base of the corollas, especially tailed coppers – except for Pipevine Swallowtail, one of the longer-tongued butterflies, which commonly visits red flowers. Penstemon considered "engineered" as bee flowers, not to serve butterflies. Hummingbirds like Penstemon flowers.

Several Penstemon are larval hosts of populations of Variable or Edith's Checkerspots and sporadically of the Common Buckeye, which may account for much of their butterfly interest. Most work as lab hosts for Anicia Checkerspot (*wheeleri* segregate) (Todd Stout).

Noctuidae: *Sympistis albifasciata* – likely (PNW Moths). *Sympistis aterrima* – possibly (PNW Moths). *Sympistis extremis* – prostrate species of rocky places (Wikipedia). *Sympistis glennyi* – possibly (PNW

Moths). *Sympistis major* uses *Penstemon fruticosus* elsewhere. *Sympistis meadiana* – possibly (PNW Moths). *Sympistis mirificalis* – probably (PNW Moths). *Sympistis picina*. *Sympistis sandaraca* – possibly (PNW Moths). *Sympistis umbrifascia*.

Tortricidae: Verbena Bud Moth (*Endothenia hebesana*). *Sparganothis senecionana*.

Penstemon azureus. **Azure Penstemon**. Plantaginaceae. May-August.

Larval host for Common Buckeye.

Penstemon caesius. **San Bernardino Beardtongue**. Plantaginaceae. Nectar: White-lined Sphinx. June-August.

Penstemon centranthifolius. **Scarlet Bugler**. Plantaginaceae. Nectar: Pale Swallowtail. Hummingbirds. April-July.

Alice Abela photos confirm it is a Variable Checkerspot hostplant (Santa Barbara County, 7 June 2010, Flickr).

Noctuidae: *Sympistis umbrifascia* develops in the flower buds (Jennifer Bundy, Southwest Moths web site).

Sesiidae: *Penstemonia edwardsii* [known from Arizona collections].

Penstemon davidsonii var. *davidsonii*. **Davidson's Penstemon**. Plantaginaceae. Nectar: Common Wood-Nymph, Red Admiral, hummingbirds (Plants in the Pollinator Pathway). July-August.

Penstemon deustus. **Rock Penstemon**. Plantaginaceae. May-July.

Foodplant for Variable Checkerspot.

Depressariidae (Oecophoridae): *Pyramidobela quinquecristata* (Powell & Opler, p. 71).

Tortricidae: *Sparganothis senecionana*. *Sparganothis tunicana*.

Penstemon eatonii. **Eaton Firecracker**. Plantaginaceae. Nectar: Two-tailed Swallowtail. Mostly hummingbirds. March-July.

Hostplant for Anicia Checkerspot (*wheeleri* segregate) (Todd Stout). May work for Arachne Checkerspot; Todd Stout finds much easier to initiate feeding with first instar than to switch over to it later.

Penstemon heterodoxus. **Sierra Beardtongue**. Plantaginaceae. Moldenke finds Rockslide Checkerspot and Nevada Cloudywing (a segregate of the Mexican Cloudywing) on its flowers. July-August.

Foodplant for Variable Checkerspot, Edith's Checkerspot.

Penstemon heterophyllus. **Foothill Penstemon**. Plantaginaceae. Nectar: Western Tiger Swallowtail, Callippe Fritillary, Umber Skipper. April-July.

Larval host for Variable Checkerspot and Common Buckeye.

Penstemon humilis. **Low Beardtongue**. Plantaginaceae. May-July.

Larval host for Anicia Checkerspot (*wheeleri* segregate) (Todd Stout) and Arachne Checkerspot.

Penstemon laetus. **Gay Penstemon**. Plantaginaceae. Nectar plant for butterflies (John Rusk). May – July.

Tortricidae: *Sparganothis tunicana*.

Penstemon newberryi. **Mountain Pride**. Plantaginaceae. Flowers attract hummingbirds. June-August.

The Variable Checkerspot population in the Desolation Valley Wilderness develops on it.

Tortricidae: *Sparganothis senecionana*.

Penstemon palmeri. **Palmer's Penstemon. Scented Beardtongue**. Plantaginaceae. Nectar: Desert Black Swallowtail, Satyr Comma, Harpalus Skipper in southernmost Nevada (Austins). White-lined Sphinx (*Hyles lineata*, Sphingidae) (Roger Steeb). May-June.

Sesiidae: *Penstemonia pappi*. *Penstemonia clarkei*.

Penstemon procerus. **Small-flowered Penstemon**. Plantaginaceae. Nectar: Milbert's Tortoiseshell, Lilac-bordered Copper, Persius Duskywing (Tanya Harvey), Umber Skipper, Mardon Skipper, Sonora Skipper. July-August.

Foodplant for Variable Checkerspot.

Penstemon pseudospectabilis. **Pink Showy Penstemon**. Plantaginaceae. Nectar: Anise Swallowtail. Hummingbirds. March-May.

Lange, Ronald S., and Peter E. Scott. 1999. "Hummingbird and Bee Pollination of *Penstemon pseudospectabilis*." *The Journal of the Torrey Botanical Society* 126 (2): 99-106. doi:10.2307/2997285.

Penstemon rupicola. **Rock Penstemon**. Plantaginaceae. Nectar: Anise Swallowtail. June-August.

Penstemon rydbergii. **Rydberg's Penstemon**. Plantaginaceae. Pale Swallowtail and Cabbage White and Zerene Fritillary (Ron Wolf). Pollinator Partnership notes as a butterfly plant. May-August.

Penstemon rydbergii var. *oreocharis*. **Tall Beardtongue**. Nectar: Edith's Checkerspot (<https://www.inaturalist.org/observations/9446253>).

Penstemon speciosus. **Showy Penstemon**. Plantaginaceae. Nectar: likely for those who use it as a host! May-August.

Larval host for Variable Checkerspot, Edith's Checkerspot, and Arachne Checkerspot.

Tortricidae: *Sparganothis senecionana*.

Penstemon spectabilis. **Showy Penstemon**. Plantaginaceae. Theodore Payne Butterfly Mixture component. Nectar: White-lined Sphinx. Good for hummingbirds. April-June.

Sesiidae: Larval host for the wasp mimics *Penstemonia dammersi* and *Penstemonia hennei*.

Penstemon utahensis. **Utah Penstemon**. Plantaginaceae. Nectar: Western Tiger Swallowtail (Austins). April-May.

Larval host for Arachne Checkerspot. Rare in California; difficult to cultivate.

Pentachaeta aurea. **Golden Chaetopappa**. Asteraceae. Astereae. Nectar: Behr's Metalmark (Bruce Edward Watts). March - June.

Pentachaeta lyonii. **Lyon's Pentachaeta**. Asteraceae. Astereae. Nectar: Mormon Metalmark (David Daniels). March – August.

Peraphyllum ramosissimum. **Wild Crab Apple**. Rosaceae. Maleae. April – May.

Larval host for the Southwestern Azure (cinerea), a segregate of the Echo Azure complex.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Zones 2, 3, 7, 18.

Pericome caudata. **Mountain Tail Leaf**. Asteraceae. Perityleae. Nectar: Painted Lady, Common Wood-Nymph, Tailed Copper (fq), Yuma Skipper, showy, likely others. July – October.

Sphingidae: White-lined Sphinx (*Hyles lineata*, Arizona).

Perideridia spp. **Yampah**. Apiaceae. Oenantheae. Nectar: Strathmann notes large numbers of Behr's Hairstreak on Yampah species late in the season in her study of butterflies in mountain meadows of the NE Sierra. Lorquin's Admiral.

Perideridia bolanderi. **Bolander's Yampah**. Apiaceae. Oenantheae. Nectar: Pine White (John Weiser). Thicket Hairstreak and Lilac-bordered Copper, 'Sierra' Arctic Blue [Sierra Nevada Blue] (Ron Wolf). Likely others! June - August.

Larval host for Anise Swallowtail.

Perideridia californica. **California Yampah**. Apiaceae. Oenantheae. Nectar: Pale Swallowtail, Anise Swallowtail, Variable Checkerspot, California Ringlet, California Hairstreak, Silvery Blue, Bernardino Dotted-Blue, and Lupine Blue (Paul Johnson, Pinnacles National Monument). April - May.

Larval host for Anise Swallowtail (Paul Johnson).

Perideridia gairdneri. **Gairdner's Yampah**. Apiaceae. Oenantheae. Moldenke finds Mountain Crescent associated with its flowers. June - July.

Larval host for Anise Swallowtail.

Perideridia kelloggii. **Kellogg's Yampah**. Apiaceae. Oenantheae. Nectar: Variable Checkerspot, Common Buckeye, Callippe Fritillary, Gray Hairstreak, Acmon Blue. July - August.

Larval host for Anise Swallowtail.

Perideridia oregana. **Oregon Yampah**. Apiaceae. Oenantheae. Nectar: Wikipedia photograph shows two fritillaries, perched, at least, on a single flower head; another photograph shows a Lorquin's Admiral, which seems to be at nectar.

Peritoma arborea was *Isomeris arborea*. **Bladderpod**. Cleomaceae formerly Capparaceae. Nectar: Anise Swallowtail, Becker's White, Spring White (Hartmut Wisch photograph), Sara Orangetip, California Dogface, Monarch, Red Admiral, Painted Lady (fq), Bramble Green Hairstreak, Silvery Blue, Funereal Duskywing, White-lined Sphinx (Ron Wolf and David Horner photographs), Ridings' Forester (*Alypia ridingsii*, Noctuidae, Hartmut Wisch), and Alfalfa Semilooper (*Autographa californica*, Noctuidae, Hartmut Wisch photograph). The Monroes find it one of the best in Anza-Borrego Desert State Park. Hummingbirds. Var. *arborea* flowers all year; the others for many months.

In Shapiro's central California garden experience, Lepidoptera rarely visits its flowers. Bladderpod likely works well in desert situations partly because of it flowers most years and over a long period. Secondary nectar sources get visits when primary sources are not available. Being a major Becker's White hostplant, thus visited frequently by it in desert areas where it is prevalent, may also get it attention from other butterfly species. I think they are copycats!

Becker's White larval host, its major host in much of southern California. Cabbage White may use it as a larval host in gardens (Shapiro, personal communication).

Peritoma lutea was *Cleome lutea*. **Yellow Spiderwort**. Cleomaceae. Nectar: Pipevine Swallowtail, Becker's White (R.M. Pyle), Monarch (David G. James), Gray Hairstreak. May - August.
Larval host for Western White and Checkered White.

Peritoma serrulata was *Cleome serrulata*. **Rocky Mountains Bee Plant**. Cleomaceae. Nectar: In Utah, Todd Stout saw Baird's Swallowtail, and the Pahaska Skipper (*martini*, same form as found in California) on a large patch and on another occasion Queen Alexandra's Sulphur and Checkered White. Others: Anise Swallowtail, Baird's Old World Swallowtail, Becker's White, Cabbage White, Checkered White, Pine White, Western White (Scott), Orange Sulphur, Clouded Sulphur, Painted Lady, Monarch, Viceroy, Milbert's Tortoiseshell, Nokomis Fritillary, Small Wood-Nymph, Coral Hairstreak, Gray Hairstreak, 'Siva' Juniper Hairstreak, Ruddy Copper, White-lined Sphinx (Karen Chiasson), Five-spotted Hawkmoth. Scott rates it "moderately popular" with Colorado butterflies. May - July.

Hostplant for Checkered White, Cabbage White, and, at least in Utah, for Becker's White (Todd Stout).

Seems to be very rare as a wild plant or perhaps a waif in California, but welcome in some gardens.

Perityle emoryi. **Emory's Rock Daisy**. Asteraceae. Nectar: Sagebrush Checkerspot, California Patch, Fiery Skipper. January - June, October - November.

Perityle incana. **Guadalupe Island Rock Daisy**. Asteraceae. Perityleae. Theodore Payne Foundation recommends it for butterfly gardens. Flowers summer and fall.

Native to Baja California.

Persicaria spp. formerly known as *Polygonum*. **Smartweeds.**

See *Polygonum* spp.

Persicaria amphibia was *Polygonum amphibium*. **Water Smartweed.** Polygonaceae. Nectar: Cabbage White, Monarch, Variegated Fritillary (Scott), Gray Hairstreak (fq), Purplish Copper (fq), Acmon Blue (fq). June – November.

Hostplant for Purplish Copper.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Banded Woollybear (*Pyrrharctia isabella*).

Persicaria hydropiperoides was *Polygonum hydropiperoides*. **False Waterpepper.** Polygonaceae. Nectar: Little Yellow, Viceroy, Red Admiral, Pearl Crescent, Gray Hairstreak, Long-tailed Skipper, Dun Skipper and Fiery Skipper. June – October.

False Waterpepper is a hostplant for the Purplish Copper.

Persicaria lapathifolia was *Polygonum lapathifolium*. **Willow Smartweed. Pale Smartweed.** Polygonaceae. Nectar: Orange Sulphur, Western Pygmy Blue, Bordered Patch, Sandhill Skipper, Eufala Skipper. June – October.

Foodplant for the Purplish Copper and Gray Hairstreak.

Noctuidae: Henry's Marsh Moth (*Acronicta insularis* formerly *Simyra henrici*).

Persicaria punctata was *Polygonum punctatum*. **Dotted Smartweed.** Polygonaceae. Nectar: Common Buckeye. June – November.

Foodplant for the Purplish Copper.

Widely planted as waterfowl food.

Petalonyx thurberi. **Sandpaper Plant.** Loasaceae. Nectar: Checkered White, Orange Sulphur, California Patch, Western Pygmy-Blue (Roger Steeb), Mojave Sootywing, Fiery Skipper. Very fragrant flowers attract a wide variety of insects (Hartmut Wisch, BugGuide). May – July.

Petasites frigidus var. *palmatus* was *Petasites palmatus*. **Coltsfoot.** Asteraceae. Senecioneae. Nectar: Anise Swallowtail, Sara Orangetip, Margined White (fq), American Lady, California Tortoiseshell, Milbert's Tortoiseshell, Green Comma, Echo Azure (fq). Diurnal geometrids: Variable Carpet (*Anticlea vasilata*), Milky-white Carpet Moth (*Enchoria lacteata*) (fq), Western White-ribboned Carpet Moth (*Mesoleuca gratulata*) (fq). Robert Michael Pyle notes it in Washington as "one of our best native nectar plants in the spring", also getting beeflies and hover flies. January – April.

Coltsfoot listed as a hostplant for the Old World Swallowtail (HOSTS).

Zones 4-6, 14-17, 19-24. Spreads readily in moist soil.

Petasites palmatus is now *Petasites frigidus* var. *palmatus*. **Coltsfoot**.

Petrophytum caespitosum. **Rock Spiraea**. Rosaceae. Spiraeaceae. May – September.

Larval host for the Cinereous Blue (Garth & Tilden).

Peucephyllum schottii. **Schott's Pygmycedar**. Asteraceae. Bahieae. Nectar: Painted Lady (Aaron Schusteff photograph on BugGuide), White-lined Sphinx (Ron Wolf photographs). December – June.

Phacelia sp. **Phacelia**. Boraginaceae. Nectar: Pearly Marble, Propertius Duskywing. Shapiro says almost all *Phacelia* species are top-notch butterfly nectar plants.

Noctuidae: Stephen's Gem (*Megalographa biloba*).

Phacelia bicolor var. *bicolor*. **Trumpet Phacelia**. Boraginaceae. Checkered White (male and female, Mono County, Ron Wolf photographs). May – June.

Phacelia brachyloba. **Shortlobe Phacelia**. Boraginaceae. Nectar: Variable Checkerspot. April – May.

Phacelia californica **California Phacelia**. Boraginaceae. Nectar: Cabbage White, Moss' Elfin, Blues. An important nectar source for the endangered Mission Blue [a segregate of Boisduval's Blue]. 'Many' species seek nectar (NABA). March – September.

Douglasiidae: *Tinagma californicum* – suspected hostplant since adults found near its flowers (Powell & Opler). Thought to be a seed or stem miner (Lepidoptera of Brooks Island, Powell, 2005).

Noctuidae: Alfalfa Semilooper (*Autographa californica*) – larvae found and reared from it, San Bruno Mountain (1988 Season Summary).

Pterolonchidae: *Coelopoeta phaceliae*, a leaf miner (Powell & Opler, p. 74).

Tortricidae: *Clepsis fucana*. *Sparganothis senecionana*.

Phacelia calthifolia. **Calthaleaf Phacelia**. Boraginaceae. March – May.

Depressariidae: *Ethmia semilugens* (BugGuide).

Phacelia campanularia. **Desert Bluebells**. Boraginaceae. Nectar: Butterflies, White-lined Sphinx. February – May.

Desert Bluebells are food for Painted Lady larvae.

Phacelia cicutaria. **Caterpillar Phacelia**. Boraginaceae. Nectar: Variable Checkerspot, Silvery Blue (Nature Shutterbug). February – June.

var. *hispida*. Acmon Blue at nectar (Marc Kummel photograph).

Depressariidae: *Ethmia coquillettella* (adults associate with the plant and larvae have been reared from eggs on it, Powell & Opler, p. 69).

Geometridae: *Stamnodes albiapicata*.

Noctuidae: *Annaphila vivanae*.

Phacelia crenulata. **Notch-leaved Phacelia**. Boraginaceae. March-May.

Depressariidae: *Ethmia semilugens* (BugGuide).

Noctuidae: Notch-leaved Phacelia is the only known foodplant for *Baptarma felicitata*, a small moth with red-and-black hindwings. Good photographs of many stages on Jennifer Bundy's Southwest Moths web site.

Phacelia curvipes. **Washoe Phacelia**. Boraginaceae. April-June.

Noctuidae: *Annaphila ida*.

Phacelia distans. **Common Phacelia**. Boraginaceae. Nectar: Sara Orangetip, Harford's Sulphur, Painted Lady, Mourning Cloak, California Patch, Marine Blue, Arizona Powdered-Skipper, Funereal Duskywing, Sleepy Duskywing, and Orange Skipperling. March – May.

Ethmiidae: *Ethmia brevistriga* (association noted, suspected host). *Ethmia coquilletella* (adults associate with the plant and larvae have been reared from eggs on it, Powell & Opler, p. 69).

Gelechiidae: *Chionodes nanodella* – eats decaying leaves at the base of the plant.

Scythrididae: Sand-dune Grasshopper Moth (*Areniscythris brachypteris*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Phacelia egena. **Rock Phacelia**. Boraginaceae. April – July.

Douglasiidae: *Tinagma californicum* – suspected hostplant since adults found near its flowers (Powell & Opler).

Phacelia fremontii. **Fremont's Phacelia**. Boraginaceae. Nectar: Becker's White, Checkered White, Cabbage White, Desert Orangetip, Sara Orangetip, Southwestern Orangetip, Desert Marble, Acmon Blue, West Coast Lady, Variable Checkerspot, Small Checkered-Skipper, and Common Checkered-Skipper (Austins). March June.

Phacelia hastata. **Silver-leaved Scorpionweed**. Boraginaceae. Nectar: Gray Hairstreak; reputedly attracts "a diverse assortment" of butterflies. A flower visit noted by Leona's Little Blue in southern Oregon. May – July.

Pterolonchidae: *Coelopoeta phaceliae*, a leaf miner (Powell & Opler, p. 74).

Tortricidae: *Sparganothis senecionana*.

Phacelia hastata ssp. *compacta*. **Timberline Phacelia**. Boraginaceae. Nectar: Milbert's Tortoiseshell, Greenish Blue (Moldenke). July – September.

Phacelia heterophylla. **Varileaf Phacelia**. Boraginaceae. Nectar: Common Ringlet, Boisduval's Blue (Idaho nectar study). Bramble Green Hairstreak (Scott). May – July.

Douglasiidae: *Tinagma californicum* – suspected hostplant since adults found near its flowers (Powell & Opler).

Tortricidae: *Sparganothis tunicana*.

Phacelia imbricata. **Mountain Phacelia**. Boraginaceae. Nectar: Checkered White, Painted Lady, West Coast Lady, American Lady and Northern White-Skipper. April – July.

Phacelia longipes. **White-flowered Phacelia**. Boraginaceae. Noted as a butterfly nectar plant. April – July.

Phacelia malvifolia. **Stinging Phacelia**. Boraginaceae. April – July.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Phacelia minor. **California Bluebell**. Boraginaceae. March-June.

Noctuidae: *Annaphila pseudoastrologa*.

Phacelia procera. **Tall Phacelia**. Boraginaceae. June - August.

Pterolonchidae: *Coelopoeta phaceliae*, a leaf miner (Powell & Opler, p. 74).

Phacelia mutabilis. **Changeable Phacelia**. Boraginaceae. May - October.

Pterolonchidae: *Coelopoeta phaceliae*, a leaf miner (Powell & Opler, p. 74).

Phacelia parryi. **Parry's Phacelia**. Boraginaceae. Nectar: White-lined Sphinx. March – May.

Noctuidae: *Annaphila pseudoastrologa*.

Phacelia procera. **Tall Phacelia**. Boraginaceae. June - August.

Depressariidae: *Ethmia lassenella* (Powell & Opler p.68-69).

Elachistidae: *Coelopoeta phaceliae*, a leaf miner.

Phacelia ramosissima. **Branching Phacelia**. Boraginaceae. Commended for San Francisco butterfly gardens (Barbara Deutsch). April – October.

Depressariidae: *Ethmia albistrigella* (BugGuide). *Ethmia macneilli* (Powell & Opler, p. 70). *Ethmia timberlakei* (Powell & Opler, p 70).

Tortricidae: *Eucosma hasseanthi*. *Eucosma hennei*.

Phacelia tanacetifolia. **Tansyleaf Phacelia** or **Beefood**. Boraginaceae. Nectar: Orange Sulphur, Cabbage White, West Coast Lady, Painted Lady, Common Buckeye, a grass skipper; moths. Bumblebees and beeflies. March – May.

Depressariidae: *Ethmia* spp., two “undescribed”, related to *E. geranella*, *E. macneilli*, and *E. timberlakei* (Powell & Opler, p. 70).

Noctuidae: *Annaphila vivanae* successfully raised on this species in the laboratory.

Phacelia vallis-mortae. **Death Valley Phacelia**. Boraginaceae. Nectar: Desert Black Swallowtail, Painted Lady, Variable Checkerspot. May – June.

Phalaris arundinacea. **Reed Canarygrass**. Poaceae. Poaeae.

Hostplant for Chryxus Arctic (HOSTS). David Nunnallee found a diapausing mature larva of the Arctic Skipper on Reed Canarygrass and finds Woodland Skipper larvae on it. Todd Stout notes it as a hostplant for Common Roadside-Skipper and Woodland Skipper. Todd Stout finds it works as a lab rearing plant for Ringless Ringlet (*Coenonympha ampelos elko*, found in northern California), Common Wood-Nymph, Great Basin Wood-Nymph, Eufala Skipper, Juba Skipper, Sandhill Skipper, Tawny-edged Skipper, and Orange Skipperling. European Skipper foodplant in Washington – an introduced butterfly spreading across the U.S. possibly to one day find its way to California.

Noctuidae: Reed Canarygrass used as an example of one of the coarser grasses that is a preferred forage of the Glassy Cutworm (*Apamea devastator*) (PNW Moths), and a favorite larval host of the Olive Green Cutworm (*Dargida procinctus*) [Tatum].

Phalaris californica **California Canarygrass**. Poaceae. Poaeae.

Larval host for the Woodland Skipper.

Phalaris lemmonii. **Lemmon’s Canarygrass**. Poaceae. Poaeae.

Larval host for the Woodland Skipper.

Phaseolus filiformis. **Slender-stem Bean**. Fabaceae. Phaseoleae. October – December.

Larval host for Golden-banded Skipper (*Autochton cellus*, Hesperidae), a butterfly not known from California, but found in Arizona and New Mexico.

Philadelphus lewisii. **Western Mock Orange**. Hydrangeaceae. Nectar: Western Tiger Swallowtail (fq), Two-tailed Swallowtail, Pale Swallowtail, Indra Swallowtail, Sulphurs, California Dogface, Monarch (Robert Ivens), Common Wood-Nymph, Common Ringlet, Variable Checkerspot, Gold-hunter’s Hairstreak, Silver-spotted Skipper. ‘Many species’. Shapiro finds it visited sporadically, not heavily by butterflies. Nevertheless, Garth & Tilden consider it ‘especially attractive’ to California butterflies. Moths, too: Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), White-lined Sphinx (*Hyles lineata*, Sphingidae), Alfalfa Looper (*Autographa californica*, Noctuidae), Cabbage Looper (*Trichoplusia ni*, Noctuidae), Stephen’s Gem (*Megalographa biloba*, Noctuidae), and Rindge’s Pero (*Pero mizon*, Geometridae). Achemon Sphinx is likely since it visits flowers of cultivated non-native *Philadelphus coronarius*. The double-flowered ‘Goose Creek’ cultivar works also. May – July.

Geometridae: Johnson's Euchlaena (*Euchlaena johnsonaria*). Columbia Pug (*Eupithecia columbiata*). Mountain Mahogany Looper (*Iridopsis clivinaris*).

Phlox austromontana. **Desert Phlox**. Polemoniaceae. Nectar: Painted Lady (Christopher Christie, CalPhotos). May – June.

Phlox caespitosa aka *Phlox cespitosa*. **Tufted Phlox**. Polemoniaceae. Nectar: White-lined Sphinx, four other nocturnal moths (not hawkmoths).

Phlox condensata aka *Phlox covillei*. **Condensed Phlox**. Polemoniaceae. Nectar: White-lined Sphinx (*Hyles lineata*, Sphingidae) and at least ten species of nocturnal moths, including Army Cutworm (*Euxoa auxiliaris*). June – August.

Phlox diffusa. **Spreading Phlox**. Polemoniaceae. Anise Swallowtail (fq), Clodius Parnassian (Michael Shepard), Variable Checkerspot, Edith's Checkerspot, Juba Skipper (Berkhousen & Shapiro, 1994), skippers, Corn Earworm. At Donner Pass gets "the earliest butterflies on the wing". Strongly favored, very fragrant and "abundantly" nectarous, pollinated by insect tongues including those of "butterflies, skippers and bee hawk moths" (Pojar, 1970). May – August.

Phlox dolichantha. **Bear Valley Phlox**. Polemoniaceae. Nectar: Mostly small flies, but also White-lined Sphinx. May – June.

Phlox douglasii. **Douglas' Phlox**. Polemoniaceae. Nectar: White-lined Sphinx (*Hyles lineata*, Sphingidae) and four other species of nocturnal moths. April – May.

Phlox gracilis is now *Microsteris gracilis*. **Slender Phlox**.

Phlox grayi. **Arizona Pink Phlox**. Polemoniaceae. Nectar: A *Satyrium* (Lycaenidae) hairstreak, White-lined Sphinx (fq).

Phlox hirsuta. **Yreka Phlox**. Polemoniaceae. Nectar: Anise Swallowtail, Spring White, Cabbage White, Painted Lady (fq), Edith's Checkerspot, California Tortoiseshell, Propertius Duskywing, Columbian Skipper, Juba Skipper, Sachem, Spurred Wave (*Drepanulatrix unicalcararia*, Geometridae), Sagebrush Girdle Moth (*Plataea trilinearia*, Geometridae), Indiscrete Cissusa (*Cissusa indiscreta*, Noctuidae), White-lined Sphinx (fq), Clark's Day Sphinx (*Proserpinus clarkiae*) (fq). (Ferguson, Filipiski, & Donham). Lepidoptera are primary pollinators. April – May.

Phlox hoodii ssp. *canescens*. **Gray Phlox**. Polemoniaceae. Nectar: Hoary Comma (Idaho study). Gray Hairstreak and 'Siva' Juniper Hairstreak (Scott). May – July.

Phlox longifolia. **Longleaf Phlox**. Polemoniaceae. Nectar: Sandhill Skipper – a major nectar source at the northern limit of its range in Canada (Garland, J. Allan. 1977. "An Ecological Note on *Polites sabuleti sabuleti* at the northern limit of its range (Hesperiidae)." *Journal of the Lepidopterists' Society* 31(1):70-71. No doubt a nectar plant for other butterflies. May - June.

Phlox pulvinata. **Cushion Phlox**. Polemoniaceae. Nectar: Chryxus Arctic in Colorado – at 13,400 feet on Mount Evans (Ron Wolf photograph). July – August.

Phlox speciosa. **Showy Phlox**. Polemoniaceae. Nectar: Chryxus Arctic, Woodland Skipper. April – June. Noctuidae: hostplant of Common Idia (*Idia aemula*), which eats dead leaves, often of conifers (HOSTS).

Phlox stansburyi. **Cold Desert Phlox**. Polemoniaceae. Nectar: Pieridae, White-lined Sphinx (*Hyles lineata*, Sphingidae), Army Cutworm (*Euxoa auxiliaris*, Noctuidae). April – June.

Phlox stansburyi subsp. *superba*. **Cold-Desert Phlox**. Polemoniaceae. Nectar: White-lined Sphinx (*Hyles lineata*, Sphingidae) (fq), and microlepidoptera.

Phoenicautis cheiranthoides. **Daggerpod**. Brassicaceae. April – June.

Larval host for Western White.

Pholisma sonora. **Sand Food**. Boraginaceae. April - May. Nectar: Painted Lady observed 14 times in a study of insects visiting its flowers from 24 April to 4 May 2001 (Wiesenborn, W. D. 2003. “Insects on *Pholisma sonora* (Lennoaceae) flowers and their conspecific pollen loads.” *Madroño* 50 (2): 110–114, cited on page 112).

Pholistoma auritum. **Purple Fiesta Flower**. Boraginaceae. Nectar: Sara Orangetip (Paul Johnson, others). March – June.

Geometridae: *Stamnodes albiapicata*.

Noctuidae: *Viridiseptis marina* [formerly *Aseptis marina*].

Formerly one of Clyde Robin’s “Foolproof Wildflowers” – large seeds, easy to grow.

Phoradendron bolleanum was *Phoradendron densum*. **Bollean Mistletoe. Dense Mistletoe**. Viscaceae. June - August.

Hostplant for Great Purple Hairstreak.

It is parasitic on native *Hesperocyparis* (cypresses), *Juniperus* (junipers) and *Pinus monophylla* (Singleleaf Pinyon in Mt. Pinos area, Ventura County) in juniper/pinyon woodlands, and locally on *Abies concolor* (White Fir).

Phoradendron californicum. **Desert Mistletoe**. Viscaceae. Nectar: Bramble Green Hairstreak, Silvery Blue (Monroes). “Exquisitely fragrant” says Mary Klinkel, (SoWestLep #11032). She saw Echo Azure and American Snout at nectar on it, January 2013 (SoWestLep #12220). Echo Azure and Great Purple Hairstreak (Klinkel, SoWestLep #13801). January- March.

Hostplant for Great Purple Hairstreak.

Noctuidae: Beloved Emarginea (*Emarginea percara*).

Desert Mistletoe is parasitic on *Senegalia greggii* (Catclaw Acacia), *Cercidium* (palo verde), *Larrea* (creosote bush), *Olneya* (desert ironwood), *Parkinsonia* (palo verde), *Prosopis* (mesquites), and *Simmondsia* (jojoba). Thus these trees indirectly support Great Purple Hairstreak and the Beloved Emarginea. Its fruits happen to be the most important food for Phainopepla from October through April.

Phoradendron densum is now *Phoradendron bolleanum*. **Dense Mistletoe**. Viscaceae. June - August.

Phoradendron juniperinum. **Juniper Mistletoe**. Viscaceae. July-September.

Hostplant for Great Purple Hairstreak.

It occurs on Incense Cedar (*Calocedrus decurrens*) and junipers (*Juniperus* species) in pinyon-juniper woodland and ponderosa pine forest. As parasitic on *Juniperus occidentalis* noted as supporting Great Purple Hairstreak in 1994 Season Summary (Lassen County).

Phoradendron leucarpum subsp. *macrophyllum* was *Phoradendron serotinum* subsp. *macrophyllum*. **Bigleaf Mistletoe**. Viscaceae. December - March.

Hostplant for the Great Purple Hairstreak.

It attaches to deciduous broadleaf trees other than *Quercus* (oaks), mostly *Alnus* (alders), *Fraxinus* (ashes), *Juglans* (walnuts), *Platanus* (sycamores), *Populus* (cottonwoods and poplars), *Robinia* (locust), and *Salix* (willows).

Phoradendron leucarpum subsp. *tomentosum* was *Phoradendron serotinum* subsp. *tomentosum*, formerly *P. villosum*. **Oak Mistletoe**. Viscaceae. Nectar: Great Purple Hairstreak (Kate Marianchild, *Secrets of the oak woodlands: plants and animals among California's oaks*). July - September.

Hostplant for Great Purple Hairstreak.

It grows mostly on *Quercus* (oaks), rarely on *Adenostoma* (chamise), *Arctostaphylos* (manzanita), *Rhus*, and *Umbellularia* (California laurel).

Geometridae: *Sicya morsicaria* [Seven Backyards web site]. Captive *Sicya pergilvaria* larvae “avidly accepted” it on Canyon Live Oak. (MacFarland, 1975).

Phoradendron serotinum subsp. *macrophyllum* is now *Phoradendron leucarpum* subsp. *macrophyllum*. **Bigleaf Mistletoe**.

Phoradendron serotinum subsp. *tomentosum* is now *Phoradendron leucarpum* subsp. *tomentosum*. **Oak Mistletoe**.

Phragmites australis. **Common Reed**. Poaceae. Molinieae.

Hostplant for Yuma Skipper, in California thus far seen developing only on the native strains. Shapiro: “So far our populations have not contacted the weedy one and we do not know if they would make use of it.”

Phyla spp. **Frogfruit**. Verbenaceae. Nectar: Cabbage White, Checkered White, Painted Lady, West Coast Lady, Common Buckeye, Texan Crescent, Phaon Crescent, Mylitta Crescent, Field Crescent, Tiny Checkerspot, Palmer’s Metalmark, Purplish Copper, Gray Hairstreak, Mallow Scrub-Hairstreak, Eastern Tailed Blue, Acmon Blue, Western Pygmy Blue, Common Sootywing, Small Checkered-Skipper, Orange Skipperling, Sandhill Skipper, Eufala Skipper.

Phyla lanceolata. **Northern Frogfruit**. Verbenaceae. Nectar: Clouded Sulphur, Dainty Sulphur, Little Yellow, Common Buckeye, Mat-plant Crescent, Eastern Tailed Blue, Mylitta Crescent, Pearl Crescent

(fq), Gray Hairstreak, Fiery Skipper, Sachem, Tawny-edged Skipper, likely others as with the following species. May – November.

Larval host for Mat-plant Crescent and Common Buckeye.

Phyla also known as Lippia – formerly more commonly sold as a groundcover.

Phyla nodiflora (aka *Lippia*). **Frogfruit**. Verbenaceae. Nectar: Checkered White (Larry Reeves, Kevin Hints), Cabbage White (Hints), Great Southern White, Western White, Dainty Sulphur (Mary Keim), Orange Sulphur (Mary Keim), Little Yellow. Queen, Callippe Fritillary, Gulf Fritillary, Variegated Fritillary (fq) (Mary Keim), Ladies, Common Buckeye (fq), Mylitta Crescent (J. Maughn, B.J. Stacey), Pearl Crescent, Phaon Crescent (Fltz Clarke), Texan Crescent, Bordered Patch. Great Copper (Hints), Purplish Copper, Gray Hairstreak (Jim McCulloch, Paul Furman), Eastern Tailed Blue, Acmon Blue, Ceraunus Blue (Adam Skowronski), Reakirt's Blue (Veronica Prida). Pacuvius Duskywing, Common Sootywing, Common Checkered-Skipper (Pete Veilleux), Small Checkered-Skipper, White Checkered-Skipper, Rural Skipper (B.J. Stacey), Sandhill Skipper (fq), Eufala Skipper (fq), Fiery Skipper (Mary Keim), Sachem (Mary Keim), Tawny-edged Skipper (Mary Keim), Woodland Skipper (Hints). Shapiro: “extremely popular”! I find flowering patches usually attended by butterflies. May – November.

Larval host for the Mat-plant Crescent and Common Buckeye.

Phyllodoce breweri. **Purple Mountainheath**. Ericaceae. Moldenke found Behr's Sulphur, Edith's Checkerspot and a diurnal moth associated with its flowers. July – August.

Phyllodoce empetriformis. **Pink Mountain Heath. Pink Heather. Mountain Heather**. Ericaceae. Nectar: Cabbage White, Painted Lady, Satyr Comma. July – August.

Noctuidae: *Hyppa indistincta* reared from “*Phyllodoce* sp.” likely this one (Crumb, Samuel Ebb. *The Larvae of the Phalaenidae [Noctuidae]*. U.S. Department of Agriculture Technical Bulletin 1135: 1-356, 1956) (PNW Moths – “probably a generalist feeding on both herbaceous and hardwood species like related species”).

Physalis sp. **Groundcherry**. Solanaceae.

Gelechiidae: *Scrobipalpa physaliella* (HOSTS). *Symmetrischema lavernella* (HOSTS).

Noctuidae: Corn Earworm (*Helicoverpa zea*) (HOSTS). Subflexus Straw Moth (*Heliiothis subflexa*) (HOSTS). Tobacco Budworm (*Heliiothis virescens*) (HOSTS). Western Bean Cutworm (*Striacosta albicosta*) (HOSTS). Dolichos Armyworm (*Spodoptera dolichos*) (HOSTS).

Pyralidae: Nightshade Leaf-tier (*Lineodes integra*) (HOSTS).

Physalis angulata. **Cutleaf Groundcherry**. Solanaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) (fq) (fq) – preferred host according to Young, William R. & Juan Antonio Sifuentes. 1959. “Biological and Control Studies on *Estigmene acrea* (Drury), a Pest of Corn in the Yaqui Valley, Sonora, Mexico.” *Journal of Economic Entomology* 52:6:1109-1111. Also listed on HOSTS.

Noctuidae: Tobacco Budworm (*Heliiothis virescens*) (HOSTS).

Sphingidae: Carolina Sphinx (*Manduca sexta*) (HOSTS).

Physalis crassifolia. **Thick-leaved Ground Cherry**. Solanaceae. Nectar: Sleepy Orange, Ceraunus Blue, Common Checkered-Skipper in Clark County, Nevada (Austins).

Physaria chambersii. **Chambers' Twinpod**. Brassicaceae.

Larval host for Checkered White.

Physocarpus capitatus. **Ninebark**. Rosaceae. Neillieae. Nectar: Pale Swallowtail, Western Tiger Swallowtail (Andrew Reding), Painted Lady (Andrew Reding), Lorquin's Admiral, Red Admiral, Mourning Cloak (Stuart Wechsler, NorWestLeps #7171), Pacific Fritillary, Hoffman's Checkerspot, Variable Checkerspot, Thicket Hairstreak, Echo Azure, Dreamy Duskywing (Sighting 1000236 on Butterflies and Moths of North America), Arctic Skipper (perched on a flower head, likely nectar plant, August Jackson), Ocean Spray Fairy Moth (*Adela septentrionella*) (fq) (Alice Cummings) and likely others. May – July.

Foodplant for the Echo Azure.

Sphingidae: Blinded Sphinx (*Paonias excaecata*) (Tatum).

Geometridae: Northwest Phoenix (*Eulithis xyliana*). Speckled Granite (*Macaria exauspicata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Adelphagrotis stellaris*. Speckled Green Cutworm (*Orthosia hibisci*). *Andropolia aedon*.

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*).

Picea sp. **Spruce**. Pinaceae.

Geometridae: *Entephria multivagata* is only known to use the non-native White Spruce (*Picea glauca*), but flies in many counties in California, likely feeding on native spruces or other native conifers. *Eupithecia rotundopuncta*.

Tortricidae: Western Black-headed Budworm (*Acleris gloveranus*). *Apotomops wellingtoniana*. Orange Tortrix (*Argyrotaenia franciscana*). Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). White-triangle Tortrix (*Clepsis persicana*). *Eana argentana* (BugGuide). Black-and-gray Banded Leafroller (*Syndemis afflictana*). Spruce Needleminer (*Taniva albolineana*). *Zeiraphera canadensis*.

Picea breweriana. **Brewer Spruce**. Pinaceae.

Supports a dwarf mistletoe that is hostplant for Johnson's Hairstreak.

Picea engelmannii. **Engelmann Spruce**. Pinaceae.

Geometridae: Gray Spruce Looper (*Caripeta divisata*). Mottled Gray Carpet (*Cladara limitaria*). Mountain Girdle (*Enypia griseata*). Variable Girdle (*Enypia venata*). Whitelined Looper (*Epirrita*

pulchraria). *Eupithecia albicapitata*. Larch Pug (*Eupithecia annulata*). *Eupithecia casloata*. Dyar's Looper (*Gabriola dyari*). Hemlock Looper (*Lambdina fiscellaria*). Western Carpet (*Melanolophia imitata*). *Speranza loricaria* [Canada]. Black-lined Synaxis (*Tetracis pallulata*). *Zenophleps lignicolorata*.

Lymantriidae: Pine Tussock Moth (*Dasychira grisefacta*).

Noctuidae: Western Conifer Looper (*Syngrapha celsa*). Nameless Pinion (*Lithophane innominata*). *Melanchra pulverulenta*.

Pyralidae: Evergreen Coneworm (*Dioryctria abietivorella*).

Sesiidae: Douglas-fir Pitch Moth (*Synanthedon novaroensis*).

Tortricidae: *Argyrotaenia dorsallana*. Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). Sugar Pine Tortrix (*Choristoneura lambertiana*). White-triangle Tortrix (*Clepsis persicana*). Ponderosa Pine Seedworm (*Cydia piperana*, Canada). Red-striped Needleworm (*Epinotia radicana*, Canada). Western Pine Shoot Borer (*Eucopina sonomana*). Spruce Needleminer (*Taniva albolineana*). *Zeiraphera canadensis* (Canada).

Picea sitchensis. **Sitka Spruce**. Pinaceae.

Sitka Spruce recorded as a foodplant for the Pine White.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: Gray Spruce Looper (*Caripeta divisata*). Small Engrailed (*Ectropis crepuscularia*). Packard's Girdle (*Enypia packardata*). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata*, Canada). Whitelined Looper (*Epirrita pulchraria*, Canada, an important host). Larch Pug (*Eupithecia annulata*). *Eupithecia longipalpata*. Spruce Cone Looper (*Eupithecia mutata*). *Eupithecia olivacea*. Dyar's Looper (*Gabriola dyari*). *Hydriomena californiata*. *Hydriomena irata*. *Hydriomena marinata*. Renounced *Hydriomena* (*Hydriomena renunciata*, Canada). *Hydriomena speciosata*. Hemlock Looper (*Lambdina fiscellaria*). Western Carpet (*Melanolophia imitata*). Brownlined Looper (*Neocalcis californiaria*). Phantom Hemlock Looper (*Nepytia phantasmaria*). *Nepytia umbrosaria* (reported in Canada). *Pero behrensaria* (Canada). Morrison's Pero (*Pero morrisonaria*, Canada). Bowling Pin (*Sabulodes edwardsata*). Pulmonaria Looper (*Stenoporpia pulmonaria*). Black-lined Synaxis (*Tetracis pallulata*, Canada). *Thallophaga hyperborea* (Canada).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: *Agrochola pulchella* (Canada). Rusty Shoulder Knot (*Aseptis binotata*). Brown Angle Shades (*Phlogophora periculosa*). Zebra Caterpillar (*Melanchra picta*). Otter Spiramater (*Spiramater lutra*). *Xestia mustelina* (Canada).

Pyralidae: Evergreen Coneworm (*Dioryctria abietivorella*). *Promylea lunigerella* (Canada).

Sesiidae: Douglas-fir Pitch Moth (*Synanthedon novaroensis*). Sequoia Pitch Moth (*Synanthedon sequoiae*).

Tortricidae: Western Black-headed Budworm (*Acleris gloveranus*). Douglas-fir Cone Moth (*Barbara colfaxiana*, Canada). Spruce Budworm (*Choristoneura fumiferana*). *Cochylis dormitoria*. *Epinotia hopkinsana*. Red-striped Needleworm (*Epinotia radicana*, Canada). Light Brown Apple Moth (*Epiphyas postvittana*, Australia). Spruce Needleminer (*Taniva albolineana*). *Zeiraphera canadensis*. *Zeiraphera pacifica*.

Pickeringia montana var. *montana*. **Chaparral Pea**. Fabaceae. Thermopsidae. Nectar: Pale Swallowtail (Marc Kummel), Gabb's Checkerspot (Lynn Watson), Gray Hairstreak (Lynn Watson). Echo Azure (Marc Kummel), Marine Blue (Lynn Watson). Propertius Duskywing, Rural Skipper [photographs of a perched specimen, suspected nectar source] (Russell Towle). May – August.

Pinus spp. **Pines**. Pinaceae.

Pines serve as night or winter roosts for some butterflies, notably the Monarch. Also some fritillaries (Gordon Pratt).

Various pine species are hostplants for the Western Pine White and Western Pine Elfin.

Gelechiidae: *Coleotechnites coniferella* complex (Wikipedia).

Geometridae: Autumnal Moth (*Epirrita autumnata*). *Eupithecia ornata*. Pine Looper (*Phaeoura mexicanaria*).

Noctuidae: *Egira variabilis*. *Euxoa extranea*. Giant Panthea (*Panthea gigantea*) (fq).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Spruce Budworm (*Choristoneura fumiferana*). Sugar Pine Tortrix (*Choristoneura lambertiana*). White-triangle Tortrix (*Clepsis persicana*). *Cydia injectiva*. White-fir Needle Miner (*Epinotia meritana*). Western Pine Shoot Borer (*Eucopina sonomana*). Omnivorous Leafroller (*Platynota stultana*). Nantucket Pine Tip Moth (*Rhyacionia frustrana*). *Rhyacionia pasadenana*. Ponderosa Pine Tip Moth (*Rhyacionia zozana*). *Xenotemna pallorana*.

Pinus albicaulis. **Whitebark Pine**. Pinaceae.

Hostplant for Pine White (Donald W. Scott, 2012).

Pyralidae: Fir Coneworm (*Dioryctria abietivorella*) may destroy more than 10% of its seeds.

Tortricidae: Lodgepole Pinecone Borer (*Eucopina recissoriana* complex).

Pinus attenuata. **Knobcone Pine**. Pinaceae.

Gelechiidae: *Exoteleia burkei*.

Pyralidae: Ponderosa Pineconeworm (*Dioryctria auranticella*).

Tortricidae: Lodgepole Pinecone Borer (*Eucopina recissoriana*). Nantucket Pine Tip Moth (*Rhyacionia frustrana*).

Pinus contorta. **Beach Pine**. **Lodgepole Pine**. Pinaceae.

Hostplant for Pine White and Western Pine Elfin (fq). It hosts Lodgepole Pine Dwarf Mistletoe, *Arceuthobium americanum*, foodplant for Thicket Hairstreak.

Geometridae: Scarce Gray (*Stenoporpia excelsaria*).

Saturniidae: Pandora Pinemoth (*Coloradia pandora*).

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: Red Girdle (*Caripeta aequaliaria*, Canada). Autumnal Moth (*Epirrita autumnata*, Canada). *Eupithecia albicapitata*. Larch Pug (*Eupithecia annulata*). *Eupithecia longipalpata*. *Eupithecia ornata*. Dyar's Looper (*Gabriola dyari*). *Glena nigricaria*. *Hydriomena nevadae*. Renounced Hydriomena (*Hydriomena renunciata*, Canada). *Hydriomena speciosata*. Adonis Angle (*Macaria adonis*). Brown-lined Looper (*Neolcis californiaria*). *Nepytia umbrosaria* (Canada). *Spodolepis substriataria*.

Noctuidae: *Lithophane atara* (Canada). Nameless Pinion (*Lithophane innominata*). *Melanchra pulverulenta*. *Papestra invalida*. Variegated Cutworm (*Peridroma saucia*). Otter Spiramater (*Spiramater lutra*). Inscribed Looper (*Syngrapha epigaea*). *Xestia mustelina* (Canada).

Tortricidae: Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). Sugar Pine Tortrix (*Choristoneura lambertiana subretiniana*). *Cydia inopiosa*. Red-striped Needleworm (*Epinotia radicana*). *Eucopeia bobana*, a cone moth. Lodgepole Pinecone Borer (*Eucopeia recissoriana*). Western Pine Shoot Borer (*Eucopeia sonomana*). *Retinia metallica*.

Sesiidae: Douglas-fir Pitch Moth (*Synanthedon novoarvensis*). Sequoia Pitch Moth (*Synanthedon sequoiae*) (Haggard).

Pyralidae: Western Pine Moth (*Dioryctria cambiicola*).

Gelechiidae: Lodgepole Needleminer (*Coleotechnites milleri*).

Most published hostplant records likely refer to the timber tree form, the Lodgepole Pine.

Pinus coulteri. **Coulter Pine**. Pinaceae.

Saturniidae: Pandora Pinemoth (*Coloradia pandora*).

Gelechiidae: *Chionodes sabinianae* specializes in developing on staminate cones.

Pyralidae: Western Pine Moth (*Dioryctria cambiicola*).

Pinus edulis. **Colorado Pinyon**. Pinaceae.

Larval host for Pine White and Western Pine Elfin. Rarely supports Juniper Mistletoe, a hostplant for Great Purple Hairstreak.

Geometridae: Pulmonaria Looper (*Stenoporpia pulmonaria*).

Lymantriidae: Pine Tussock Moth (*Dasychira grisefacta*).

Pyralidae: Pinyon Tip Moth (*Dioryctria albovitella*).

Saturniidae: Pandora Pinemoth (*Coloradia pandora*). Velda Pinemoth (*Coloradia velda*).

Tortricidae: *Cydia colorana*. *Eucopina bobana*, a cone moth, and Pinyon Pitch Nodal Moth (*Retinia arizonensis*).

Pinus flexilis. **Limber Pine**. Pinaceae.

Foodplant for the Western Pine Elfin. Supports a dwarf mistletoe upon which Thicket Hairstreak larvae have been found (Shields, 1965).

Gelechiidae: *Coleotechnites lewisi*.

Geometridae: *Zenopheps lignicolorata*.

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Pyralidae: Fir Coneworm (*Dioryctria abietivorella*).

Tortricidae: Western Spruce Budworm (*Choristoneura freemani*). Sugar Pine Tortrix (*Choristoneura lambertiana*). *Eucopina bobana*, a cone moth.

Pinus jeffreyi. **Jeffrey Pine**. Pinaceae.

Foodplant for Pine White (fq) and Western Pine Elfin. Readily supports dwarf mistletoe, thus indirectly serving Thicket Hairstreak and Johnson's Hairstreak.

Gelechiidae: Lodgepole Needleminer (*Coleotechnites milleri*).

Pyralidae: Fir Coneworm (*Dioryctria abietivorella*). Possibly *Dioryctria westerlandi* (E. H. Strickland Entomological Museum, citing Neunzig, 2004)

Saturniidae: An important preferred foodplant for Pandora Pinemoth (*Coloradia pandora*) caterpillars, at times "extremely abundant" (Tuskes). Indigenous peoples ate them! Velda Pinemoth (*Coloradia velda*).

Tortricidae: Sugar Pine Tortrix (*Choristoneura lambertiana subretiniana*). *Cydia injectiva*. *Cydia miscitata*. Ponderosa Pine Seedworm (*Cydia piperana*). *Eucopina bobana*, a cone moth. *Eucopina ponderosa*. Western Pine Shoot Borer (*Eucopina sonomana*). *Retinia edemoidana*. Nantucket Pine Tip Moth (*Rhyacionia frustrana*). *Rhyacionia subcervinana*. Ponderosa Pine Tip Moth (*Rhyacionia zozana*). *Thaumato-grapha regalis*.

Yponomeutidae: Pine Needle Sheathminer (*Zelleria haimbachi*).

Pinus lambertiana. **Sugar Pine**. Pinaceae.

Hostplant for Western Pine Elfin (Austin & Leary, 2008, cited in James & Nunnallee).

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Lymantriidae: Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Saturniidae: Pandora Pinemoth (*Coloradia pandora*).

Sesiidae: Sequoia Pitch Moth (*Synanthedon sequoiae*), a wasp mimic.

Tortricidae: Sugar Pine Tortrix (*Choristoneura lambertiana*).

Pinus longavea. **Western Bristlecone Pine**. Pinaceae.

Supports Western Dwarf Mistletoe (*Arceuthobium campylopodum*, Santalaceae) foodplant for Thicket Hairstreak.

Tortricidae: *Eucopina bobana*, a cone moth.

Pinus monophylla. **Singleleaf Pinyon Pine**. Pinaceae.

Supports dwarf mistletoes, foodplants of Thicket Hairstreak.

Geometridae: *Cochisea recisa*. Alice Abela photographed what may be a Pine Looper (*Phaeoura mexicanaria*) on one in Ventura County; adults were flying.

Pyrilidae: Fir Coneworm (*Dioryctria abietivorella*).

Saturniidae: Velda Pinemoth (*Coloradia velda*).

Tortricidae: *Argyrotaenia paiuteana*. *Eucopina bobana*, a cone moth. *Rhyacionia monophylliana*.

Pinus monticola. **Western White Pine**. Pinaceae.

Larval host for Pine White and Western Pine Elfin.

Geometridae: Red Girdle (*Caripeta aequaliaria*, Canadian record). Mottled Gray Carpet (*Cladara limitaria*, Canada). Small Engrailed (*Ectropis crepuscularia*, Canada). Mountain Girdle (*Enypia griseata*, Canada). Packard's Girdle (*Enypia packardata*, Canada). Variable Girdle (*Enypia venata*). Linden Looper (*Erannis tiliaria*). Larch Pug (*Eupithecia annulata*). *Eupithecia harrisonata* (Canada). *Eupithecia longipalpata*. *Eupithecia ornata*. Dyar's Looper (*Gabriola dyari*). *Hydriomena speciosata*. Hemlock Looper (*Lambdina fiscellaria*). Adonis Angle (*Macaria adonis*, Canada). Speckled Granite (*Macaria exauspicata*, Canada). *Macaria signaria* (Canada). Brown-lined Looper (*Neolcis californiaria*). Phantom Hemlock Looper (*Nepytia phantasmaria*, Canada). *Nepytia umbrosaria* (Canada). Western Carpet (*Melanolophia imitata*). *Pero behrensaria* (Canada). Bowling Pin (*Sabulodes edwardsata*, Canada). Pulmonaria Looper (*Stenoporpia pulmonaria*, Canada). *Thallopaga hyperborea* (Canada).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: Pine Tussock Moth (*Dasychira grisefacta*, Canada).

Noctuidae: *Papestra cristifera*. Plain Silver Y (*Syngrapha celsa*). Hooked Silver Y (*Syngrapha alias*, Canada).

Sesiidae: Douglas-fir Pitch Moth (*Synanthedon novaroensis*).

Tortricidae: Spruce Budworm (*Choristoneura fumiferana*). *Eucopeina bobana*. Lodgepole Pinecone Borer (*Eucopeina recissoriana*).

Pinus muricata. **Bishop Pine**. Pinaceae.

Foodplant for the Western Pine Elfin, especially young trees.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Noctuidae: *Egira baueri*.

Sesiidae: Sequoia Pitch Moth (*Synanthedon sequoiae*).

Tortricidae: *Rhyacionia pasadenana*.

Pinus ponderosa. **Ponderosa Pine**. Pinaceae.

Hostplant for Pine White (fq) and Western Pine Elfin. A primary foodplant for Pine White in the San Francisco Bay Area. Thicket Hairstreak and Johnson's Hairstreak develop on the mistletoe (*Arceuthobium campylopodum*, Santalaceae) that parasitizes it.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Cossidae: Pine Carpenterworm (*Givira lotta*). Larvae eat the outer bark of Ponderosa Pine.

Gelechiidae: *Chionodes periculella*. *Chionodes retiniella*. *Coleotechnites condignella*.

Geometridae: Common Gray (*Anavitrinella pampinaria*, Canadian record). Red Girdle (*Caripeta aequaliaria*, Canadian foodplant record). Mountain Girdle (*Enypia griseata*, Canada). *Eupithecia ornata*. Dyar's Looper (*Gabriola dyari*). *Glena nigricaria* (fq). Adonis Angle (*Macaria adonis*). Western Carpet (*Melanolophia imitata*, Canada). Brown-lined Looper (*Nealcis californiaria*, Canada). *Pero behrensaria* (Canada). Pine Looper (*Phaeoura mexicanaria*) – causes extensive defoliation in some instances. Bowling Pin (*Sabulodes edwardsata*, Canada). Scarce Gray (*Stenoporpia excelsaria*). Pulmonaria Looper (*Stenoporpia pulmonaria*).

Lymantriidae: Pine Tussock Moth (*Dasychira grisefacta*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Noctuidae: *Lithophane atara*. *Panthea gigantea* (fq).

Pyralidae: Ponderosa Pineconeworm (*Dioryctria auranticella*). *Dioryctria baumhoferi*. Western Pine Moth (*Dioryctria cambiicola*). *Dioryctria pentictonella*. *Dioryctria ponderosae*. *Dioryctria rossi*. Zimmerman Pine Moth (*Dioryctria zimmermani*).

Saturniidae: Pandora Pinemoth (*Coloradia pandora*) (fq), the preferred hostplant in Oregon (Tuskes).

Sesiidae: Douglas-fir Pitch Moth (*Synanthedon novoarvensis*). Sequoia Pitch Moth (*Synanthedon sequoiae*).

Tortricidae: *Sparganothis tunicana*. Western Spruce Budworm (*Choristoneura freemani*). Sugar Pine Tortrix (*Choristoneura lambertiana*). *Cydia injectiva*. *Cydia miscitata*. Ponderosa Pine Seedworm (*Cydia piperana*). *Epinotia rectiplicana*. *Eucopina bobana*. *Eucopina ponderosa*. Western Pine Shoot Borer (*Eucopina sonomana*). *Retinia edemoidana*. *Retinia metallica*. *Rhyacionia bushnelli*. *Rhyacionia multilineata*. *Rhyacionia subcervinana*. Ponderosa Pine Tip Moth (*Rhyacionia zozana*).

Yponomeutidae: *Ocnerostoma piniariella*. Pine Needle Sheathminer (*Zelleria haimbachi*).

Pinus quadrifolia. **Parry Pinyon Pine**. Pinaceae.

Tortricidae: Spruce Needleminer (*Taniva albolineana*).

Pinus radiata. **Monterey Pine**. Pinaceae.

Monterey Pine is a foodplant for the Western Pine Elfin, especially young trees.

Monterey Pine historically an important winter roosting tree for the Monarch on the central California coast.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: *Nepytia umbrosaria*.

Lasiocampidae: *Gloveria arizonensis*.

Sesiidae: Sequoia Pitch Moth (*Synanthedon sequoiae*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Epinotia hopkinsana*. *Rhyacionia bushnelli*. Nantucket Pine Tip Moth (*Rhyacionia frustrana*). *Rhyacionia pasadenana*. Black-and-Gray Banded Leafroller (*Syndemis afflictana*). *Syndemis* sp.

Pinus sabiniana. **Gray Pine**. Pinaceae.

Hosts Western Pine Mistletoe (*Arceuthobium campylopodum*), a foodplant for Thicket Hairstreak and Johnson's Hairstreak. The Foothill Pine Dwarf Mistletoe (*Arceuthobium occidentale*) is a formerly recognized segregate of the Western Pine Mistletoe. Thicket Hairstreak is locally common on serpentine near heavily infested trees (Shapiro).

Gelechiidae: *Chionodes sabinianae* specializes in developing on staminate cones of Gray Pine and Coulter Pine. *Exoteleia burkei* feeds on staminate cones of Gray Pine.

Pyralidae: Gray Pine is the suspected larval host of *Dioryctria fordi*.

Tortricidae: *Retinia sabiniana* develops in its pitch nodes. *Thaumatographa regalis*.

Pinus torreyana. **Torrey Pine**. Pinaceae.

Lasiocampidae: *Gloveria arizonensis*.

Piperia elegans. **Elegant Rein Orchid**. Orchidaceae. A pollinating flower visitor seems to be *Plusia nichollae* (Hampson 1913) (Noctuidae) cited as *Chrysaspidea nichollae*; *Chrysaspidia nichollae* is a synonym according to BugGuide. Also an *Autographa* (Noctuidae) species (Coleman, 1995), July-October.

Piperia transversa. **Royal Rein Orchid**. Orchidaceae. Taylor's Thallophaga (*Thallophaga taylorata*, Geometridae) is a pollinator (Ackerman, 1977). June – July.

Piperia unalascensis. **Slender Spire Orchid**. Orchidaceae. The flowers are fragrant in the evenings, attracting moths. Pollinated by *Oidaematophorus* and *Platyptilia* species (Pterophoridae, plume moths) (Ackerman, 1977). April – July.

Piperia yadonii. **Yadon's Rein Orchid**. Orchidaceae. Moth species observed at flowers or found with pollen indicating flower visits: Noctuidae: Ipsilon Dart (*Agrotis ipsilon*). Geometridae: *Drepanulatrix baueraria*. Oak Winter Highflier (*Hydriomena nubilofasciata*). *Prochoerodes truxaliata*. *Speranza marcescaria*. Pyralidae: Lucerne Moth (*Nomophila nearctica*). Shasta Pyrausta Moth (*Pyrausta perrubralis*). False Greenhouse Leaf-tier (*Udea profundalis*). (Graff, 2005). May – August.

Plagiobothrys chorisianus var. *chorisianus*. **Artist's Popcornflower**. Boraginaceae. Nectar: Field Crescent (Avis Boutell photograph). March – June.

Plagiobothrys hispidus. **Bristly Popcorn Flower**. Boraginaceae. Nectar: Leona's Little Blue in southern Oregon. June – August.

Plagiobothrys nothofulvus. **Rusty Popcorn Flower**. Boraginaceae. Nectar: Large Marble (Ron Wolf photo). California Ringlet (David Hoffman photo, iNaturalist) (<https://www.inaturalist.org/observations/11146555>). *Annaphila lithosina* (Noctuidae), a day-flying moth. Not much visited by butterflies, gets attention by plenty of other small insects. March – May.

Plagiobothrys stipitatus var. *micranthus*. **Common Vernal Pool Allocarya**. Boraginaceae. Small lycaenid butterflies at times heavily visit its flowers at Mather Field. April – July.

It served as a secondary Painted Lady larval host after the 1992 dispersion event.

Plantago spp. **Plantains**. Plantaginaceae.

Wind-pollinated, their primary attraction for butterflies is as larval hosts. Quino Checkerspot hostplants in southern California. Shapiro: "Plantains are also larval hosts of the Buckeye and some populations of Edith's Checkerspot in northern California." Infrequently Variable Checkerspot. Naturalized non-native *Plantago* are important Common Buckeye foodplants. Some *Plantago* serve Variegated Fritillary, sometimes Pearl Crescent (HOSTS) or even Painted Lady (HOSTS)..

Arctiidae: Ornate Tiger Moth (*Apantesis ornata*) (HOSTS). Painted Tiger Moth (*Arachnis picta*) (HOSTS). Garden Tiger Moth (*Arctia caja*) (HOSTS). Salt Marsh Moth (*Estigmene acrea*) (HOSTS). Fall Webworm (*Hyphantria cunea*) (HOSTS). California Tiger Moth (*Leptarctia californiae*). (HOSTS). Silver-spotted Tiger Moth (*Lophocampa argentata*) (HOSTS). Mexican Tiger Moth

(*Notarctia proxima*). *Parasemia plantaginis* (HOSTS). Ruby Tiger Moth (*Phragmatobia fuliginosa*) (HOSTS). Isabella Tiger Moth or Banded Woollybear (*Pyrrharctia isabella*) (HOSTS). Brown Tiger Moth (*Spilosoma pteridis*) (HOSTS). Virginian Tiger Moth or Yellow Woollybear (*Spilosoma virginica*) (HOSTS).

Geometridae: Marbled Carpet (*Dysstroma truncata*) (HOSTS).

Noctuidae: *Agrochloa purpurea* (HOSTS). Tawny Shoulder or Subterranean Dart (*Feltia subterranea*) (HOSTS). The Mouse (*Amphipyra tragopoginis*) (HOSTS). Celery Moth (*Anagrapha falcifera*) (HOSTS). Green Cutworm (*Anicla infecta*) (HOSTS). Bent-line Dart or Dingy Cutworm (*Feltia jaculifera*) (HOSTS). Common Hyppa (*Hyppa xylinoides*) (HOSTS). Olive Arches (*Lacinipolia olivacea*) (HOSTS). Stephen's Gem or Bilobed Looper (*Megalographa biloba*) (HOSTS). Hitched Arches (*Melanchra adjuncta*) (HOSTS). Zebra Caterpillar (*Melanchra picta*) (HOSTS). Pearly Underwing or Variegated Cutworm (*Peridroma saucia*) (HOSTS). Clandestine Dart (*Spaelotis clandestina*) (HOSTS). Otter Spiramater (*Spiramater lutra*) (HOSTS). Small Mottled Willow or Beet Armyworm (*Spodoptera exigua*.) (HOSTS). Cabbage Looper (*Trichoplusia ni*) (HOSTS). Setaceous Hebrew Character (*Xestia c-nigrum*) (HOSTS).

Pyralidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*) (HOSTS).

Sphingidae: White-lined Sphinx (*Hyles lineata*) (HOSTS).

Plantago erecta. **California Plantain**. Plantaginaceae.

Larval host for Variable Checkerspot, Edith's Checkerspot, and the Common Buckeye (rarely used, according to Scott, in comparison to English plantain).

Plantago maritima. **Pacific Seaside Plantain**. Plantaginaceae.

Foodplant for Edith's Checkerspot.

Plantago insularis is now *Plantago ovata* var. *insularis*. **Desert Plantain**.

Plantago ovata. **Woolly Plantain**. Plantaginaceae.

Foodplant for Edith's Checkerspot and Painted Lady.

Plantago ovata var. *insularis* was *Plantago insularis*. **Desert Plantain**. Plantaginaceae. February – April.

Hostplant for the Common Buckeye. One small Painted Lady larva found on it reared to adulthood in 1991 migration event (1991 Season Summary, San Bernardino County (JFE)).

Plantago patagonica. **Southwestern Plantain**. Plantaginaceae.

Foodplant for Quino Checkerspot (a segregate of Edith's Checkerspot) and Common Buckeye (Monroes).

Plantago rhodosperma. **Redseed Plantain**. Plantaginaceae. May.

Hostplant for Common Buckeye and Variegated Fritillary (Butterflies of America web site).

Plantago subnuda. **Mexican Plantain**. Plantaginaceae.

Foodplant for Common Buckeye.

Garden tolerant -- requires more moisture and is less weedy than English Plantain.

Platanthera sp. **Bog Orchid**. Nectar: Anise Swallowtail, Painted Lady occasional, high elevations (Paul Severns).

Platanthera dilatata. **Scentbottle**. Nectar: *Anarta oregonica* (Noctuidae), a pollinator; and likely other moths (Larson, 1992). June – August.

Platanthera dilatata var. *leucostachys*. **White-flowered Bog Orchid**. Orchidaceae. Nectar: Flowers much visited by California Dogface and Western Tiger Swallowtail (Alarcon et. al.), Pale Swallowtail (Mountain Plants of the Western Cascades web site), Anise Swallowtail (Dave's Garden web site photograph), Two-tailed Tiger Swallowtail (Mike Grandmansion poster), Western Painted Lady, Dun Skipper (Glenn Fine). Glenn Fine notes 4 Lepidoptera species as flower visitors in his Siskiyou County study. May - September.

Horticulturist Ted Kipping: "I have grown it. The wet terrestrial orchids aren't difficult." It likes wet feet, edge of a pond a good situation for it.

Platanthera sparsiflora. **Bog Orchid**. Orchidaceae. Flowers visited by moths (J. L. Kipping). May – September.

Platanthera stricta. **Slender Bog Orchid**. Orchidaceae. American Barred Umber (*Plagodis pulveraria* aka *Anagoga occiduaria*), *Eupithecia* sp., *Xanthorhoe incursata*, and *Antepirrhoe fasciata* are some of the geometrid moths among flower visitors in Olympic National Park, Washington. May - September.

Platanus racemosa. **California Sycamore**. Platanaceae.

A favorite hostplant for Western Tiger Swallowtail. James and Nunnallee found females typically lay eggs singly on the upper side of a leaf, often 5 - 8' from the ground on widely scattered plants, especially over water or cliffs. A hostplant for Two-tailed Swallowtail. Supporting Big-leaf Mistletoe (*Phoradendron leucarpum* ssp. *macrophyllum*, Viscaceae) indirectly supports Great Purple Hairstreak caterpillars feeding on the mistletoe.

Sometimes California Sycamore serves as a Monarch roost in southern California.

Gelechiidae: Sycamore Leaf Skeletonizer (*Gelechia desiliens*).

Gracillariidae: Sycamore Leaf Blotch Miner (*Phyllonorycter platani*) (aka *Phyllonorycter felinella* or *Lithocolletis felinella*) -- in recent times this apparently Californian moth migrated to Europe where it eats other plane trees (H. Sefrova, 2001). There it spreads by an average of about 10 km annually, but has many enemies, mostly does not do enough damage to be of any concern (worse, it seems, in Serbia, see Markovic, 2012).

What is believed to be the same organism later described in California was first described by Staudinger in 1870 as *Lithocolletis platani* (now = *Phyllonorycter platani*), showing up in northern Italy and from

there rapidly spreading across Europe It was described in California in 1920 by Heinrich as *Phyllonorycter felinella* and *Phyllonorycter felinelle*. Believed actually indigenous here, naturalized in Europe. Fossils of it found in America, but it seems new, spreading rapidly in Europe, perhaps largely by pupae on leaves blown by the wind. An attractive little moth, showing up in London in 1989, where it acquired another common name: “London Midget”.

Nepticulidae: *Ectoedemia platanella*. A leaf miner.

Sesiidae: Sycamore Borer (*Synanthedon resplendens*) – adults usually found in leaves near the top of the tree, wasp like in appearance and behavior; California Sycamore is a preferred host. Ceanothus Borer (*Synanthedon mellinipennis*) – this record possibly erroneous, perhaps based on misidentification; the Sycamore Borer is common, this one scarce, usually eating wild lilacs.

California Sycamore prime growing Zones are 11 and 18-24; it often suffers from sycamore anthracnose; one cultivated selection seems immune.

Platystemon californicus. **Cream Cups**. Papaveraceae. Wind-pollinated, modestly showy flowers offer no nectar. March-May.

Adelidae: Opler’s Longhorn Moth (*Adela oplerella*) eggs laid in flower buds, caterpillars eat developing seeds.

Plectritis ciliosa. **Longspur Seablush. Longspur Plectritis**. Valerianaceae. Nectar: Mariposa Forester (*Alypia mariposa*, Noctuidae) (Ron Wolf, photographed in Pinnacles). March – June.

Hostplant for Edith’s Checkerspot (HOSTS). Reported as a post-diapause foodplant by White and Singer.

Considered worthy of cultivation.

Plectritis congesta. **Seablush. Short-spur Plectritis**. Valerianaceae. Nectar: Sara Orangetip, Orange Sulphur (Mountain Plants of the Western Cascades). Edith’s Checkerspot, California Crescent (Janet Brien photo), California Ringlet (Janet Brien photo), Great Basin Wood-Nymph, Painted Lady (Xerces Society photograph), Brown Elfin, Gray Hairstreak, small blues, Propertius Duskywing (Paul Severns, Ann Potter). Good early spring nectar (Oregon NABA). Mardon Skipper. Secondary for Edith’s Checkerspot in Western Oregon (Severns & Warren). “Excellent bee/butterfly nectar plant.” Bumblebees. March – June.

Post-diapause Taylor’s Checkerspot (segregate of Edith’s Checkerspot) caterpillars eat Seablush seedlings! (Ann Potter, personal communication). So far, the only known Valerianaceae species serving as a checkerspot hostplant.

Considered worthy of cultivation, grown by some butterfly gardeners.

Plectritis macrocera. **White Plectritis**. Valerianaceae. Nectar: Northern Checkerspot, Common Ringlet, Three-striped Longhorn (*Adela trigrapha*, Incurvariidae) (fq), and a *Schinia* sp. (Noctuidae). March – June.

Post-diapause larval food for Variable Checkerspot (1984 Season Summary, Arthur Shapiro, noted at his Gates Canyon site).

Pluchea odorata. **Salt Marsh Fleabane** or **Sweetscent**. Asteraceae. Plucheeae. Nectar: Orange Sulphur, Monarch, West Coast Lady, Variegated Fritillary, Gray Hairstreak, Fiery Skipper. Attracts ‘a variety of butterflies’ sometimes ‘in large numbers’ (Shapiro). Recommended for butterflies by the Xerces Society. Especially “skippers, blues, hairstreaks” (Mother Nature’s Backyard) -- and native bees, including metallic green *Agapostemon* species. June – November.

Arctiidae: Cinnabar Moth (*Tyria jacobaeae*).

Geometridae: Southern Emerald (*Synchlora frondaria*).

Easy to grow.

Pluchea sericea. **Desert Arrowweed**. Asteraceae. Plucheeae. Nectar: Checkered White, Cabbage White, Great Purple Hairstreak, Gray Hairstreak, Western Pygmy Blue, Marine Blue, Reakirt’s Blue, Painted Lady, Bordered Patch, California Patch, Queen, Mojave Sootywing, Northern White-Skipper, Yuma Skipper, Eufala Skipper, Orange Skipperling. The Monroes list ten butterfly species at nectar on it in the Anza-Borrego area. March – July.

Noctuidae: *Schinia intrabilis*.

Used in revegetation, spreads readily.

Poaceae. **Grasses**.

Precise hostplants of most grass-feeding butterflies and moths are not well known. Identifying grasses is difficult, the grass feeding butterflies and moths sometimes difficult to identify, with rather secretive caterpillars!

Butterflies whose caterpillars eat grasses include Common Wood-Nymph. Common Ringlet, including Ringless Ringlet (*Coenonympha ampelos elko*) and Siskiyou Ringlet, the *eryngii* segregate, both found in California. Great Arctic. Arctic Skipper. European Skipper. Orange Skipperling. Fiery Skipper. Many other skippers eat various grasses.

Arctiidae: Garden Tiger Moth (*Arctia caja*). Yellow-collared Scape Moth (*Cisseps fulvicollis*) – especially Poaceae (PNW Moths). Red-shouldered Ctenucha (*Ctenucha rubroscapus*) – especially Poaceae (PNW Moths). Veined Ctenucha (*Ctenucha venosa*). Banded Woolly Bear (*Pyrrharctia isabella*). Ranchman’s Tiger Moth (*Arctia virginialis*). Yellow Woollybear (*Spilosoma virginica*).

Coleophoridae: *Coleophora viridicuprella*.

Crambidae: *Agriphila plumbifimbriellus* – considered likely to eat grass roots; its habitat is native grasslands.

Elachistidae: Known hosts for this family are all grasses and sedges. Common name is “Grass Miner Family”.

Geometridae: Common Gray (*Anavitrinella pampinaria*).

Limacodidae: Saddleback Caterpillar (*Acharia stimulea*).

Noctuidae: Henry’s Marsh Moth (*Acronicta insularis*). Black Cutworm (*Agrotis ipsilon*). American Ear Moth (*Amphipoea americana*) (PNW Moths). *Amphipoea lunata* – possibly a feeder on grass roots (PNW Moths). Green Cutworm (*Anicla infecta*). *Apamea acera* – probably eats short bunchgrasses based on habitat (PNW Moths). *Apamea albina* – probably feeds on short bunchgrasses based on habitat (PNW Moths). *Apamea alia* – “a climbing cutworm that feeds on grasses” (PNW Moths). *Apamea antennata* – probably eats bunchgrasses based on habitat; found in *Festuca* grasslands in the NW (PNW Moths). *Apamea acera* – probably eats short bunchgrasses based on habitat (PNW Moths). *Apamea albina* – probably feeds on short bunchgrasses based on habitat (PNW Moths). *Apamea alia* – “a climbing cutworm that feeds on grasses” (PNW Moths). *Apamea antennata* – probably eats bunchgrasses based on habitat; found in *Festuca* grasslands in the NW (PNW Moths). *Apamea atriclava* (PNW Moths). *Apamea centralis* – probably eats short bunchgrasses based on habitat (PNW Moths). *Apamea cinefacta* – adults associated with grasslands, larvae likely grass feeders. Thoughtful Apamea (*Apamea cogitata*) (PNW Moths). *Apamea commoda* – probably eats short bunchgrasses based on habitat (PNW Moths). *Apamea cuculliformis* (PNW Moths). Glassy Cutworm (*Apamea devastator*). *Apamea digitula* – probably a grass-feeding generalist (PNW Moths). *Apamea inordinata* – probably a grass feeder (PNW Moths). *Apamea longula* – probably feeds on grasses (PNW Moths). Large Cutworm (*Apamea maxima*) – specializes on Pacific Reedgrass (*Calamagrostis nutkaensis*) (PNW Moths). Snowy-veined Apamea (*Apamea niveivenosa*) – and can be a major agricultural pest (PNW Moths). Western Apamea (*Apamea occidens*) specializes on grasses (PNW Moths). Dusky Quaker (*Apamea plutonia*) (PNW Moths). *Apamea scoparia* (PNW Moths). Spalding’s Quaker (*Apamea spaldingi*) probably feeds on short bunchgrasses based on habitat (PNW Moths). *Apamea tahoensis* – probably feeds on grasses (PNW Moths). Airy Apamea (*Apamea vultuosa*). Alfalfa Semilooper (*Autographa californica*). *Benjaminia colorada* – probably bores into stems (PNW Moths). Range Grass Moth (*Caenurgina crassiuscula*). Forage Looper (*Caenurgina erechtea*). Yellow Sedge Borer (*Globia subflava*). *Chytonix divesta*. Olive Green Cutworm (*Dargida procinctus*). Rosy Dart (*Diarsia rosaria*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa bicollaris* – an herbaceous generalist but larval pattern indicates may eat mostly grasses. Red-backed Cutworm (*Euxoa ochrogaster*). Striped Cutworm (*Euxoa tessellata*). Dingy Cutworm (*Feltia jaculifera*). Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Hop Vine Borer (*Hydraecia immanis*). *Hypocoena rufostriata* (PNW Moths). Garden Arches (*Lacanobia radix*). Olive Arches (*Lacinipolia olivacea*). Dark-lined Wainscot (*Leucania commoides*). Meadow Wainscot (*Leucania farcta*). Phragmites Wainscot (*Leucania phragmitidicola*). Scirpus Wainscot (*Leucania scirpicola*). Stephen’s Gem (*Megalographa biloba*). *Melanapamea mixta* – probably a grass feeder (PNW Moths). Broken-line Brocade (*Mesapamea fractilinea*). Lesser Wainscot (*Mythimna oxygala*). Armyworm (*Mythimna unipuncta*). Large Yellow Underwing (*Noctua pronuba*). *Oligia divesta* – bores into stems of coarse grasses (PNW Moths). *Parabagrotis exsertistigma*. *Parabagrotis formalis*. *Parabagrotis sulinaris*. *Photedes didonea* – probably bores into stems of coarse marsh grasses (PNW Moths). Lempke’s Gold Spot (*Plusia putnami*). White-streaked Looper (*Plusia venusta*, Canada). Pale Glyph (*Protodeltote albidula*). *Protolampra rufipectus*. *Psammopolia arietis*. *Psammopolia wyatti*. *Pseudanarta crocea* – likely feeds on native bunchgrasses (PNW Moths). *Pseudanarta flava* (a species with yellow underwings). The Redwing (*Sideridis rosea*). Western W-marked Cutworm (*Spaelotis havilae*). Fall Armyworm (*Spodoptera frugiperda*). *Tholera americana* considered a probable native bunchgrass specialist (PNW Moths). American Swordgrass Moth (*Xylena nupera*). Oblique Brocade (*Xylomoia indirecta*) — bores into stems (PNW Moths). V-lined Quaker (*Zosteropoda hirtipes*). Hostplant of *Photedes* [*Xylomoia*] *didonea* unknown but likely it is a borer of coarse marsh grasses.

Oecophoridae: White-shouldered House Moth (*Endrosis sarcitrella*) – eats plant debris, dead grasses and grain.

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*). Crambus cypridalis. Eastern Grass-veneer (*Crambus laqueatellus*) – General range in the East, but reported at least once from California.

Leach's Grass-veneer (*Crambus leachellus*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). North American Grass Webworm (*Nomophila nearctica*). Bluegrass Webworm (*Parapediasia teterrellus*). Large Sod Webworm (*Pediasia trisecta*). Meal Moth (*Pyralis farinalis*). Western Lawn Moth (*Tehama bonifatella*).

Tortricidae: *Bactra maiorina*. *Celypha cespitana*.

Poa spp. **Bluegrasses**. Poaceae. Poaceae.

Hostplants for Common Roadside-Skipper.

A number of grass (see Poaceae) feeding caterpillars either laboratory raised on or found on bluegrasses.

Poa glauca. **Glaucous Bluegrass**. Poaceae. Poaceae. Foodplant for the Comma Skipper.

Poa secunda. **Malpais Bluegrass**. Poaceae. Poaceae. Reported as a larval host for Holarctic Grass Skipper, otherwise known as the Comma Skipper or Common Branded Skipper or Western Branded Skipper (*Hesperia comma* – North American segregate is now assigned to *Hesperia colorado*). Shapiro notes it in the San Francisco Bay region for the *tildenii* segregate.

Polanisia dodecandra ssp. *trachysperma*. **Red-whisker Clammyweed**. Cleomaceae. Nectar: Pipevine Swallowtail (Kurt Geiger photo, Sacramento Valley NWR). Laura Miller, Phoenix, confirms, "loves it". Brian Banker observed three Western Tiger Swallowtail at nectar on it in Inyo County (Desert Leps 24390). Checkered White (Liz Makings). Dainty Sulphur (Liz Makings). Orange Sulphur (Liz Makings). Variegated Fritillary (Liz Makings). June – September.

Foodplant for Cabbage White (Butterflies of America web site). Liz Makings photographed oviposition by Checkered White:

<https://www.flickr.com/photos/94853594@N08/20935991096/in/album-72157657476451150/>

<https://www.flickr.com/photos/94853594@N08/20935990986/in/album-72157657476451150/>

Polemonium spp. **Polemonium**. Polemoniaceae. Its flowers attract butterflies (*Butterfly Gardening in the Pacific Northwest*). Arctic Skipper among them.

Polemonium eximium. **Showy Sky Pilot**. Polemoniaceae. Nectar: Flowers smell like urine, but attract many butterflies! (Called "Skunk Polemonium" in Ireland!). White-lined Sphinx (*Hyles lineata*) (John W. Little photograph). Showy flowers, but bloom time at high elevations is brief. July – August.

Polemonium pulcherrimum var. *pulcherrimum*. **Sky Pilot**. Polemoniaceae. Attracts butterflies. June – August.

Polygala sp. **Milkwort**. Polygalaceae.

Noctuidae: Showy Milkwort, *Polygala grandiflora*, native to the southeastern United States, is hostplant for *Dypterygia patina*, a moth collected in Imperial County. Perhaps it eats a Californian desert *Polygala*).

Polygala californica. **California Milkwort**. Polygalaceae. Nectar: Pacific Fritillary (Scott Peden). April – July.

Polygonum spp. **Smartweed**. Polygonaceae. Nectar: Purplish Copper and Thicket Hairstreak.

Arctiidae: Ornate Tiger Moth (*Apantesis ornata*).

Geometridae: Confused Eusarca (*Eusarca confusaria*, Geometridae). Listed for *Scopula sideraria* (Geometridae), a day-flying species common in Marin County; very likely refers to *Persicaria*. Much of the genus now assigned to *Persicaria*.

Polygonum amphibium is now *Persicaria amphibia*. **Water Smartweed**.

Polygonum austinae was *Polygonum douglasii* var. *austinae*. **Rebecca Austin's Knotweed**. Polygonaceae. June- September.

Purplish Copper observed laying on it in September, as well as oviposition by Lilac-bordered Copper: Shapiro, Arthur M. 1986. "Montane Insular Butterfly Biogeography: Fauna of Ball Mountain, Siskiyou County, California." *The Great Basin Naturalist* 46 (2): 336-47.

Polygonum bistortoides is now *Bistorta bistortoides*. **Western Bistort**.

Polygonum californicum. **California Knotweed**. Polygonaceae. Nectar: Acmon Blue.

Host for Purplish Copper (Art Shapiro's Butterfly site).

Polygonum davisiae is now *Aconogonon davisiae*. **Davis Knotweed**.

Polygonum douglasii. **Douglas Smartweed**. Polygonaceae. Nectar: Acmon Blue, Columbian Skipper. June-October.

Foodplant for Purplish Copper, Mariposa Copper, and for Lilac-bordered Copper.

Polygonum douglasii ssp. *spergulariforme* is now *Polygonum spergulariforme*. **Spurry Knotweed**.

Polygonum hydropiperoides is now *Persicaria hydropiperoides*. **False Waterpepper**.

Polygonum lapathifolium is now *Persicaria lapathifolia*. **Willow Smartweed. Pale Smartweed**.

Polygonum paronychia. **Beach Knotweed**. Polygonaceae. Nectar: some value for Purplish Copper, very few visits by Common Ringlet and Woodland Skipper. March – September.

Purplish Copper strongly associated it (Mike Patterson, NorWestLeps #2150) – and Acmon or Lupine Blue (Pyle, NorWestLeps #2161), appears to be a hostplant for them. 1988 Season Summary confirms Purplish Copper ovipositing on it at Yonotocket Indian Reservation 15 May in Del Norte County (K.C. Hansen).

Gelechiidae: *Aroga xyloglypta* adults found associated with the plant; possibly a hostplant.

Noctuidae: *Psammopolia arietis*. *Psammopolia wyatti*.

Sesiidae: Buckwheat Borer (*Synanthedon polygona*).

Best in zones 14, 16, 17, 22-24; groundcover. The Jepson Manual says it is a “good bee plant”.

Polygonum phytolaccifolium is now *Aconogonon phytolaccifolium*. **Alpine Knotweed.**

Polygonum punctatum is now *Persicaria punctata*. **Dotted Smartweed.**

Polygonum spergulariforme was *Polygonum douglasii* ssp. *spergulariforme*. **Spurry Knotweed.**
Polygonaceae. June-October.

A “very strongly suspected” hostplant for Lilac-bordered Copper in the Trinity Alps area, with oviposition observed (Shapiro).

Polyphorus sp. **Polypore.** Kingdom Fungi, Division Basidiomycota, Polyporaceae.

Tortricidae: Garden Tortrix (*Clepsis peritana*), usually dead or decaying leaves, but sometimes buds, or this fungus.

Polyporus versicolor see *Trametes versicolor*. **Turkey Tail.**

Polyporus volvatus see *Cryptoporus volvatus*.

Polystichum munitum. **Western Sword Fern.** Dryopteridaceae.

Geometridae: Tender unfurling fronds a favorite food for Taylor’s Thallophaga (*Thallopaga taylorata*) caterpillars. It flies in early spring in moist conifer forests. Brown-lined Looper (*Neocalcis californiaria*), a polyphagus species.

Noctuidae: *Diarsia esurialis*. Brown Angle Shades (*Phlogophora periculosa*). *Pseudorthodes irrorata*.

Best cultivated in Zones 6, 7, 14-17, 20-24.

Populus spp. **Cottonwoods, Aspens.** Salicaceae. Their wind-pollinated flowers offer no nectar, no scent, thus, unlike the related willows, do not attract Lepidoptera.

Foodplants for: Mourning Cloak (Haggard). Todd Stout finds any species works as a lab host for Viceroy or Weidemeyer’s Admiral.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Batrachedridae: *Batrachedra praeangusta*, adults found on Populus and larvae reared from catkins and seed (Powell & Opler, p. 75).

Drepanidae. Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae. Infant (*Archiearis infans*). The Vestal (*Cabera variolaria*). Pale Beauty (*Campaea perlata*). Dark-bordered Granite (*Digrammia neptaria*). Linden Looper (*Erannis tiliaria*). Barred Yellow (*Eulithis propulsata*). Chevron (*Eulithis testata*). Juniper Looper (*Eupithecia interruptofasciata*). Sulphur Wave (*Hesperumia sulphuraria*). July Highflier (*Hydriomena furcata*). Yellow-lined Thorn (*Metanema*

inatomaria) (fq). Scallop Shell (*Rheumaptera undulata*). Omnivorous Looper (*Sabulodes aegrotata*). October Thorn (*Tetracis jubararia*).

Hepialidae: Four-spotted Ghost Moth (*Sthenopsis purpurascens*). Larvae are root borers.

Lasiocampidae. Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae. *Abagrotis orbis*, *Abagrotis reedi*. Henry's Marsh Moth (*Acronicta insularis*), *Acronicta strigulata* suspected to employ *Populus* as hosts based on habitat. Foodplants for many underwings: *Catocala californica*, *Catocala faustina*, *Catocala hermia*, Irene Underwing (*Catocala irene*), Jessica Underwing (*Catocala jessica*), *Catocala junctura*, and Semirelict Underwing (*Catocala semirelictica*). Simplex Cutworm (*Egira simplex*), Lesser Eyed Sallow (*Enargia infumata*), *Homoglaea californica*, *Homoglaea carbonaria*, False Pinion (*Litholomia napaea*), Gray Midget (*Nycteola cinerea*), Purple Arches (*Polia purpurissata*), The Herald (*Scoliopteryx libatrix*), *Ufeus faunus*, *Ufeus plicatus*, Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*), and Colorful Zale (*Zale minerea*).

Notodontidae. *Clostera brucei*, Angle-lined Prominent (*Clostera inclusa*). Zigzag Furcula (*Furcula scolopendrina* [Haggard]). Banded Pebble Moth (*Gluphisia severa*). Black-rimmed Prominent (*Pheosia rimosa* [Haggard]).

Tineidae: *Nemapogon defectella*. Associated with fungi that grow in association with cottonwoods and aspens.

Tortricidae: Great Acleris (*Acleris maximana*). Sallow Apotomis (*Apotomis capreana*). *Apotomis infida*. Green Aspen Leafroller (*Apotomis removana*). Fruit-tree Leafroller (*Archips argyrosipila*). Ugly-nest Caterpillar (*Archips cerasivorana*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). White-triangle Tortrix (*Clepsis persicana*). Poplar Branchlet Borer (*Epinotia nisella*). Birch Leafroller (*Epinotia solandriana*). *Gypsonoma substitutionis*. Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Pandemis limitata*). Poplar Leafroller (*Pseudosciaphila duplex*).

Populus angustifolia. **Narrow-leaved Cottonwood**. Salicaceae.

Foodplant for Western Tiger Swallowtail, Lorquin's Admiral (Todd Stout found *burrisoni* caterpillars on it in Boise County, Idaho) and Weidemeyer's Admiral. Todd Stout finds it a suitable lab host for Mourning Cloak.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

In cultivation; a rare species in the wild in California.

Populus balsamifera var. *trichocarpa*. **Black Cottonwood**. Salicaceae.

Hostplant for Western Tiger Swallowtail, Mourning Cloak, Lorquin's Admiral (noted specifically for Ventura County in 1983 Season Summary), Viceroy, and Dreamy Duskywing (though in California it is usually on willows according to Shapiro).

Marc Kummel photographed a large specimen serving as an overwintering roost for Monarchs (29 December 2009, Refugio Creek, Santa Barbara County). <http://us.fotolog.com/treebeard/57874395/>

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Cossidae: Locust Borer (*Prionoxystus robiniae*).

Geometridae: The Vestal (*Cabera variolaria*, Canada). Dark-bordered Granite (*Digrammia neptaria*). Northwest Phoenix (*Eulithis xyliana*). Linden Looper (*Erannis tiliaria*, Canadian record). Columbia Pug (*Eupithecia columbiata*). Tawny Eupithecia (*Eupithecia ravocostaliata*). Grey Pug (*Eupithecia subfuscata*). Sulphur Wave (*Hesperumia sulphuraria*). *Protitame subalbaria*. Scallop Shell (*Rheumaptera undulata*). October Thorn (*Tetracis jubararia*, Canada). Pearsall's Carpet (*Venusia pearsalli*, Canada).

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phylodesma americana*).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*). Satin Moth (*Leucoma salicis*) (fq).

Nepticulidae: Balsam Poplar Petiole Miner (*Ectoedemia canutus*).

Noctuidae: Fingered Dagger (*Acronicta dactylina*). Fragile Dagger (*Acronicta fragilis*, Canada). Cottonwood Dagger (*Acronicta lepusculina*). Copper Underwing (*Amphipyra pyramidoides*). Large Looper (*Autographa ampla*). Pale Enargia (*Enargia decolor*). Lesser Eyed Sallow (*Enargia infumata*). Nutmeg (*Anarta trifolii*). *Homoglaea dives*. *Ipimorpha viridipallida* – likely hostplant (PNW Moths). forSpeckled Green Cutworm (*Orthosia hibisci*). Purple-lined Sallow (*Pyrrhia experimens* --Canadian record). *Raphia pallula* (strongly suspected). The Herald (*Scoliopteryx libatrix*). Bicolored Sallow (*Sunira bicolorago*). Colorful Zale (*Zale minerea*).

Nolidae: Grey Midget (*Nycteola cinereana*) (fq).

Notodontidae: Apical Prominent (*Clostera apicalis*). *Clostera brucei*. Rough Prominent (*Nadata gibbosa*). Black-rimmed Prominent (*Pheosia rimosa*). Red-humped Caterpillar (*Schizura concinna*).

Sesiidae: American Hornet Moth (*Sesia tibiale*) – looks like a wasp and even the drone of its wingbeats sounds like a wasp.

Sphingidae: Blinded Sphinx (*Paonias excaecata*). One-eyed Sphinx (*Smerinthus ophthalmica*).

Tortricidae: *Acleris hastiana* (Canada). Black-lined Acleris (*Acleris nigrolinea*). Green Aspen Leafroller (*Apotomis removana*, Canada). Fruit-tree Leafroller (*Archips argyrospila*, Canada). Ugly-nest Caterpillar (*Archips cerasivorana*, Canada). Large Aspen Tortrix (*Choristoneura conflictana*). Spruce Budworm (*Choristoneura fumiferana*, Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*, Canada). White-triangle Tortrix (*Clepsis persicana*). *Cydia populana*. Poplar Branchlet Borer (*Epinotia nisella*). Birch Leafroller (*Epinotia solandriana*, Canada). *Gypsonoma substitutionis* (Canada). Three-lined Leafroller (*Pandemis limitata*, Canada). Poplar Leafroller (*Pseudosciaphila duplex*, Canada).

Best cultivated in Zones 2-7, 15-18, 24.

Populus fremontii. **Fremont Cottonwood**. Salicaceae.

Hostplant for Western Tiger Swallowtail, Viceroy (including *obsoleta*, Todd Stout), Mourning Cloak, Lorquin's Admiral, Dreamy Duskywing and Persius Duskywing (?? – a mistaken ID?).

Arctiidae. Fall Webworm (*Hyphantria cunea*).

Cossidae. Locust Borer (*Prionoxystus robiniae*).

Drepanidae. Arched Hooktip (*Drepana arcuata*).

Geometridae. *Digrammia irrorata*. Day Emerald (*Mesothea incertata*).

Gracillariidae: *Phyllonorycter deserticola*.

Lasiocampidae. Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*).

Lymantriidae. White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae. Red Cutworm (*Abagrotis placida*). *Brachylomia populi*. *Catocala junctura*. Semirelict Underwing (*Catocala semirelictica*). *Raphia pallula* [BugGuide].

Notodontidae. *Clostera inornata*. Gray Kitten (*Furcula cinerea*). Common Gluphisia (*Gluphisia septentrionis*). Red-humped Caterpillar (*Schizura concinna*).

Saturniidae. Polyphemus Moth (*Antheraea polyphemus*). Western Sheepmoth (*Hemileuca eglanterina*). Juno Buckmoth (*Hemileuca juno*). Nevada Buckmoth (*Hemileuca nevadensis*).

Sesiidae. Western Poplar Clearwing (*Paranthrene robiniae*). American Hornet Moth (*Sesia tibialis*).

Sphingidae. Big Poplar Sphinx (fq) (*Pachysphinx occidentalis*). Blinded Sphinx (*Paonias excaecata*). One-eyed Sphinx (“*Smerinthus cerisyi*”) -- in California, really *Smerinthus ophthalmica*. *S. cerisyi*, a ringer, not thought extant in California.)

Tortricidae: Great Acleris (*Acleris maximana*) reported with some uncertainty about moth ID.

Populus tremuloides. **Quaking Aspen**. Salicaceae.

Look for sap feeding butterflies and moths at sapsucker wounds on Quaking Aspen.

Hostplant for Western Tiger Swallowtail, Viceroy, Lorquin's Admiral and Weidemeyer's Admiral, Mourning Cloak, Green Comma, Oreas Comma, and Dreamy Duskywing. Persius Duskywing (??).

Arctiidae: Garden Tiger Moth (*Arctia caja*). Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Yellow Woollybear (*Spilosoma virginica*).

Coleophoridae: Cherry Casebearer (*Coleophora pruniella*).

Cossidae: Locust Borer (*Prionoxystus robiniae*), Aspen Carpenterworm (*Acosus populi*).

Drepanidae: Two-lined Hooktip (*Drepana bilineata*, Canada).

Gelechiidae: Pale-headed Aspen Leafroller (*Anacamptis niveopulvella*).

Geometridae: Fall Cankerworm (*Alsophila pomataria*). Common Gray (*Anavitrinella pampinaria*, Canada). Infant (*Archiearis infans*). Peppered Moth (*Biston betularia*, Canada). The Vestal (*Cabera variolaria*, Canada). Pale Beauty (*Campaea perlata*) (fq). *Digrammia hebetata*. Dark-bordered Granite (*Digrammia neptaria*). Dark Marbled Carpet (*Dysstroma citrata*, Canada). Small Engrailed (*Ectropis crepuscularia*, Canada). Maple Spanworm (*Ennomos magnaria*). Autumnal Moth (*Epirrita autumnata*). Linden Looper (*Erannis tiliaria* – Canadian record). Chevron (*Eulithis testata*, Canada). Northwest Phoenix (*Eulithis xyliana*). Tawny Eupithecia (*Eupithecia ravocostaliata*). July Highflier (*Hydriomena furcata*). Shattered Hydriomena (*Hydriomena perfracta*, Canada). Emasculated Grey (*Iridopsis emasculatum*). Mournful Thorn (*Lambdina fiscellaria*, Canada). *Lobophora magnoliatoidata*. *Lobophora montanata*. Powdered Bigwing (*Lobophora nivigerata*) (fq). *Lobophora simsata* (Canada). Twilight (*Lycia rachelae*). Common Angle (*Macaria aemulataria*). Speckled Granite (*Macaria exauspicata*, Canada). *Macaria loricaria* (E. H. Strickland Museum). Western Carpet (*Melanolophia imitata*, Canada). Yellow-lined Thorn (*Metanema inatomaria*) (fq). Bruce Spanworm (*Operophtera bruceata*). Spring Cankerworm (*Paleacrita vernata*, Canada). Morrison's Pero (*Pero morrisonaria*, Canada). American Barred Umber (*Plagodis pulveraria*, Canada). George's Carpet (*Plemyria georgii*, Canada). Friendly Probole (*Probole amicaria*, Canada). *Protitame subalbaria*. Scallop Shell (*Rheumaptera undulata*). Sharp-lined Yellow (*Sicya macularia*, Canada). *Speranza loricaria* (Canada). Lorquin's Angle (*Macaria lorquinaria*). *Spodolepis substriataria*. October Thorn (*Tetracis jubararia* – Canada). Pearsall's Carpet (*Venusia pearsalli*, Canada).

Gracillariidae: Poplar Caloptilia (*Caloptilia stigmatella*). Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Aspen Serpentine Leafminer (*Phyllocnistis populiella*). Willow Leaf Blotch Miner (*Phyllonorycter salicifoliella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*), Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*). White Satin (*Leucoma salicis*) (fq). European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Alder Dagger (*Acrionicta dactylina*). Gray Dagger (*Acrionicta grisea*, Canada). Impressed Dagger (*Acrionicta impressa*). Cottonwood Dagger (*Acrionicta lepusculina*). Ruddy Dagger (*Acrionicta rubricoma*). Copper Underwing (*Amphipyra pyramidoides*). Puta Sallow (*Anathix puta*). Cottonwood Dagger (*Acrionicta lepusculina*). *Acrionicta rubricoma*. Copper Underwing (*Amphipyra pyramidoides*). Canadian Giant (*Andropolia contacta*, Canada). Large Looper (*Autographa ampla*). *Brachylomia algens*. *Brachylomia populi*. *Catocala californica*. Jessica Underwing (*Catocala jessica*). *Catocala junctura*. White Underwing (*Catocala relictata*) – Powell & Opler believe quaking aspen is its primary host in the West. Semirelict Underwing (*Catocala semirelictata*). Intermediate Cucullia (*Cucullia intermedia*). Pale Enargia (*Enargia decolor*). Lesser Eyed Sallow (*Enargia infumata*). Three-spotted Sallow (*Eupsilia tristigmata*). *Eurois nigra* – PNW indicates it a possible hostplant. Great Brocade (*Eurois occulta*). *Homoglaea carbonaria* (Canada). *Homoglaea dives*. *Ipimorpha viridipallida* – likely hostplant (PNW Moths). False Pinion (*Litholomia napaea*). American Brindle (*Lithomoia germana*). Bailey's Pinion (*Lithophane baileyi*). Nameless Pinion (*Lithophane innominata*). Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*). *Papestra cristifera*. *Papestra invalida*. *Protolampra*

rufipectus (Canada). Purple-lined Sallow (*Pyrrhia experimens*, Canada). The Herald (*Scoliopteryx libatrix*). Otter Spiramater (*Spiramater lutra*). Inscribed Looper (*Syngrapha epigaea*). *Ufeus plicatus*, Grote's Satyr (*Ufeus satyricus*). Gray Swordgrass Moth (*Xylena cineritia*-- Canada). Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). Western Swordgrass Moth (*Xylena thoracia*, Canada). Colorful Zale (*Zale minerea*).

Notodontidae: Apical Prominent (*Clostera apicalis*). *Clostera brucei*. Angle-lined Prominent (*Clostera inclusa*). Yellow-necked Caterpillar (*Datana ministra*). Gray Furcula (*Furcula cinerea*). Zigzag Furcula (*Furcula scolopendrina*). Lintner's Gluphisia (*Gluphisia lintneri*). Banded Pebble Moth (*Gluphisia severa*, Canada). Rough Prominent (*Nadata gibbosa*). Red-washed Prominent (*Oligocentria semirufescens*). Black-rimmed Prominent (*Pheosia rimosa*). Red-humped Caterpillar (*Schizura concinna*). Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*).

Oecophoridae: *Agonopterix argillacea* (Canada). *Depressariodes ciniflonella* (Canada). Dull Flatbody Moth (*Semioscopis inornata*).

Pyralidae: Lesser Aspen Webworm (*Meroptera pravella*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Pandora Pinemoth (*Coloradia pandora*). Western Sheepmoth (*Hemileuca eglanterina*). Nevada Buckmoth (*Hemileuca nevadensis*).

Sesiidae: American Hornet Moth (*Sesia tibiale*) (fq).

Sphingidae: Big Poplar Sphinx (*Pachysphinx occidentalis*). Blinded Sphinx (*Paonias excaecata*). One-eyed Sphinx (*Smerinthus cerisyi* -- in California *Smerinthus ophthalmica*, formerly a subspecies). Great Ash Sphinx (*Sphinx chersis*).

Thyatiridae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Tortricidae: *Acleris hastiana*. Marbled Dog's Tooth Tortrix (*Acleris maccana*). *Acleris maximana*. *Acleris nigrolinea*. Robinson's Acleris (*Acleris robinsoniana*). *Acleris senescens*. Yellow Birch Leafroller Moth (*Ancylis discigerana*). Allen's Tortrix (*Aphelia alleniana*). Sallow Apotomis (*Apotomis capreana*, Canada). *Apotomis infida* (Canada). Green Aspen Leafroller (*Apotomis removana*, Canada). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). *Celypha cespitana* (Canada). Large Aspen Tortrix (*Choristoneura conflictana*, confirmed for California). Oblique-banded Leafroller (*Choristoneura rosaceana*). Zapulata (*Choristoneura zapulata*). White-triangle Tortrix (*Clepsis persicana*). *Cydia populana*. *Epinotia lomonana* (Canada). Poplar Branchlet Borer (*Epinotia nisella*). Birch Leafroller (*Epinotia solandriana*, Canada). *Gypsonoma substitutionis* (Canada). *Olethreutes deprecatorius* (Canada). Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Pandemis limitata*). Pandemis Leafroller (*Pandemis pyrusana*, confirmed for California). Poplar Leafroller (*Pseudosciaphila duplex*, California).

Quaking Aspen, found over a vast range, fed upon by many moths. The Lepidoptera listed here, as elsewhere in this compilation, are known from California, and Quaking Aspen is at least a potential host, though not necessarily being utilized by all California populations (and thus with many plants in this compilation!)

Best in cultivation in Zones 1, 2, 4-7, 18; may be garden invasive.

Porophyllum gracile. **Odora. Yerba del Venado**. Asteraceae. Tageteae. Nectar: Southern Dogface, California Patch (Organ Pipe National Monument, Arizona), Tiny Checkerspot (Liz Makings).. Ceraunus Blue (Bob Beatson photograph). September – June.

Potamogeton gramineus. **Grass-leaved Pondweed**. Potamogetonaceae. July – August.

Pyralidae: *Elophila occidentalis* (Wikipedia).

Potentilla sp. **Cinquefoil**. Rosaceae. Potentilleae. Nectar: Eastern Tailed Blue, Thicket Hairstreak.

Potentilla anserina ssp. *pacifica* (aka *Argentina egedii*). **Silverweed**. Rosaceae. Potentilleae. Nectar: Checkered White [Michigan], Purplish Copper, Greenish Blue (John & Jane Balaban, BugGuide, Wyoming). March – October.

Silverweed became a Purplish Copper hostplant for a few years in Suisun Marsh (Shapiro).

Geometridae: Dark Marbled Carpet (*Dysstroma citrata*).

Zones 4-6, 14-17, 19-24.

Potentilla breweri. **Brewer's Cinquefoil**. Rosaceae. Potentilleae. Nectar: Lilac-bordered Copper. June – September.

Potentilla diversifolia. **Varileaf Cinquefoil**. Rosaceae. Potentilleae. A favored nectar plant for the Mardon Skipper in Oregon. Moldenke found the Ruddy Copper and Greenish Blue associated with its flowers.

Potentilla drummondii. **Drummond's Cinquefoil**. Rosaceae. Potentilleae. June – August.

A foodplant for the Two-banded Checkered-Skipper.

Potentilla fruticosa is now *Dasiphora fruticosa*. **Shrubby Cinquefoil**.

Potentilla glandulosa is now *Drymocallis glandulosa*. **Sticky Cinquefoil**.

Potentilla gracilis. **Slender Cinquefoil**. Rosaceae. Potentilleae. Western White. Purplish Copper shown in an online photograph. Lilac-bordered Copper (David Horner). Scott notes, mostly only once or a few times, flower visits by Rocky Mountain Parnassian, Common Ringlet, and Ruddy Copper. Ron Wolf photographed Shasta Blue at nectar on it in Yosemite National Park. Puget Blue (segregate of Boisduval's Blue). Greenish Blue (David. S. Horner). Sonora Skipper (David Horner). June – August.

Potentilla pensylvanica. **Prairie Cinquefoil**. Rosaceae. Potentilleae. Scott notes a flower visit by Uncas Skipper. July – August.

Potentilla pulcherrima. **Beautiful Cinquefoil**. Rosaceae. Potentilleae. Nectar: Large Marble, Checkered White, Western White, Mormon Fritillary, Ruddy Copper, Greenish Blue, Western Tailed Blue, Western Branded Skipper (Scott). July – August.

Potentilla wheeleri. **Kern Cinquefoil**. Rosaceae. Potentilleae. Nectar: small butterflies, other insects. May – August.

Prosopis spp. **Mesquite**. Fabaceae. Mimoseae.

Geometridae: Citrus Looper (*Iridopsis fragilaria*).

Noctuidae: *Heteranasa mima*.

Prosopis glandulosa var. *torreyana*. **Honey Mesquite**. Fabaceae. Mimoseae. Nectar: Checkered White, American Snout, Queen, Palmer's Metalmark, Western Pygmy Blue, Marine Blue, Ceraunus Blue, Reakirt's Blue, Great Purple Hairstreak, Gray Hairstreak, Leda Ministreak, Mojave Sootywing, Fiery Skipper, likely nectar plant for Long-tailed Skipper, for which it is a hostplant. April – August.

Hostplant for Palmer's Metalmark (Heath), Leda Ministreak, Marine Blue (Monroes), Edwards's Blue, Reakirt's Blue (Garth & Tilden), Ceraunus Blue, (Monroes), Long-tailed Skipper (Garth). Supports Desert Mistletoe, a Great Purple Hairstreak hostplant.

Noctuidae: *Bulia deducta*. Indomitable Melipotis (*Melipotis indomita*). Gray Looper (*Rachiplusia ou*).

Saturniidae: Possible host for Juno Buckmoth – collected once in California in San Diego County in 1908 (Tuskes).

Tortricidae: *Cydia membrosa*.

Prosopis pubescens. **Screwbean Mesquite**. Fabaceae. Mimoseae. Nectar: Checkered White, Queen, Palmer's Metalmark, Marine Blue, Ceraunus Blue, Reakirt's Blue, Gray Hairstreak, and Yuma Skipper. April – September.

Hostplant for Ceraunus Blue, Marine Blue, Reakirt's Blue (Monroes).

Hosting the parasitic Desert Mistletoe (*Phoradendron californicum*), it indirectly supports Great Purple Hairstreak.

Noctuidae: *Heteranassa fraterna* [Jennifer Bundy].

Prunella vulgaris var. *lanceolata*. **Self-heal**. Lamiaceae. Nectar: Pale Swallowtail, Pipevine Swallowtail, Clouded Sulphur, Cabbage White (fq), Margined White, Checkered White, American Lady, Mylitta Crescent (fq), Gulf Fritillary, Behren's Silverspot (a segregate of Zerene Fritillary), Gray Hairstreak, Great Arctic, Propertius Duskywing, Northern Cloudywing, Common Checkered-Skipper, Silver-spotted Skipper, Eufala Skipper, Lindsey's Skipper (fq), Woodland Skipper, Dun Skipper (particularly fond of this source), Sandhill Skipper, Sonora Skipper, Tawny-edged Skipper, Common Roadside-Skipper. Dennis lists 21 eastern butterflies for Self-heal. Bumblebees. May – September.

Easy to grow.

Prunus spp. **Cherries**. Rosaceae. Amygdaleae. Nectar: Thicket Hairstreak.

Hostplants for Lorquin's Admiral. Todd Stout finds any suitable as a lab host for Weidemeyer's Admiral.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*). *Eupithecia perfusca*. *Macaria confederata*. Scallop Shell (*Rheumaptera undulata*).

Noctuidae: *Abagrotis orbis*. Fragile Dagger (*Acronicta fragilis*). Western Woodling (*Egira rubrica*). Northern Scurfy Quaker (*Homorthodes furfurata*). Nameless Pinion (*Lithophane innominata*). *Lithophane pertorrida* (Canada). Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*). Purple-lined Sallow (*Pyrrhia experimens*). The Herald (*Scoliopteryx libatrix*). *Trichordestra tacoma*. Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). Western Swordgrass Moth (*Xylena thoracia*). Lunate Zale (*Zale lunata*).

Notodontidae: Banded Pebble Moth (*Gluphisia severa*, Canada). Pacific Prominent (*Notodonta pacifica*) – host unknown, Prunus though possible (PNW Moths). Unicorn Caterpillar (*Schizura unicornis*).

Sphingidae: Great Ash Sphinx (*Sphinx chersis*) (Haggard).

Prunus andersonii. **Desert Peach**. Rosaceae. Amygdaleae. Nectar: a big favorite of the Painted Lady in migration. Ken Davenport found a few early Desert Elfin, many ‘Desert’ Sheridan’s Hairstreak in April 2007 (SoWestLep #8373). In Nevada, 17 April 2014, Jim Dreier saw Desert Marble, Sara Orangetip, Becker’s White, Spring White, Painted Lady, Gray Hairstreak, Thicket Hairstreak (Janel Johnson), Square-spotted Blue, Silvery Blue, and Boisduval’s Blue (NorWestLeps #8226). Juba Skipper (Ray Bruun). Its fragrant flowers serve bees of many sorts. March – May.

Geometridae: *Tetracis formosa*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Quite attractive in flower!

Prunus angustifolia. **Chickasaw Plum**. **Sand Plum**. Rosaceae. Amygdaleae. Nectar: Georgia records show its flowers appeal to a wide range of butterflies from swallowtails to skippers. Some eastern butterfly species known to visit its flowers there are also native here: Pipevine Swallowtail, Cloudless Sulphur, American Snout, American Lady (fq), Common Buckeye (fq), Gray Hairstreak, Great Purple Hairstreak, Juniper Hairstreak, Spring Azure, Eastern Tailed Blue, Sleepy Duskywing, and Fiery Skipper. Its flowers very attractive to eastern duskywings, likely to ours, also. It flowers are fragrant and early, with redbuds in February and March; no doubt an aspect of its appeal. Said to be a “particularly good” butterfly nectar plant in Kentucky.

Scats of coyote or raccoon that have eaten it are attractive to scat-feeding butterflies.

Chickasaw Plum is a hostplant for the Coral Hairstreak elsewhere. Their known ranges in California do not coincide.

A thicket-forming plum native over a wide area of the United States from Colorado and New Mexico east, with recently discovered disjunct populations thought native to California (not documented in the 2012 print edition of the *Jepson Manual*, but rather, online on CalFlora). Reported from Sonoma County, Contra Costa County and Santa Barbara County in somewhat moist but well drained situations in acidic soil.

Prunus emarginata. **Bitter Cherry**. Rosaceae. Amygdaleae. Nectar: Sara Orangetip, Painted Lady (fq), Lorquin's Admiral, Milbert's Tortoiseshell, Great Purple Hairstreak, Nelson's Hairstreak, Western Banded Elfin, Echo Azure (fq), Silvery Blue, Propertius Duskywing (fq). Shapiro: "unpreferred but visited". April – June.

Newly fruiting bitter cherry have very sticky surfaces, a resource for various butterflies; Joseph Smith, an observer in Lava Beds National Monument says "once I recorded 35 Tailed Copper, 5 Great Purple Hairstreak, 8 Mountain Mahogany Hairstreak, and 12 Behr's Hairstreak on one bush."

Foodplant for Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Lorquin's Admiral, Brown Elfin.

Coleophoridae: *Coleophora irroratella*.

Drepanidae: *Ceranemota fasciata* [Tatum].

Gelechiidae: *Evippe prunifoliella*.

Geometridae: Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Red-winged Wave (*Dasyfidonia avuncularia*), a showy day-flying species. *Eupithecia maestosa*. *Eupithecia misturata*. Linden Looper (*Erannis tiliaria*). Northwest Phoenix (*Eulithis xyliana*). Sulphur Wave (*Hesperumia sulphuraria*). *Hesperumia fumosaria*. *Hesperumia latipennis*. Citrus Looper (*Iridopsis fragilaria*). Emasculated Gray (*Iridopsis emasculatum*). Hemlock Looper (*Lambdina fiscellaria*). *Macaria umbriferata*. *Nematocampa brehmeata*. Brown-lined Looper (*Neocalcis californiaria*, [Tatum – secondary host on southern Vancouver Island]). Bruce Spanworm (*Operophtera bruceata*). Western Pero (*Pero occidentalis*). Sharp-lined Yellow (*Sicya macularia*). *Tetracis barnesii*. Falcate Synaxis (*Tetracis cervinaria*). *Tetracis hirsutaria*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). *Phyllodesma coturnix* (Lasiocampidae),

Noctuidae: *Acerra normalis*. Radcliffe's Dagger (*Acronicta radcliffei*). *Agrochola pulchella*. *Agrochloa purpurea*. *Andropolia theodori*. Rusty Shoulder Knot (*Aseptis binotata*). Shadowy Arches (*Drasteria adumbrata*). *Egira crucialis*. *Egira hiemalis*. Three-spotted Sallow (*Eupsilia tristigmata*). Garden Cutworm (*Fishia discors*). Large Gray Pinion (*Lithophane georgii*). Hitched Arches (*Melanchra adjuncta*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*). *Pseudorthodes irrorata*. Gray Sword-grass Moth (*Xylena cineritia*). American Sword-grass Moth (*Xylena nupera*).

Pyralidae: *Ambesa walsinghami*.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Sphingidae: Wild Cherry Sphinx (*Sphinx drupiferarum*).

Tortricidae: *Acleris aenigmata*. *Acleris maximana*. *Acleris senescens*. Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). *Argyrotaenia dorsalana*. Oblique-banded Leafroller (*Choristoneura rosaceana*). *Eucosma columbiana*.

In an intensive local study, Crabtree & Leuschner found 34 species of Lepidoptera from 10 families utilizing Bitter Cherry as a caterpillar plant.

Prunus fasciculata. **Desert Almond**. Rosaceae. Amygdaleae. Nectar: Comstock's Hairstreak, Juniper Hairstreak (Sharon Figula), Thicket Hairstreak, Bramble Green Hairstreak. March – May.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*). Neumoegen's Buckmoth (*Hemileuca neumoegeni*) (Powell & Opler).

Prunus fremontii. **Desert Apricot**. Rosaceae. Amygdaleae. Nectar: 'Desert' Black Swallowtail, Spring White (fq) (Frank S. Model, SWLEps 02/17/16, "irresistible"), Desert Orangetip, Sara Orangetip, Brown Elfin, Bramble Green Hairstreak, Loki Juniper Hairstreak, Silvery Blue, Sonoran Blue, Acmon Blue, Painted Lady, West Coast Lady, California Patch, American Snout, Sleepy Duskywing, Funereal Duskywing, Propertius Duskywing (Monroes). It rates in the top six of Anza-Borrego butterfly nectar plants, attracting 13 species – "a wonderful nectar plant" – Lynn Monroe (SoWestLep #7499) they also find *Annaphila astrologa* (Noctuidae) and Six-spotted Litocala (*Litocala sexsignata*, Noctuidae) on it. Bob Allen found Ridings' Forester (*Alypia ridingsi*, Noctuidae) abundant on it. January – March.

Noctuidae: early instar *Sympistis bakeri* (Noctuidae) reared to adults, pupating in the soil (Jennifer Bundy).

Prunus ilicifolia. **Hollyleaf Cherry**. Rosaceae. Amygdaleae. Nectar: Anise Swallowtail (fq), Western Tiger Swallowtail, Pale Swallowtail, California Sister, Lorquin's Admiral, Red Admiral, California Tortoiseshell, Variable Checkerspot, Edith's Checkerspot, Brown Elfin, Hedgerow Hairstreak, with 'other butterflies' (natureshutterbug.com). Geometrid (*Stamnodes/Stannoctenis* sp.) (Paul Johnson photo). Honeybees.. April – May.

Foodplant for Western Tiger Swallowtail, Pale Swallowtail, and Two-tailed Swallowtail, Echo Azure, and the Coral Hairstreak.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Drepanidae: *Ceranemota fasciata*, an attractive moth with no common name.

Gelechiidae: *Filatima demissae*.

Geometridae: Autumnal Moth (*Epirrita autumnata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Lyonetiidae: *Paraleucoptera heinrichi*.

Nepticulidae: Hollyleaf Cherry Leafminer (*Stigmella braunella*).

Noctuidae: An underwing, *Catocala faustina cleopatra*. Simplex Cutworm (*Egira simplex*). February Miller (*Feralia februalis*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

Tischeriidae: *Tischeria ceanothi*.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Filbertworm Moth (*Cydia latiferreaneus*). *Epinotia lomonana*. Oriental Fruit Moth (*Grapholita molesta*).

Prunus ilicifolia subsp. *lyonii*. **Catalina Cherry**. Rosaceae. March – May.

Nepticulidae: Hollyleaf Cherry Leafminer (*Stigmella braunella*).

Prunus subcordata. **Sierra Plum**. Rosaceae. Amygdaleae. March – May.

Larval host for California Hairstreak, Brown Elfin, Lorquin's Admiral.

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*, Arctiidae). California Tiger Moth (*Leptarctia californiae*), an attractive dayflying species.

Gelechiidae: *Filatima demissae*.

Geometridae: Red-winged Wave, *Dasyfidonia avuncularia* – an attractive day-flying moth. Linden Looper (*Erannis tiliaria*). *Eupithecia maestosa*. *Eupithecia nevadata*. *Hesperumia fumosaria*. Sulphur Wave (*Hesperumia sulphuraria*). Mountain Mahogany Looper (*Iridopsis clivinaris*). *Nematocampa brehmeata*. Western Pero (*Pero occidentalis*). *Phaeoura perfidaria*. *Sericosema wilsonensis*. Sharp-lined Yellow (*Sicya macularia*). *Tetracis barnesii*. Falcate Synaxis (*Tetracis cervinaria*). *Tetracis hirsutaria*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). *Phyllodesma coturnix*, a lappet moth.

Lymantriidae: *Orgyia cana*.

Noctuidae: Corylus Dagger (*Acronicta falcata*). Rusty Shoulder Knot (*Aseptis binotata*). Shadowy Arches (*Drasteria adumbrata*). *Drasteria stretchii*, *Egira hiemalis*. *Egira curialis*. Garden Cutworm (*Fishia discors*).

Large Gray Pinion (*Lithophane georgii*). *Lithophane pertorrida*. *Sympistis bakeri*.

Notodontidae: Unicorn Caterpillar (*Schizura unicornis*).

Pterophoridae: Western Plume Moth (*Oidaematophorus occidentalis*).

Pyralidae: Destructive Pruneworm (*Acrobasis tricolorella*). *Ambesa walsinghami*.

Tortricidae: *Acleris hastiana*. *Acleris paracinderella*. *Acleris senescens*. Fruit-tree Leafroller (*Archips argyrospila*). Oblique-banded Leafroller (*Choristoneura rosaceana*). *Sparganothis senecionana*.

Ypsolophidae: *Ypsolopha walsinghmiella*.

Crabtree & Leuschner found 44 species of 12 families of Lepidoptera caterpillars on Sierra Plum, and others have reported yet others.

Prunus virginiana var. *demissa*. **Western Choke Cherry**. Rosaceae. Amygdaleae. Nectar: Pale Swallowtail, Two-tailed Swallowtail. Western Tiger Swallowtail, California Dogface. Mourning Cloak, California Tortoiseshell, Milbert's Tortoiseshell (fq), Painted Lady (fq), American Lady (fq), Red Admiral (fq), Lorquin's Admiral (Las Pilitas Nursery), Coronis Fritillary, Northwestern Fritillary, Variable Checkerspot, Northern Checkerspot, Sagebrush Checkerspot (fq), Field Crescent, Satyr Comma, Pearly Crescent. Common Ringlet. Brown Elfin, Western Pine Elfin, Great Purple Hairstreak (fq), 'Siva' Juniper Hairstreak, Johnson's Hairstreak, Thicket Hairstreak, Hedgerow Hairstreak, Sheridan's Hairstreak, Blue Copper, Boisduval's Blue, Echo Azure, Silvery Blue (fq). Dreamy Duskywing, Arctic Skipper, Western Branded Skipper (fq). Sequoia Sphinx. Shapiro: "Preferred nectar source, often with many small species in attendance." May – June.

Foodplant for Western Tiger Swallowtail, Two-tailed Swallowtail (fq), Pale Swallowtail, Lorquin's Admiral, Weidemeyer's Admiral, Echo Azure, Coral Hairstreak, and California Hairstreak. Joseph Smith notes it especially important for Two-tailed Swallowtail in the Lava Beds National Monument area; also in Shasta County.

Arctiidae. Garden Tiger Moth (*Arctia caja*). Salt Marsh Moth (*Estigmene acrea*). Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Carposinidae: Prune Limb Borer (*Bondia comonana*).

Coleophoridae: Cherry Casebearer (*Coleophora pruniella*).

Drepanidae. *Ceranemota fasciata* and *Ceranemota improvisa* -- attractive macromoths with no common names.

Gelechiidae: *Chionodes thoraceochrella* and *Filatima demissae*.

Geometridae. The Vestal (*Cabera variolaria*, Canada). Dark Marbled Carpet (*Dysstroma citrata*). Small Engrailed (*Ectropis crepuscularia*). Large Maple Spanworm (*Ennomos magnaria*). Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Columbia Pug (*Eupithecia columbiata*). *Eupithecia maestosa*. *Eupithecia misturata*. Tawny Eupithecia (*Eupithecia ravocostaliata*). Northwest Phoenix (*Eulithis xyliana*). *Hesperumia fumosaria*. Sulphur Wave (*Hesperumia sulphuraria*). July Highflier (*Hydriomena furcata*). Mountain Mahogany Looper (*Iridopsis clivinaris*). Emasculated Gray (*Iridopsis emasculatum*). Mournful Thorn (*Lambdina fiscellaria*). Twilight Moth (*Lycia rachelae*). Common Angle (*Macaria aemulataria*). Speckled Granite (*Macaria exauspicata*). *Macaria umbriferata*. *Nematocampa brehmeata*. Bruce Spanworm (*Operophtera bruceata*). Spring Cankerworm (*Paleacrita vernata*). Western Pero (*Pero occidentalis*). Straight-line Plagodis (*Plagodis phlogosaria*), Friendly Proboscis (*Proboscis amicarum*). Falcate Synaxis (*Tetracis cervinaria*).

Gracillariidae: Cherry Leafcone Caterpillar (*Caloptilia invariabilis*) and *Caloptilia melanocarpae*.

Lasiocampidae. Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*). *Phyllodesma coturnix*.

Lymantriidae. European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae. Alder Dagger (*Acronicta dactylina*). Gray Dagger (*Acronicta grisea*). Yellow-haired Dagger (*Acronicta impleta*). Radcliffe's Dagger (*Acronicta radcliffei*). Rusty Shoulder Knot (*Aseptis binotata*). Copper Underwing (*Amphipyra pyramidoides*). Large Looper (*Autographa ampla*). Intermediate Cucullia (*Cucullia intermedia*). *Egira crucialis*. *Egira curialis*. *Egira hiemalis*. Lost Sallow (*Eupsilia devia*). Three-spotted Sallow (*Eupsilia tristigmata*). Garden Cutworm (*Fishia discors*). *Lithophane amanda*. Nameless Pinion (*Lithophane innominata*). *Lithophane pertorrada*. Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*). *Paradiarsia littoralis*. *Platypolia loda*. Purple Arches (*Polia purpurissata*). Otter Spiramater (*Spiramater lutra*). *Trichordestra tacoma*. Gray Swordgrass Moth (*Xylena cineritia*). Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). American Swordgrass Moth (*Xylena nupera*). Western Swordgrass Moth (*Xylena thoracia*).

Notodontidae. Yellow-necked Caterpillar (*Datana ministra*). Red-washed Prominent (*Oligocentria semirufescens*). Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Pyrilidae: Destructive Pruneworm Moth (*Acrobasis tricolorella*). *Ambesa walsinghami*.

Saturniidae. Polyphemus Moth (*Antheraea polyphemus*). Ceanothus Silkmoth (*Hyalophora euryalus*). Nevada Buckmoth (*Hemileuca nevadensis*). Burns' Buckmoth (*Hemileuca burnsi*). Neumoegen's Buckmoth (*Hemileuca neumoegeni*). Western Sheepmoth (*Hemileuca eglanterina*).

Sesiidae. Peachtree Borer (*Synanthedon exitiosa*).

Sphingidae. Small Eyed Sphinx (*Paonias myops*). Wild Cherry Sphinx (*Sphinx drupiferarum*). Sequoia Sphinx (*Sphinx sequoiae*).

Tortricidae: *Acleris aenigmata*. *Acleris hastiana*. *Acleris nigrolinea*. *Acleris paracinderella*. *Acleris senescens*. Allen's Tortrix (*Aphelia alleniana*). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Zapulata (*Choristoneura zapulata*). *Clepsis virescana*. *Epinotia albicapitana*. *Epinotia lomonana*. Birch Leafroller (*Epinotia solandriana*). Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Orthotaenia undulana*). Poplar Leafroller (*Pseudosciaphila duplex*). *Sparganothis senecionana*. *Xenotemna pallorana*.

Ypsolophidae: *Ypsolopha walsinghamiella*.

In their northeastern California study, Crabtree & Leuschner found caterpillars of 41 species of Lepidoptera of 13 families eating Western Choke Cherry!

Psathyrotes ramosissima. **Turtleback**. Asteraceae. Helenieae. Nectar: Western Pygmy Blue. March – June.

Pseudognaphalium spp. formerly Gnaphalium. **Cudweeds**. Asteraceae. Gnaphalieae. Nectar: Acmon Blue (Jerry Ting at Sunol RW).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Clepsis fucana*. *Eucosma apacheana*. *Eucosma artemisiana*. *Sparganothis senecionana*.

Pseudognaphalium biolettii was *Gnaphalium bicolor*. **Two-color Cudweed. Bioletti's Cudweed. Pungent Cudweed.** Asteraceae. Gnaphalieae. Silvery Blue shown at nectar on CalPhotos (Hartmut Wisch). Tree of Life Nursery Butterfly Mix. April – June.
Larval host for American Lady.

Zones 4, 5, 9, 14-17,18-24.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Eucosma apacheana*.

Pseudognaphalium californicum was *Gnaphalium californicum*. **Green Everlasting.** Asteraceae. Gnaphalieae. Variable Checkerspot (John Kehoe, Jeffrey Caldwell). Moldenke found a nocturnal moth associated with its flowers. Good nectar plant – *Growing Native*. April – July.

Larval host for American Lady.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Eucosma apacheana*.

Nancy Bauer commends Green Everlasting as one of the “best-behaved” members of the tribe for gardens. Barbara Deutsch recommends it for the butterfly garden. Zones 7, 14-21.

Pseudognaphalium canescens was *Gnaphalium canescens*. **White Everlasting.** Asteraceae. Gnaphalieae. Western Pygmy Blue. Its flowers attract butterflies – blues, hairstreaks. August – October.

Hostplant for American Lady. Marc Kummel (Treebeard) displays beautiful photographs of its caterpillars on it.

Pseudognaphalium microcephalum was *Gnaphalium canescens* subsp. *microcephalum*. **Wright's Cudweed.** Asteraceae. Gnaphalieae. June – August.

Tortricidae: *Eucosma apacheana*.

Pseudognaphalium stramineum was *Gnaphalium stramineum*. **Cottonbatting Plant** Asteraceae. Gnaphalieae. Some nectar value for Woodland Skipper. March – August.

Proved to be a larval host for the American Lady in the East Bay Wilds Nursery.

Gracillariidae: *Cremastobombicia grindeliella*.

Pseudostellaria jamesiana. **Tuber Starwort.** Caryophyllaceae. Nectar: Persius Duskywing (Scott).

Pseudotsuga macrocarpa. **Bigcone Spruce. Bigcone Douglas-fir.** Pinaceae.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). *Argyrotaenia lautana*. *Choristoneura carnana*. *Choristoneura retiniana* (HOSTS notes “Pseudotsuga”).

Pseudotsuga menziesii. **Douglas-fir.** Pinaceae.

Foodplant for Pine White and Western Pine Elfin. Pete Haggard finds it most abundant in old growth Douglas-fir forest. Douglas fir hosts Douglas fir Dwarf Mistletoe (*Arceuthobium douglasi*), a Johnson's Hairstreak hostplant.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*), a primary host for this polyphagous conifer feeder.

Gelechiidae: *Chionodes abella*. *Chionodes lictor*. *Chionodes periculella*.

Geometridae: *Hydriomena speciosata*. Common Grey (*Anavitrinella pampinaria*). Pale Beauty (*Campaea perlata*). Red Girdle (*Caripeta aequaliaria*). Mottled Gray Carpet (*Cladara limitaria nigroangulata*). Small Engrailed (*Ectropis crepuscularia*). Mountain Girdle (*Enypia griseata*). Packard's Girdle (*Enypia packardata*) (fq). Variable Girdle (*Enypia venata*). Bowling Pin (*Sabulodes edwardsata*). Autumnal Moth (*Epirrita autumnata*). Whitelined Looper (*Epirrita pulchraria*, Canada). *Eupithecia albicapitata*. Larch Pug (*Eupithecia annulata*). Graef's Pug (*Eupithecia graefii*). *Eupithecia harrisonata*. *Eupithecia longipalpata* (fq). *Eupithecia olivacea*. *Eupithecia ornata*. *Eupithecia sabulosata*. *Eupithecia spermaphaga*. *Eupithecia unicolor*. Dyar's Looper (*Gabriola dyari* – seems to be a primary host for it). *Glena nigricaria*. Sulphur Wave (*Hesperumia sulphuraria*). *Hydriomena irata*. *Hydriomena marinata*. Renounced Hydriomena (*Hydriomena renunciata*, Canada). *Hydriomena speciosata*. Mournful Thorn or Hemlock Looper (*Lambdina fiscellaria*). Adonis Angle (*Macaria adonis*). Pale-marked Angle (*Macaria signaria*). Western Carpet (*Melanolophia imitata*). Brown-lined Looper (*Neocalcis californiaria* – found in numbers on Douglas fir). Phantom Hemlock Looper (*Nepytia phantasmaria*). *Nepytia umbrosaria*. Rindge's Pero (*Pero mizon*). Morrison's Pero (*Pero morrisonaria*, Canada). American Barred Umber (*Plagodis pulveraria* – Canada). Lorquin's Angle (*Macaria lorquinaria* – Canada). *Spodolepis substriataria*. Scarce Gray (*Stenoporpia excelsaria*). Pulmonaria Looper (*Stenoporpia pulmonaria*). Black-lined Synaxis (*Tetraxis pallulata*, Canada).

Lasiocampidae. Western Tent Caterpillar (*Malacosoma californica*, Canada). Forest Tent Caterpillar (*Malacosoma disstria*, Canada). Lappet Moth (*Phyllodesma americana*). *Tolyte dayi* – a striking close relation to the Yarn Moth.

Lymantriidae. Pine Tussock Moth (*Dasychira griseifacta*). The Vaporiser (*Orgyia antiqua*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Noctuidae. Fragile Dagger (*Acronicta fragilis*, Canada). *Cosmia epipaschia*. *Cosmia praeacuta*. *Egira hiemalis*. Brown Woodling (*Egira perlubens*). Simplex Cutworm (*Egira simplex*). Western Woodling (*Egira rubrica*). American Angle Shades (*Euplexia benesimilis*). Deceptive Sallow (*Feralia deceptiva*). Comstock's Sallow (*Feralia comstocki* – possible in northern coastal California). Dark Grey Fishia (*Fishia yosemitae*). Common Idia (*Idia aemula* -- said to eat the dead leaves). American Idia (*Idia americalis* -- eating lichens, dead leaves). *Lacinipolia patalis*. Nameless Pinion (*Lithophane innominata*). Zebra Caterpillar (*Melanchra picta*). *Melanchra pulverulenta*. Speckled Green Cutworm (*Orthosia hibisci*). *Panthea virginarius*. *Papestra cristifera*. *Papestra invalida*. Variegated Cutworm (*Peridroma saucia*). *Platypolia loda*. Otter Spiramater (*Spiramater lutra*). Hooked Silver Y (*Syngrapha alias*, Canada). *Xestia mustelina*. Colorful Zale (*Zale minerea*).

Pyrilidae: Dwarf Mistletoe Snout Moth (*Dasyphyga alternosquamella*). Fir Coneworm (*Dioryctria abietivorella*). Spruce Coneworm (*Dioryctria reniculelloides*), generally a rather secondary host. Zimmerman Pine Moth (*Dioryctria zimmermani*). *Promylea lunigerella* (Canada).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Sesiidae. Douglas-fir Pitch Moth (*Synanthedon novoarvensis*). Sequoia Pitch Moth (*Synanthedon sequoiae*).

Tortricidae. Western Black-headed Budworm (*Acleris gloveranus*). Fruit-tree Leafroller (*Archips argyrospila*). *Argyrotaenia dorsalana* (fq). Orange Tortrix (*Argyrotaenia franciscana*). *Argyrotaenia provana*. Douglas-fir Cone Moth (*Barbara colfaxiana*). *Choristoneura carnana*. Western Spruce Budworm (*Choristoneura freemani*). Spruce Budworm (*Choristoneura fumiferana*). *Choristoneura retiniana*. Oblique-banded Leafroller (*Choristoneura rosaceana*). White-triangle Tortrix (*Clepsis persicana*, Canada). *Cochylis dormitoria*. Ponderosa Pine Seedworm (*Cydia piperana*, Canada). Red-barred Tortrix (*Ditula angustiorana*). *Epinotia emarginana*. Red-striped Needleworm (*Epinotia radicana*). *Epinotia trossulana*. Light Brown Apple Moth (*Epiphyas postvittana*). *Sparganothis senecionana*, confirmed for California. Black-and-gray Banded Leafroller (*Syndemis afflictana*, Canada). *Zeiraphera canadensis* (Canada). Douglas-fir Bud Moth (*Zeiraphera hesperiana*).

Blastobasidae: *Holcocera villella*, a micro-moth that feeds on seeds.

Ypsolophidae: *Ypsolopha nella*.

Psilocarphus brevissimus. **Dwarf Woolly-heads**. Asteraceae. Gnaphalieae. May – June.

Served as a larval host for Painted Lady, noted in western Tehama County vernal pools after the 1992 dispersion event, and in in Glenn, Colusa, Sacramento and Solano Counties (Witham).

Psilocarphus tenellus. **Slender Woolly Marbles**. Asteraceae. Gnaphalieae. March – July.

Served as a secondary larval food source for the Painted Lady after the 1992 dispersion event (Witham).

Psilostrophe cooperi. **Whitestem Paperflower**. Asteraceae. Helenieae. Nectar: Painted Lady, Eufala Skipper (Liz Makings). March – July. October – January.

Zones 12, 13.

Psorothamnus arborescens. **Mojave Indigobush**. Fabaceae. Amorpheae. Nectar: White-lined Sphinx (David Horner). Varieties in flower April-October.

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*).

Psorothamnus fremontii. **Fremont Indigobush**. **Fremont Dalea**. Fabaceae. Amorpheae. Nectar: Painted Lady (fq), Ceraunus Blue. Bumblebees. April – May.

Hostplant for Southern Dogface (Ken Davenport). Possible Painted Lady hostplant, since it eats legumes, even *Psorothamnus schottii*. Larval host for Ceraunus Blue.

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*).

Psorothamnus polydenius. **Nevada Dalea**. **Nevada Indigobush**. Fabaceae. Amorpheae. Nectar: Marine Blue, Western Pygmy Blue (Aaron Schusteff photographs on BugGuide). May – September.

Marine Blue caterpillars sometimes eat legumes; Nevada Dalea might be a hostplant for it.

Psorothamnus schottii. **Schott Indigobush**. Fabaceae. Amorpheae. Nectar: Ceraunus Blue. Bumblebees. March – May.

Larval host for Painted Lady. Might be a hostplant for Ceraunus Blue, as with *Psorothamnus fremontii*.

Psorothamnus spinosus. **Smoke Tree**. Fabaceae. Amorpheae. Gets some butterflies, such as the Desert Metalmark. Bumblebees. Said to have a lovely fragrance. June – July, with at times more flowers October – November.

Ptelea crenulata. **Hoptree**. Rutaceae. Nectar: Anise Swallowtail (fq), California Sister, Lorquin's Admiral, others. "Everyone" according to the Las Pilitas Nursery. Flowers have strong citrusy aroma.

The day-flying Eight-spotted Forester (*Alypia octomaculata*, Noctuidae) visits flowers of the related *Ptelea trifoliata* in the Midwest. Harry Pavulaan, a Virginia lepidopterist, reports large specimens in his yard "produce massive clusters of lush, fragrant blooms that many butterflies love, especially Summer Azures." April – May.

Foodplant for Two-tailed Swallowtail – in the San Francisco Bay area known to develop only on it. Giant Swallowtail. The 1989 Season Summary reports (J. F. Emmel) Giant Swallowtail "ova and larvae on several dates on ... *Ptelea crenulata* (Rutaceae), residential Hemet" in Riverside County. Sometimes Anise Swallowtail caterpillars develop on Rutaceae; likely hostplant for it. The 1989 Season Summary reports: "*Papilio zeliacaon*, six 1st instar larvae on leaves of cultivated *Ptelea crenulata* (Rutaceae), Hemet, Riverside Co., 31 May (JFE); Two reared to pupae on this host, dwarfed, however (JFE)."

Oecophoridae: *Apachea barbarella*.

An attractive small tree, much under-used in cultivation.

Pteridium aquilinum var. *pubescens*. **Bracken Fern**. Dennstaedtiaceae.

Arctiidae: Garden Tiger Moth (*Arctia caja*), California Tiger Moth (*Leptarctia californiae*) – a notable tiger moth, polyphagous, but captive larvae preferred bracken fern above other choices. Brown Tiger Moth (*Spilosoma pteridis*).

Gelechiidae: *Monochroa harrisonella*. *Monochroa placidella*. *Monochroa* sp.

Geometridae: *Philedia punctomaculata*.

Noctuidae: American Angle Shades (*Euplexia benesimilis*). Hitched Arches (*Melanchra adjuncta*). *Paradiarsia littoralis*. *Pseudorthodes irrorata*. Variegated Cutworm (*Peridroma saucia*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Purshia glandulosa. **Desert Bitterbrush**. Rosaceae. Dryadeae.

Larval host for Behr's Hairstreak.

Gelechiidae: *Filatima aulaea*.

Geometridae: *Anticlea pectinata*. *Speranza colata*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Provia argentata* – McFarland (1975) notes "A very colorful larva, marked with vivid red and pure white over a translucent green ground-color", "obtained by beating".

Ypsolophidae: *Ypsolopha walsinghiamiella*.

Purshia mexicana. **Mexican Cliffrose**. Rosaceae. Dryadeae.

Larval host for the Early Elfin (*Incisalia fotis*).

Purshia mexicana var. *stansburyana* is now *Purshia stansburyana*. **Stansbury's Antelope Bush**. Rosaceae. Dryadeae. Nectar plant for the Monarch in Clark County, Nevada (Austins). April – May (October).

Larval host for Desert Elfin.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Purshia tridentata. **Antelope Bitterbrush**. Rosaceae. Dryadeae. Pine White (DeMarco). Scott notes one visit each by Western Tiger Swallowtail and Common Ringlet. Shapiro: "Occasionally visited by Juniper Hairstreak, but I don't know if it gets any nectar!" Sheridan's Hairstreak. Veined Blue (Brunn, SoWestLep #12370). March – July.

Antelope Bitterbrush is a hostplant for Behr's Hairstreak and California Hairstreak.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Nuttall's Sheepmoth (*Hemileuca nuttalli*). Ceanothus Silkmoth (*Hyalophora euryalus*) (fq).

Geometridae: Mountain Mahogany Looper (*Iridopsis clivinaria*). Banks' Emerald (*Chlorosea banksaria*). *Digrammia denticulata*. *Eupithecia nevadata*. Sulphur Wave (*Hesperumia sulphuraria*). Darwin's Green (*Nemoria darwiniata*). Rindge's Pero (*Pero mizon*). Walnut Spanworm (*Phigalia plumogeraria*). *Speranza colata*. Falcate Synaxis (*Tetraxis cervinaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: California Tussock Moth (*Orgyia cana*).

Noctuidae: *Acerra normalis*. Impressed Dagger (*Acrionicta impressa*). Lost Dagger (*Acrionicta perdita*). *Andropolia diversilineata*. *Aseptis fumosa*. *Egira crucialis*. *Egira curialis*. *Egira hiemalis*. Brown Woodling (*Egira perlubens*). Garden Cutworm (*Fishia discors*). *Lacinipolia pensilis*. Large Gray Pinion (*Lithophane georgii*). *Mesogona olivata*. *Tesagrotis atrifrons*. *Tesagrotis corrodera*. *Tesagrotis piscipellis*. Purple Arches (*Polia purpurissata*) (fq). Bruce's Swordgrass Moth (*Xylena brucei*).

Tortricidae: Three-lined Leafroller (*Orthotaenia undulana*).

Pycnanthemum californicum. **Sierra or Mountain Mint**. Lamiaceae. Nectar: American Lady. Pete Veilleux remembers butterflies liking this plant, which rings true; Hilty records 28 butterfly species at nectar on *P. tenuifolium*, a Midwestern species. A photograph of putative Mountain Mint shows a Police Car Moth (*Gnophaela vermiculata*, Arctiidae) working the flowers. June – September.

Pyrocoma apargioides. **Alpine Flames**. Asteraceae. Astereae. Nectar: Shasta Blue (Ron Wolf photograph). Moldenke captured Chryxus Arctic, Milbert's Tortoiseshell, Mormon Fritillary, Leto Fritillary and a diurnal moth on its flowers. July – September.

Pyrocoma lanceolata. **Lanceleaf Golden-weed**. Asteraceae. Astereae. Scott notes flower visits by Western Branded Skipper, Sandhill Skipper. June – September.

Pyrocoma racemosa. **Racemose Golden-weed**. Asteraceae. Astereae. Nectar: Carson Wandering Skipper. June – October.

Quercus spp. **Oak**. Fagaceae.

Blastobasidae: Acorn Moth (*Blastobasis glandulella*, CODA).

Bucculatricidae: *Bucculatrix zophopasta* (CODA).

Carposinidae: Prune Limb Borer (*Bondia comonana*, CODA).

Cossidae: Carpenterworm (*Prionoxystus robiniae*, CODA).

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Gelechiidae: Oak Groundling (*Telphusa sedulitella*) (CODA).

Geometridae: *Aethaloida packardaria*. Pale Beauty (*Campaea perlata*). Packard's Girdle (*Enypia packardata*) (CODA). Autumnal Moth (*Epirrita autumnata*). Linden Looper (*Erannis tiliaria*). Lesser Grapevine Looper (*Eulithis diversilineata*). *Eupithecia subvirens* (CODA). Oak Winter Highflier (*Hydriomena nubilofasciata*). Western White Ribboned Carpet (*Mesoleuca gratulata*) – an early spring day-flying moth. Darwin's Green (*Nemoria darwiniata punctularia*) (CODA). Spring Cankerworm (*Paleacrita vernata*) (CODA). Falcate Synaxis (*Tetracis cervinaria*, CODA).

Gracillariidae: *Acrocercops affinis*.

Lasiocampidae: *Phyllodesma coturnix* (CODA).

Lymantriidae: White Satin (*Leucoma salicis*) (CODA).

Lyonetiidae: Live Oak Ribbed Casemaker (*Bucculatrix albertiella*, CODA).

Noctuidae: Charred Dagger (*Acronicta brumosa*). *Brachylomia populi*. Aholibah Underwing (*Catocala aholibah*). *Catocala benjamini*. *Catocala chelidonia*. *Catocala johnsoniana*. Indiscrete Cissusa (*Cissusa indiscreta*). Simplex Cutworm (*Egira simplex*) (CODA). *Lacinipolia incurva*. Western Oak Pinion

(*Lithophane contenta*). Six-spotted Litocala (*Litocala sexsignata*). Mesogona olivata (CODA). Armyworm (*Mythimna unipuncta*, CODA). Variegated Cutworm (*Peridroma saucia*). *Psaphida damalis*. Western Swordgrass Moth (*Xylena thoracia*). Lunate Zale (*Zale lunata*).

Nolidae: Confused Meganola (*Meganola minuscula*) (CODA).

Notodontidae: Angle-lined Prominent (*Clostera inclusa*). Yellow-necked Caterpillar (*Datana ministra*). Oregon Prominent (*Nadata oregonensis* [Haggard]). Morning-glory Prominent (*Schizura ipomoeae*, CODA).

Pyralidae: Indian Meal Moth (*Plodia interpunctella*, CODA).

Sphingidae: Blinded Sphinx (*Paonias excaecata*) (California Oak Disease and Arthropod Database, CODA).

Tineidae: *Morophagoides burkerella*. Feeds on Turkey Tail (*Trametes versicolor*), a common polyphore mushroom on oak and other hardwoods, and on our most common oak conk, *Phellinus gilvus*, another polyphore fungus, and other fungi (Powell & Opler). *Nemapogon molybdanellus* [aka *molybdanella*] feeds on *Phellinus gilvus*, our most common oak conk, and other fungi (Powell & Opler).

Tortricidae: the Filbertworm (*Cydia latiferreana*) eats acorns of “most oaks”. *Henricus umbrabasana* – eats leaves, may be abundant (Powell & Opler, p. 157). *Oreana unicolorella* (BugGuide).

Quercus agrifolia. **Coast Live Oak**. Fagaceae, Erythrobalanus, black oaks subgenus. Mourning Cloak comes to sap.

Foodplant for California Sister, California Hairstreak, Propertius Duskywing and Mournful Duskywing. 1993 Season Summary reports Gold-hunter’s Hairstreak using it (atypically) in Los Angeles County. Supports Great Purple Hairstreak as a host for Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*).

Arctiidae: *Cisthene liberomacula* (strongly associated with Coast Live Oak; thought to eat lichens that grow on the tree. Salt Marsh Moth (*Estigmene acrea*). Edwards’ Glassywing (*Pseudohemihyalea edwardsii*).

Blastobasidae: Acorn Moth (*Blastobasis glandulella*).

Bucculatricidae: Oak Ribbed Casemaker (*Bucculatrix albertiella*).

Cosmopterigidae: *Stilbosis dulcedo*.

Cossidae: Carpenterworm (*Prionoxystus robiniae*), one of its most common oak hosts (Swiecki & Bernhardt, 2006).

Eriocraniidae: *Dyseriocrania auricyanea*. *Eriocraniella aurosparsella*. *Eriocraniella xanthocara*.

Gelechiidae: *Chionodes acrina*. *Chionodes chrysopyla*. *Chionodes occidentella*. *Chionodes petalumensis*. *Chimoptesis chrysopyla* (Powell & Opler, p. 137). *Evippe* sp. *Recurvaria glinax*. Oak Groundling (*Telphusa sedulitella*). *Stenolechia bathrodyas*. *Xenolechia querciphaga*.

Geometridae: *Eupithecia misturata*. *Hydriomena albifasciata*. Oak Winter Highflier (*Hydriomena nubilofasciata*) – reared from it on San Bruno Mountain (1987 Season Summary). *Nemoria glaucomarginaria* (an emerald). Omnivorous Looper (*Sabulodes aegrotata*). *Venusia duodecemlineata*.

Gracillariidae: *Acrocercops insulariella*. *Caloptilia agrifoliella*. – its mines conspicuous and ubiquitous (Powell & Opler, p. 55). *Caloptilia reticulata*. *Cameraria agrifoliella*. *Cameraria anomala*. *Cameraria wislizeniella*. *Neurobathra bohartiella*. *Phyllonorycter antiochella*. *Phyllonorycter inusitatella*. *Phyllonorycter sandraella*.

Heliozelidae: Madrone Shield-bearer (*Coptodisca arbutiella*). *Coptodisca powellella*.

Incurvariidae [or Prodoxidae]: Live Oak Leaf Cutter (*Vespina quercivora*).

Lasiocampidae: *Gloveria medusa*. Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*).

Lymantriidae: Gypsy Moth (*Lymantria dispar*). Western Tussock Moth (*Orgyia vetusta*).

Lyonetiidae: Live Oak Ribbed Casemaker (*Bucculatrix albertiella*).

Nepticulidae: *Stigmella variella*.

Noctuidae: Aholibah Underwing (*Catocala aholibah*). American Dun-bar (*Cosmia calami*) – said to feed on geometer caterpillars on the oak when in new leaf in March or April). *Egira crucialis*. *Mesogona olivata* (reared on coast live oak; usually seems to feed on deciduous woody plants). Western Oak Sallow (*Mesogona subcuprea*) (its adults, drawn to sugar bait more readily than lights, are surely sap feeders). *Orthosia pacifica*.

Nolidae: *Meganola fuscula*. *Nola minna* (CODA, California Oak Disease and Arthropod Database).

Notodontidae: California Oakworm (*Phryganidia californica*) – “In years of heavy infestation, the larvae are so abundant on oaks that their falling frass sounds like light rain” (McFarland, 1965).

Oecophoridae [Stenomatidae]: Stenomid Oak Leaf Tier (*Rectiostoma fernaldella*).

Pyralidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella* formerly *Trachycera caliginella* or *Rhodophaea caliginella*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*).

Sesiidae: Sycamore Borer (*Synanthedon resplendens*) – more commonly noted in southern California (Swiecki & Bernhardt, 2006). Ceanothus Borer (*Synanthedon mellinipennis*) – noted more commonly in central coastal California and in the San Francisco Bay Area (Swiecki & Bernhardt, 2006).

Tischeriidae: *Coptotriche discreta* [aka *Tischeria discreta*].

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). *Chimoptesis chrysopyla*. Oblique-banded Leafroller (*Choristoneura rosaceana*). *Clepsis fucana*.

Filbertworm (*Cydia latiferreana*). *Decodes basiplagana*. *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Henricus umbrabasana*. *Pseudexentera habrosana*.

Ypsolophidae: *Ypsolopha cervella*.

Quercus agrifolia var. *oxyadenia*. **Southern Coast Live Oak**. Fagaceae. Erythrobalanus, black oaks subgenus.

Bucculatricidae: Live Oak Ribbed Casemaker (*Bucculatrix albertiella*, CODA).

Cosmopterigidae: *Stilbosis dulcedo* (CODA).

Gracillariidae: *Caloptilia agrifoliella* (CODA). *Phyllonorycter sandraella* (CODA).

Heliozelidae: *Coptodisca powellella* (CODA).

Nepticulidae: *Stigmella variella* (CODA).

Oecophoridae: Stenomid Oak Leaf Tier (*Rectiostoma fernaldella*, CODA).

Plutellidae: Golden Oak Plutellid (*Ypsolopha cervella*, CODA).

Quercus X alvordiana (hybrids involving *Q. douglasii*, *Q. john-tuckeri*). **Alvord Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Noctuidae: *Catocala californiensis* associates with it in Cuyama Valley, Ventura County (J.W. Johnson, 1984).

Gracillariidae: *Cameraria temblorensis*.

Tortricidae: *Pseudexentera habrosana*, CODA).

Quercus berberidifolia. **Scrub Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Foodplant for Gold-hunter's Hairstreak.

Eriocraniidae: *Dyseriocrania auricyanea*.

Gelechiidae: *Chionodes chrysopyla*. *Chionodes trichostola*. [*Exoteleia*] *graphicella*. *Stenolechia bathrodyas*. Oak Groundling (*Telphusa sedulitella*). *Xenolechia querciphaga*.

Geometridae: *Pterotaeta comstocki* Rindge. *Slossonia rubrotincta* Hulst.

Gracillariidae: *Cameraria jacintoensis*. *Cameraria serpentiniensis*. *Cameraria temblorensis*.

Lasiocampidae: *Gloveria medusa*. Pacific Tent Caterpillar (*Malacosoma constricta*).

Noctuidae: Andromache Underwing (*Catocala andromache*). Western Oak Sallow (*Mesogona subcuprea*).

Notodontidae: California Oakworm (*Phryganidia californica*).

Oecophoridae: Stenomid Oak Leaf Tier (*Rectiostoma fernaldella*).

Pyralidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella*). *Acrobasis comptella*.

Tischeriidae: *Coptotriche consanguinea*.

Tortricidae: *Acleris hastiana*. Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Henricus umbrabasana*. *Pseudexentera habrosana*.

Quercus chrysolepis. **Canyon Live Oak**. Fagaceae. Protobalanus, intermediate oaks subgenus.

Foodplant for California Sister, California Hairstreak, Golden Hairstreak and Propertius Duskywing. Listed by HOSTS as hostplant for the Western Tiger Swallowtail, seems improbable. Indirectly supports Great Purple Hairstreak, supporting Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*).

Arctiidae: Edwards' Glassywing (*Pseudohemihyalea edwardsii*).

Bucculatricidae: Oak Ribbed Casemaker (*Bucculatrix albertiella*).

Cosmopterigidae: *Stilbosis dulcedo*.

Cossidae: Carpenterworm (*Prionoxystus robiniae*).

Eriocraniidae: *Dyseriocrania auricyanea* (strongly suspected). *Eriocraniella falcata*. *Neocrania bifasciata*.

Gelechiidae: *Chionodes trichostola*. *Evippe* sp. (CODA). Oak Groundling (*Telphusa sedulitella*).

Geometridae: *Cyclophora dataria*. Oak Winter Highflier (*Hydriomena nubilofasciata*). Brown-lined Looper (*Neolcis californiaria*). Rindge's Pero (*Pero mizon*). *Sicya pergilvaria* (a yellow species).

Gracillariidae: *Acrocercops insulariella*. *Cameraria diabloensis* (feeds on var. *nana* according to Wikipedia). *Cameraria leucothorax*. *Cameraria shenaniganensis*. *Neurobathra bohartiella*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*). cf. Yarn Moth (listed by HOSTS as *Tolype distincta?*).

Lymantriidae: California Tussock Moth (*Orgyia cana*). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: *Catocala andromache*. McDunnough's Underwing (*Catocala mcdunnoughi*). Ophelia Underwing (*Catocala ophelia*). Indiscrete Cissusa (*Cissusa indiscreta*). *Egira curialis* [CODA]. Six-spotted Litocala (*Litocala sexsignata*). *Orthosia behrensiana* (CODA under synonym of *O. macona*). *Orthosia ferrigera* (PNW Moths). Angulate Oak Quaker (*Perigonica angulata*). Pectinate Oak Quaker (*Perigonica pectinata*). *Pseudocopivaleria anaverta* (a species first described in 1966). Terminal Oak Zale (*Zale termina*).

Notodontidae: California Oakworm (*Phryganidia californica*).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Tischeriidae: *Coptotriche discreta*.

Tortricidae: Filbertworm (*Cydia latiferreana*). *Decodes montanus*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Henricus umbrabasana*.

Ypsolophidae: *Ypsolopha cervella*.

Quercus cornelius-mulleri. **Desert Scrub Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Gold-hunter's Hairstreak larvae found on it in San Bernardino County by John F. Emmel (1988 Season Summary). Foodplant for Sleepy Duskywing and, say the Monroes, probably Mournful Duskywing.

Noctuidae: *Catocala chelidonia occidentalis*. *Catocala californiensis*. Suspected host for *Catocala andromache*.

Quercus douglasii. **Blue Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Foodplant for California Sister, Gold-hunter's Hairstreak (fq), Mournful Duskywing, Propertius Duskywing. Older trees often host Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*), a Great Purple Hairstreak hostplant.

Bucculatricidae: *Bucculatrix* sp. (CODA). *Bucculatrix zophopasta* (CODA).

Eriocraniidae: *Dyseriocrania auricyanea*.

Gelechiidae: *Agnippe laudatella*. *Aristotelia urbaurea*. *Chionodes chrysopyla*. *Chionodes occidentella*. *Chionodes trichostola*. *Agnippe laudatella*. Oak Groundling (*Telphusa sedulitella*). *Xenolechia querciphaga*.

Geometridae: *Digrammia muscariata* (CODA, California Oak Disease and Arthropod Database).

Gracillariidae: *Cameraria lobatiella*. *Cameraria pentekes*. *Cameraria serpentinensis*. *Cameraria temblorensis*.

Heliozelidae: *Coptodisca powellella*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californicum*). Pacific Tent Caterpillar (*Malacosoma constricta*).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: The "expected preferred" host for *Catocala johnsoniana*, an underwing. American Dun-bar (*Cosmia calami*). February Miller (*Feralia februalis*, an attractive early-flying green moth). Western Oak Pinion (*Lithophane contenta*).

Notodontidae: California Oakworm (*Phryganidia californica*).

Pyralidae: *Acrobasis comptella*. Phycitid Oak Leaf Tier (*Trachycera caliginella*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). Filbertworm (*Cydia latiferreana*, eats acorns). *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Pseudexentera habrosana*.

Ypsolophidae: *Ypsolopha cervella*.

Quercus dumosa. **Nuttall's Scrub Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Foodplant for Gold-hunter's Hairstreak(fq). Mournful Duskywing [Gavilan Hills, Riverside County, John W. Johnson].

Eriocraniidae: *Dyseriocrania auricyanea*.

Gelechiidae: *Stenolechia bathrodyas* (CODA). Oak Groundling (*Telphusa sedulitella*) (CODA). *Xenolechia querciphaga* CODA).

Geometridae: Wavy-lined Cochisea (*Cochisea sinuaria*). *Digrammia muscariata*. *Nemoria pulcherrima* (CODA). Walnut Spanworm (*Phigalia plumogeraria*) (CODA). *Slossonia rubrotincta*. *Venusia duodecemlineata*.

Gracillariidae: *Cameraria jacintoensis*. *Cameraria serpentiniensis*. *Cameraria temblorensis*.

Lasiocampidae: *Gloveria medusa*. Pacific Tent Caterpillar (*Malacosoma constricta*).

Noctuidae: *Catocala andromache*. *Catocala californiensis*. Western Oak Sallow (*Mesogona subcuprea*).

Notodontidae: California Oakworm (*Phryganidia californica*) (CODA – all its records refer to *Q. dumosa* in the “wide sense”).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Prodoxidae: *Vespina quercivora* (CODA – with some question if specimen record is precisely this species).

Pyralidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella*). *Acrobasis comptella*.

Tischeriidae: *Coptotriche consanguinea*.

Tortricidae: *Acleris hastiana*. Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Henricus* sp. *Pseudexentera habrosana* (CODA).

Ypsolophidae: *Ypsolopha cervella*.

Quercus durata. **Leather Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

A foodplant for the Sleepy Duskywing.

Gelechiidae: Oak Groundling (*Telphusa sedulitella*) (CODA).

Gracillariidae: *Cameraria serpentiniensis*.

Lasiocampidae: Pacific Tent Caterpillar (*Malacosoma constricta*).

Pyralidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella*).

Tortricidae: *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Henricus* sp. *Pseudexentera habrosana* (CODA). *Pseudexentera* sp. *Sparganothis tunicana*.

Quercus engelmannii. **Engelmann Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Michael Schmidt photographed a Mournful Duskywing caterpillar on it – 11 July 2011.

Lasiocampidae: Pacific Tent Caterpillar (*Malacosoma constricta*).

Tortricidae: Filbertworm (*Cydia latiferreana*).

Blastobasidae: Acorn Moth (*Blastobasis glandulella*).

Gelechiidae: *Agnippe laudatella*.

Gracillariidae: *Caloptilia* sp. (CODA). *Cameraria temblorensis*.

Heliozelidae: *Coptodisca* sp. (CODA).

Notodontidae: California Oakworm (*Phryganidia californica*).

Pyralidae: *Acrobasis comptella* (CODA, with some question as to precise species identification).

Tischeriidae: *Tischeria* sp. (CODA).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Quercus garryana. **Oregon Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Foodplant for Propertius Duskywing, preferred in Oregon (Warren), and seems to be its sole hostplant in Washington (Potter). Preferred hostplant for California Sister in Oregon (Warren). Supports Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*), thus indirectly the Great Purple Hairstreak.

Arctiidae: Edwards' Glassywing (*Pseudohemihyalea edwardsii*) – a favored host in western Oregon (PNW Moths). Wandering Tiger Moth (*Spilosoma vagans*) (PNW Moths). Vestal Tiger Moth (*Spilosoma vestalis*) (PNW Moths).

Bucculatricidae: *Bucculatrix* sp. (CODA). *Bucculatrix zophopasta* (Wikipedia).

Drepanidae: Two-lined Hooktip (*Drepana bilineata*).

Gelechiidae: *Chionodes petalumensis*. *Chionodes trichostola*. *Stenolechia bathrodyas* (CODA). Oak Groundling (*Telphusa sedulitella*) (CODA).

Geometridae: Pale Beauty (*Campaea perlata*). *Cyclophora dataria* (an oak wave). Sweetfern Geometer (*Cyclophora pendulinaria*). *Digrammia muscariata*. Linden Looper (*Erannis tiliaria*). Columbia Pug (*Eupithecia columbiata*). *Eupithecia maestosa*. *Eupithecia misturata*. *Hesperumia latipennis*. Large Hydriomena (*Hydriomena edenata*). July Highflier (*Hydriomena furcata*). *Hydriomena irata*. Oak Winter Highflier (*Hydriomena nubilofasciata*). Shattered Hydriomena (*Hydriomena perfracta*). Renounced Hydriomena (*Hydriomena renunciata*). Mountain Mahogany Looper (*Iridopsis clivinarum*). Hemlock Looper (*Lambdina fiscellaria*) (fq). Horned Spanworm (*Nematocampa resistaria*). Darwin's Green (*Nemoria darwiniata*). *Nemoria pulcherrima* (a striking emerald; its caterpillars eat the flowers). Brown-lined Looper (*Neolcis californiaria*). Bruce Spanworm (*Operophtera bruceata*). *Operophtera danybi*. Rindge's Pero (*Pero mizon*). Walnut Spanworm (*Phigalia plumogeraria*). Falcate Synaxis (*Tetracis cervinaria*). Tissue Moth (*Triphosa haesitata*). *Venusia duodecemlineata* (CODA). Pearsall's Carpet (*Venusia pearsalli*).

Gracillariidae: *Acrocercops insulariella*. Alder Leafminer (*Caloptilia alnivorella*). *Cameraria mediodorsella*. *Cameraria mendocinensis*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*). Lymantriidae: Variable Tussock Moth (*Dasychira vagans*).

Noctuidae: *Abagrotis baueri*. Marble Dagger (*Acronicta marmorata*). *Agrochola pulchella*. Rusty Shoulder Knot (*Aseptis binotata*). Aholibah Underwing (*Catocala aholibah*). Ilia Underwing (*Catocala ilia*) (fq) (PNW Moths). Verrill's Underwing (*Catocala verrilliana*). Indiscrete Cissusa (*Cissusa indiscreta*). American Dun-bar (*Cosmia calami*). *Egira cognata*. *Egira crucialis*. Mottled Oak Woodling (*Egira februalis*). *Egira hiemalis*. Western Oak Pinion (*Lithophane contenta*). *Mesogona olivata*. Red Manzanita Sallow (*Mesogona rubra*) (?). Ceanothus Nola (*Nola minna*). *Orthosia ferrigera*. Speckled Green Cutworm (*Orthosia hibisci*). *Orthosia pacifica*. Tertia Oak Quaker (*Perigonica tertia*). *Pleromelloida conserta* (grey form - 'obliquata'). *Pseudorthodes irrorata*. Otter Spiramater (*Spiramater lutra*).

Notodontidae: California Oakworm (*Phryganidia californica*). Rough Prominent (*Nadata gibbosa*) (fq). Oregon Prominent (*Nadata oregonensis*). Red-washed Prominent (*Oligocentria semirufescens*). Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: *Acrobasis comptella*.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*) (fq).

Tischeriidae: *Coptotriche consanguinea*.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). *Decodes fragariana*. Red-barred Tortrix (*Ditula angustiorana*). Filbertworm (*Cydia latiferreana*). Variable Oak Leaf-roller (*Epinotia emarginana*, Canada). Barred Fruit-tree Tortrix (*Pandemis cerasana*) (CODA, a non-native species). Eye-spotted Bud Moth (*Spilonota ocellana*, Canada).

Ypsolophidae: *Ypsolopha cervella*.

Quercus john-tuckeri formerly *Quercus turbinella* ssp. *californica*. **Tucker's Oak. Desert Scrub Oak.** Fagaceae. Lepidobalanus, white oaks subgenus.

Noctuidae: Probable for Andromache Underwing (*Catocala andromache*) (J.W. Johnson, 1984), Benjamin's Underwing (*Catocala benjamini*) associates with it (J.W. Johnson, 1984), *Catocala californiensis* (California Oak Disease and Arthropod Database, CODA). *Catocala chelidonia*, another oak feeder, inhabits woodland of this species on the desert slopes of San Diego and Riverside Counties (J.W. Johnson, 1984).

Gracillariidae: *Cameraria jacintoensis* (CODA).

Heliozelidae: *Coptodisca* sp. (CODA).

Tischeriidae: *Tischeria* sp. (CODA).

Tortricidae: *Decodes fragariana* (CODA).

Quercus kelloggii. **California Black Oak.** Fagaceae. Erythrobalanus, black oaks subgenus.

Foodplant for California Sister (Monroes and reported in Riverside County by John F. Emmel – I and II instar larvae at Idyllwild, 7 July 1990). California Hairstreak – at lower elevations on the western slopes of the Sierra Nevada Mountains (Shapiro), and Gold-hunter's Hairstreak – as at Shapiro's mid-elevation west slope Lang Crossing site. Propertius Duskywing. John Lane observed oviposition by Mournful Duskywing on a small sapling near El Portal, Mariposa County (personal communication). Supports Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*), thus indirectly the Great Purple Hairstreak.

Cossidae: Carpenterworm (*Prionoxystus robiniae*) – California Black Oak one of its most common oak hosts (Swiecki & Bernhardt, 2006).

Eriocraniidae: *Eriocraniella aurosparsella*.

Gelechiidae: Oak Groundling (*Telphusa sedulitella*) (CODA). *Xenolechia querciphaga* (CODA).

Geometridae: Linden Looper (*Erannis tiliaria*) (CODA). *Hydriomena expurgata*. *Nemoria glaucomarginaria* (strongly suspected). Brown-lined Looper (*Neocalcis californiaria*). Falcate Synaxis (*Tetracis cervinaria* – feeding test, Valenti, 1997).

Gracillariidae: *Cameraria jacintoensis*. *Cameraria lobatiella*. *Cameraria mediodorsella*. *Phyllonorycter basistrigella* (Wikipedia).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*). Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: Douglas-fir Tussock Moth (*Orgyia pseudotsugata*). Western Tussock Moth (*Orgyia vetusta*).

Lyonetiidae: Oak Ribbed Casemaker (*Bucculatrix albertiella*). *Bucculatrix* sp. (CODA).

Nepticulidae: *Stigmella variella*.

Noctuidae: Haggard reports Aholibah Underwing (*Catocala aholibah*). The Ophelia Underwing (*Catocala ophelia*) at least reared on Black Oak, a likely host for the Ilia Underwing (*Catocala ilia*). American Dun-bar (*Cosmia calami*) -- its carnivorous caterpillars feed on geometrid caterpillars eating the oak! Mottled Oak Woodling (*Egira februalis*) (CODA). Large Gray Pinion (*Lithophane georgii*). California Tussock Moth (*Orgyia cana*) (CODA). *Orthosia ferrigera* (PNW Moths). *Orthosia pacifica* (CODA).

Notodontidae: California Oakworm (*Phryganidia californica*). Rough Prominent (*Nadata gibbosa*). Oregon Prominent (*Nadata oregonensis* [Haggard]).

Pyralidae: *Acrobasis* sp. (CODA).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Tischeriidae: *Coptotriche mediotriata*.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*), sometimes multi-year outbreaks of abundance causing significant defoliation; notably in the San Bernardino Mountains (1999 – 2003) (Swiecki & Bernhardt, 2006). Filbertworm (*Cydia latiferreana*). *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). *Pseudexentera habrosana* (CODA). *Pseudexentera* sp.

Quercus lobata. **Valley Oak**. Fagaceae. *Lepidobalanus*, white oaks subgenus.

Foodplant for Gold-hunter's Hairstreak, California Hairstreak, Mournful Duskywing – as in the Sacramento Valley. Shapiro says Mournful Duskywing likes fresh, young growth only, thus generally employs Valley Oak, which typically provides such growth all summer. Propertius Duskywing. Supports Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*), hostplant for Great Purple Hairstreak.

Arctiidae: Edwards' Glassywing (*Pseudohemihyalea edwardsii*) (CODA).

Eriocraniidae: *Dyseriocrania auricyanea*.

Gelechiidae: *Chionodes chrysopyla*. *Chionodes occidentella*. *Chionodes petalumensis*. *Stenolechia bathrodyas* (CODA). Oak Groundling (*Telphusa sedulitella*).

Geometridae: *Nemoria glaucomarginaria* (an emerald). Large Hydriomena (*Hydriomena edenata*) (CODA, misspelled there but with proper authority). Oak Winter Highflier (*Hydriomena nubilofasciata*) (CODA).

Gracillariidae: *Cameraria lobatiella*. *Cameraria mediodorsella*. *Cameraria mendocinensis*. *Cameraria pentekes*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Pacific Tent Caterpillar (*Malacosoma constricta*). Lappet Moth (*Phyllodesma americana*, CODA).

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*) (CODA).

Lyonetiidae: Oak Ribbed Casemaker (*Bucculatrix albertiella*). *Bucculatrix zophopasta* (CODA).

Noctuidae: The Ophelia Underwing (*Catocala ophelia*, Noctuidae) reared on Valley Oak. American Dunbar (*Cosmia calami*) (CODA). *Egira curialis* (CODA). Western Woodling (*Egira rubrica*) (CODA). *Orthosia pacifica* (CODA, ID uncertain, apparently at least closest to this species).

Notodontidae: California Oakworm (*Phryganidia californica*).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*).

Tischeriidae: *Coptotriche consanguinea*.

Tortricidae: *Anopina* sp. (Arizona). Fruit-tree Leafroller (*Archips argyrospila*). *Argyrotaenia cupressae*. Filbertworm (*Cydia latiferreana*), noted feeding in the “oak apple” *Andricus* parasitic wasp galls, as well as acorns (Tortricidae Foodplant Database). *Decodes basiplagana*. *Decodes fragariana*. Variable Oak Leaf-roller (*Epinotia emarginana*). Contrasting Henricus Moth (*Henricus contrastana* [Arizona], moth also found in California, as with other listings). *Henricus umbrabasana*. *Pseudexentera habrosana*.

Quercus X morehus (*Quercus kelloggii* x *Quercus wislizeni*, evergreen). **Oracle Oak**. Fagaceae, Erythrobalanus, black oak subgenus.

Gracillariidae: *Caloptilia agrifoliella*. *Caloptilia reticulata*. *Cameraria wislizeniella* (CODA).

Nepticulidae: *Stigmella variella* (CODA).

Quercus pacifica. **Island Scrub Oak**. Fagaceae. Lepidobalanus, white oaks subgenus. All of the species below from “Lepidoptera Recorded on Santa Catalina Island” (Powell, 2004).

Blastobasidae: unplaced female moth of this family reared from the tree.

Bucculatricidae: Oak Ribbed Casemaker (*Bucculatrix albertiella*) – this or similar taxon, mines and adults.

Gelechiidae: *Chionodes acrina*. *Coleotechnites* sp. Oak Groundling (*Telphusa sedulitella*).

Gracillariidae: *Caloptilia reticulata* – “a pale race” of this or similar one, mines, adults. *Phyllonorycter* sp. – mines.

Nepticulidae: *Stigmella variella*, mines and adults observed on the plant.

Pyalidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella*).

Tischeriidae: *Tischeria* (?) – Numerous mines.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana* – reared from a Santa Catalina Island oak thought this one). Variable Oak Leafroller (*Epinotia emarginana*). *Henricus umbrabasana*.

Quercus palmeri. **Desert Oak**. Fagaceae. Protobalanus, intermediate oaks.

1997 Season Summary reports an ovum of Great Purple Hairstreak on a mistletoe parasitic on this oak.

Bucculatricidae: *Bucculatrix* sp. (CODA).

Gracillariidae: *Cameraria* sp. (CODA).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Pyralidae: *Acrobasis* sp. (CODA).

Quercus sadleriana. **Deer Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Gracillariidae: *Cameraria sadlerianella*. *Phyllonorycter basistrigella* (CODA).

Quercus tomentella. **Island Oak**. Fagaceae. Protobalanus, intermediate oaks subgenus.

Geometridae: *Hydriomena* sp. (CODA).

Gracillariidae: *Acrocercops insulariella*.

Quercus turbinella. **Grey Oak. Sonoran Scrub Oak. Shrub Live Oak**. Fagaceae. Lepidobalanus, white oaks subgenus.

Todd Stout saw Arizona Sister feeding on split galls of this oak in southwestern Utah. Fred Heath, the same behavior on split oak galls in SE Arizona, presumably for their sugar content. He finds Colorado Hairstreak (Arizona) and the Snout (in Texas) do the same.

Larval host for the California Sister. Foodplant for the Sleepy Duskywing in Clark County, Nevada (Austins). Foodplant for Sleepy Duskywing (*burgessi*, one of the Californian segregates) (Todd Stout).

Gelechiidae: Oak Groundling (*Telphusa sedulitella*). *Xenolechia querciphaga*.

Gracillariidae: *Cameraria jacintoensis*. *Cameraria temblorensis*.

Lasiocampidae: *Gloveria medusa*. Pacific Tent Caterpillar (*Malacosoma constricta*, CODA). Sonoran Tent Caterpillar (*Malacosoma tigris*), a little known species to be looked for in California on this oak.

Noctuidae: Andromache Underwing (*Catocala andromache*). *Catocala benjamini mayhewi*. Ashy-gray Underwing (*Catocala californiensis*). *Catocala chelidonia*.

Pyralidae: *Acrobasis comptella*.

Saturniidae: Grote's Buckmoth (*Hemileuca grotei*), not recorded in California, found on it in western Arizona.

Tischeriidae: *Coptotriche consanguinea*.

Tortricidae: *Decodes fragariana*. *Pseudexentera habrosana*.

Quercus vaccinifolia. **Huckleberry Oak**. Fagaceae. Protobalanus, intermediate oaks subgenus.

Caterpillar foodplant for California Sister and Propertius Duskywing. The Golden Hairstreak employs only hybrids with *Q. chrysolepis*, according to Shapiro's studies, not pure *Q. vaccinifolia*.

Gelechiidae: *Recurvaria* sp. (CODA, same moth found on hybrids of Huckleberry Oak and Canyon Live Oak). Oak Groundling (*Telphusa sedulitella*) (CODA).

Geometridae: Likely foodplant for *Nemoria glaucomarginaria*.

Gracillariidae: *Acrocercops insulariella*.

Noctuidae: Angulate Oak Quaker (*Perigonica angulata*).

Pyralidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella*).

Tortricidae: *Decodes montanus*. *Henricus* sp.

Quercus wislizeni. **Interior Live Oak**. Fagaceae. Erythrobalanus, black oaks subgenus.

Foodplant for California Sister, California Hairstreak, Gold-hunter's Hairstreak, and Mournful Duskywing. California Hairstreak commonly breeds on Interior Live Oak in the Rancho Cordova area (Shapiro). Supports Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*), hostplant for Great Purple Hairstreak.

Cosmopterigidae: *Stilbosis dulcedo*.

Eriocraniidae: *Dyseriocrania auricyanea*. *Eriocraniella xanthocara*.

Gelechiidae: *Chionodes chrysopyla*. *Chionodes occidentalis*. *Stenolechia bathrodyas*. Oak Groundling (*Telphusa sedulitella*). *Xenolechia quercivora*.

Geometridae: *Digrammia muscariata* (CODA).

Gracillariidae: *Acrocercops insulariella*. *Caloptilia agrifoliella*. *Caloptilia reticulata*. *Cameraria anomala*. *Cameraria wislizeniella*. *Phyllonorycter inusitatella*. *Phyllonorycter sandraella*.

Incurvariidae: *Vespina quercivora*.

Lasiocampidae: Pacific Tent Caterpillar (*Malacosoma constricta*).

Lyonetiidae: Live Oak Ribbed Casemaker (*Bucculatrix albertiella*).

Nepticulidae: *Stigmella variella*.

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). Andromache Underwing (*Catocala andromache*), a colorful underwing moth.

Notodontidae: California Oakworm (*Phryganidia californica*) (CODA).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*).

Pyralidae: *Acrobasis caliginella*.

Tischeriidae: *Coptotriche discreta*.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Filbertworm (*Cydia latiferreana*). *Decodes fragariana*. Variable Oak Leafroller (*Epinotia emarginana*). *Pseudexentera habrosana*.

Quercus wislizeni var. *frutescens*. **Scrub Live Oak**. Fagaceae. Erythrobalanus, black oaks subgenus.

Reported as a larval host for the Gold-hunter's Hairstreak in San Diego County.

Gracillariidae: *Cameraria wislizeniella* (CODA).

Heliozelidae: *Coptodisca powellella* (CODA).

Incurvariidae: *Vespina quercivora* (CODA).

Nepticulidae: *Stigmella variella* (CODA).

Oecophoridae: Stenomid Leaf Tier (*Rectiostoma fernaldella*, CODA).

Pyralidae: Phycitid Oak Leaf Tier (*Acrobasis caliginella*, CODA).

Tischeriidae: *Coptotriche discreta* (CODA).

Rafinesquia californica. **California Chicory**. Asteraceae. Cichorieae. Nectar: photographs that appear to be this plant show California Dogface at nectar (Andrew Lazere). April – July.

Rafinesquia neomexicana. **Desert Chicory**. Asteraceae. Cichorieae. Photographs that appear to be this plant show Orange Sulphur and a checkerspot at nectar. *Heliolonche carolus* and *Heliolonche pictipennis*, attractive noctuid flower moths. February – June.

Noctuidae: *Heliolonche carolus*. *Heliolonche pictipennis*.

Raillardella argentea. **Silky Raillardella**. Asteraceae. Madieae. Ivallda Arctic, one of few nectar plants recorded for it (Shapiro). Moldenke found the Chryxus Arctic associated with its flowers. July – September.

Thought to be difficult to cultivate.

Raillardella scaposa. **Stem Raillardella**. Asteraceae. Madieae. Flower visitors: Thicket Hairstreak (fq) and a diurnal moth (Moldenke). June – September.

Ramalina menziesii. Ramalinaceae (fungi)). **Lace Lichen**. Foodplant for *Cisthene faustinula* (Arctiidae). It often grows on deciduous oaks, but also on many other kinds of plants, especially on dead branches. As many other lichens it is sensitive to air pollution, therefore absent in most densely settled areas.

Ranunculus alismifolius. **Plantainleaf Buttercup**. Ranunculaceae. Moldenke finds Greenish Blue associated with its flowers. Varieties flower April – August.

Ranunculus californicus. **California Buttercup**. Ranunculaceae. Nectar: Common Ringlet, Sara Orangetip, Large Marble, Mylitta Crescent, California Ringlet, Bramble Green Hairstreak, *Adela trigrapha* (fq). Monroes: Nelson's Hairstreak. *Ranunculus* species among nectar plants for Columbian Skipper and Large Marble and a secondary nectar source for the San Bruno Elfin (Steiner). Shapiro does not see butterflies coming to any buttercups. Seems a sporadic secondary butterfly nectar source. My observations indicate it is a secondary nectar source for many insects. March – August.

Ranunculus cymbalaria. **Alkali Buttercup**. Ranunculaceae. Nectar: Meridian Duskywing in southernmost Nevada. May-August.

Ranunculus glaberrimus. **Sagebrush Buttercup**. Ranunculaceae. Nectar: Moss's Elfin, Persius Duskywing. March-May.

Ranunculus macounii. **Macoun's Buttercup**. Ranunculaceae. Nectar: Cabbage White. June – July.

Ranunculus occidentalis. **Western Buttercup**. Ranunculaceae. Nectar: not visited often, but Cabbage White, Taylor's Checkerspot (segregate of Edith's Checkerspot), Common Ringlet (fq), Purplish Copper, Puget Blue (segregate of Boisduval's Blue) and Mardon Skipper noted at nectar on it. March-May.

Noctuidae: Hitched Arches (*Melanchra adjuncta*).

Ranunculus orthorhynchus. **Bloomer's Buttercup**. Ranunculaceae. Showy species, likely some nectar value. March – May.

Ranunculus uncinatus. **Woodland Buttercup**. Ranunculaceae. Butterflies among flower visitors (Gut, et al. 1977).

Rhamnus alnifolia. **Alder Buckthorn**. Rhamnaceae.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: Western Tussock Moth (*Orgyia leucostigma*). CHECK – name confusion here

Rhamnus californica is now *Frangula californica*. **California Coffeeberry**.

Rhamnus crocea. **Redberry**. Rhamnaceae. A few individuals of Leanira Checkerspot noted at nectar on its tiny flowers by Bill Bouton in San Luis Obispo County population (SoWestLep #8399). January – April.

Foodplant for Pale Swallowtail and Hermes Copper. Questionably, the Western Tiger Swallowtail (HOSTS).

Arctiidae: Vestal Tiger Moth (*Spilosoma vestalis*).

Geometridae: Hulst's Wave (*Drepanulatrix hulstii*). *Macaria guenearia*. McDunnough's Leafwing (*Pero macdunnoughi*). California Tissue Moth (*Triphosa californiata*) – found in June in silk enclosed leaf-shelter nests in young foliage (MacFarland, 1975).

Nepticulidae: *Stigmella* sp.

Noctuidae: Ceanothus Nola (*Nola minna*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Rhamnus ilicifolia. **Hollyleaf Redberry**. Nectar: Muir's Hairstreak (Mount Diablo Interpretive Association), Echo Azure, Silvery Blue (Paul Johnson photographs). March – June.

Paul Johnson reports it a Pale Swallowtail hostplant in Pinnacles National Monument.

Geometridae: *Macaria guenearia* = *Speranza guenearia* caterpillars on the young leaves in southwestern California (MacFarland, 1975). California Tissue Moth (*Triphosa californiata*) [Seven Backyards web site].

Rhamnus purshiana is now *Frangula purshiana*. **Cascara**.

Rhamnus rubra is now *Frangula rubra*. **Sierra Coffeeberry**.

Rhamnus tomentella is now *Frangula californica* subsp. *tomentella*. **Hoary Coffeeberry**.

Rhodiola integrifolia ssp. *integrifolia* was *Sedum roseum* ssp. *integrifolium*. **Rosy Stonecrop**.
Crassulaceae. Nectar: Sierra Nevada Parnassian and Rocky Mountain Parnassian. May – August.

Larval host for Sierra Nevada Parnassian and Rocky Mountain Parnassian.

Grows on talus slopes in the alpine zone.

Rhododendron sp. Ericaceae. Nectar: Achemon Sphinx (*Eumorpha achemon*, Sphingidae), Elegant Sphinx (*Sphinx perelegans*, Sphingidae).

Geometridae: Northwest Phoenix (*Eulithis xyliana*). *Eupithecia russeliata*. Scallop Shell (*Rheumaptera undulata*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). Speckled Green Cutworm (*Orthosia hibisci*).
Cuneate Arches (*Lacinipolia cuneata*). Purple Arches (*Polia purpurissata*).

Rhododendron columbianum was *Ledum glandulosum*. **Western Labrador Tea**. Ericaceae. Shapiro: “Very popular with Great Arctic, Anglewings [Commas] and Gossamer-wings in bogs in NW California and south to Butterfly Valley in Plumas County.” Pacific Fritillary, Zerene Fritillary, Green Comma, Johnson's Hairstreak, Echo Azure (Mike Patterson). Moths. May – August.

Gracillariidae: A striking micromoth, *Phyllonorycter ledella* is a leaf miner specific to this plant.

Rhododendron macrophyllum. **Rose Bay**. Ericaceae. Nectar: Western Tiger Swallowtail. Bumblebees. April – July.

Hostplant for Brown Elfin (Salix Associates).

Geometridae: Ten-spotted Rhododendron Moth (*Dysstroma sobria*). Brown-lined Looper (*Neocalcis californiaria*). October Thorn (*Tetracis jubararia*).

Noctuidae: Rusty Shoulder Knot (*Aseptis binotata*). Wandering Brocade (*Fishia illocata*). Transparent Quaker (*Orthosia transparens*). *Xestia plebeia*.

Rhododendron occidentale. **Western Azalea**. Ericaceae. Nectar: Pipevine Swallowtail, Clodius Parnassian, Anise Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, *Colias* sp., Satyr Comma, Brown Elfin, White-lined Sphinx. Shapiro finds it infrequently visited in his Central California experience. Grant (observing in San Jacinto Mountains) says Western Tiger Swallowtail pollinates it and considers it a butterfly flower or a butterfly-and-moth flower. Bumblebees. April – August.

Caterpillar foodplant for the Green Comma (aka Rustic Anglewing), also reported for Hoary Comma (including the Zephyr Comma).

Geometridae: Northwest Phoenix (*Eulithis xyliana*). October Thorn (*Tetracis jubararia*).

Gracillariidae: *Caloptilia ferruginella*. A leaf miner (Powell & Opler).

Rhus spp. **Sumac**. Anacardiaceae. Nectar for Thicket Hairstreak.

Noctuidae: *Papestra cristifera*. Variegated Cutworm (*Peridroma saucia*). Otter Spiramater (*Spiramater lutra*).

Rhus aromatica was *Rhus trilobata*. **Squaw Bush**. Anacardiaceae. Nectar: Desert Marble, Painted Lady, Variable Checkerspot (fq), Edith's Checkerspot, California Tortoiseshell, Brown Elfin, Desert Elfin, Western Pine Elfin, Gray Hairstreak, Thicket Hairstreak, Johnson's Hairstreak (fq), Juniper Hairstreak, Sheridan's Hairstreak, Western Pygmy Blue, Marine Blue, Echo Azure, Reakirt's Blue, Western Tailed Blue, Propertius Duskywing, *Annaphila decia* (Noctuidae, Hartmut Wisch photograph, as some of these others), *Annaphila astrologa* (Noctuidae) Mark Kummel. Shapiro: "very attractive to checkerspots ... and Johnson's Hairstreak. March - May.

Geometridae: five emeralds: *Dichorda illustraria*. *Dichorda rectaria*. *Nemoria intensaria*. *Nemoria obliqua*. Phoenix Emerald (*Dichordophora phoenix*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Edwards' False Underwing (*Drasteria edwardsi*). Likely hostplant for *Marathyssa minus* – avidly accepted by captive larvae (McFarland, 1975).

Notodontidae: Yellowstriped Caterpillar (*Datana perspicua*).

Saturniidae: Mendocino Saturnia Moth (*Saturnia mendocino*). Walters' Saturnia Moth (*Saturnia walterorum*). Neumogen's Buckmoth (*Hemileuca neumogeni*).

Rhus integrifolia. **Lemonade Berry**. Anacardiaceae. Nectar: Monarch (B.J. Stacey photograph). Queen. Painted Lady. Red Admiral. Lorquin's Admiral. American Snout. February-May.

Saturniidae: Saturnia Moth (*Saturnia walterorum*). Mendocino Saturnia Moth (*Saturnia mendocino*). Cedros Island Ceanothus Silkmoth (*Hyalophora euryalus cedrosensis*), Laurel Sumac (*Malosma laurina*) its likely major host.

Gracillariidae: *Caloptilia ovatiella*. A leaf miner (Wikipedia).

Rhus ovata. **Sugarbush**. Anacardiaceae. Nectar: Pale Swallowtail, Variable Checkerspot, Red Admiral (Treebeard). Monroes: Checkered White, California Sister (Brett Badeaux) (fq), California Tortoiseshell, Desert Metalmark, Brown Elfin, Bramble Green Hairstreak 'Loki' Juniper Hairstreak (fq), Great Purple Hairstreak (Peter Bryant also), Sonoran Blue, Silvery Blue, Funereal Duskywing, Desert False Underwing (*Drasteria tejonica*, Noctuidae). Brett Badeaux sees especially California Sister and Red Admiral, not much else. March - May.

Gracillariidae: *Caloptilia ovatiella*. A leaf miner (Powell & Opler).

Notodontidae: Yellowstriped Caterpillar (*Datana perspicua*).

Rhus trilobata is now *Rhus aromatica*. **Squaw Bush**.

Rhynchospora alba. **White Beaked-Rush**. Cyperaceae.

A foodplant for Common Ringlet (*Coenonympha tullia*) in Europe; possibly so serves here, also (HOSTS).

Ribes spp. **Currants and Gooseberries**. Grossulariaceae. Nectar: Large Marble, Thicket Hairstreak. Hummingbirds.

Larval hosts for Hoary Comma and Tailed Copper.

Gelechiidae: *Filatima vaniae* (BOLD: The Barcode of Life Data System). *Gelechia ribesella*.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina* [Haggard]).

Geometridae: Linden Looper (*Erannis tiliaria*), *Eulithis destinata*, Barred Yellow (*Eulithis propulsata*), Chevron (*Eulithis testata*), Northwest Phoenix (*Eulithis xylina*), Currant Pug (*Eupithecia assimilata*), *Eupithecia nimbicolor*, *Hesperumia latipennis*. Rindge's Pero (*Pero mizon*), Wavy-lined Emerald (*Synchlora aerata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Aseptis adnixa*. Rusty Shoulder Knot (*Aseptis binotata*, Haggard finds it frequent on gooseberries). Brown Woodling (*Egira perlubens*). Simplex Cutworm (*Egira simplex*). *Lacinipolia pensilis*. *Papestra invalida*. Figwort Stem Borer (*Papaipema sauzalitae*). Stormy Arches (*Polia nimbose*). The Redwing (*Sideridis rosea*). Otter Spiramater (*Spiramater lutra*). Gooseberry Stretchia (*Stretchia muricina*). *Stretchia prima* considered likely (PNW Moths).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). White-triangle Tortrix (*Clepsis persicana*, Canada). *Decodes asapheus* (California). *Decodes horariana* [*horarianus* may be correct, references differ in spelling, California]. *Epinotia castaneana*. *Epinotia vagana* (California). Pandemis Leafroller (*Pandemis pyrusana*, California).

Ribes amarum. **Bitter Gooseberry**. Grossulariaceae. Nectar: Sara Orangetip (Marc Kummel). February – April.

Foodplant for the Tailed Copper.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Ribes aureum. **Golden Currant**. Grossulariaceae. Nectar: West Coast Lady, Desert Elfin, Sleepy Duskywing and Meridian Duskywing in Clark County, Nevada (Austins). Satyr Comma (Pyle). White-lined Sphinx. April – May.

Foodplant for the Hoary Comma and Tailed Copper.

Arctiidae: California Tiger Moth (*Leptarctia californiae*). Banded Woollybear (*Pyrrharctia isabella*).

Geometridae: Peppered Moth (*Biston betularia*). The Canary Thorn (*Neoterpes trianguliferata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Abagrotis nefascia*. Rusty Shoulder Knot (*Aseptis binotata*). *Mesogona olivata*.

Tortricidae: *Decodes aneuretus* (California). *Decodes asapheus*.

Ribes aureum var. *gracillimum*. **Golden Currant**. Grossulariaceae. Nectar: Anise Swallowtail, Pipevine Swallowtail, Monarch, Clark's Day Sphinx (*Proserpinus clarkiae*, Sphingidae). February – May.

Good larval host for Tailed Copper.

Tortricidae: *Decodes asapheus* (California).

Ribes californicum. **California Gooseberry**. **Hillside Gooseberry**. Grossulariaceae. Nectar: Margined White, California Dogface. February – March.

Good larval host for the Tailed Copper.

Gelechiidae: *Gelechia ribesella* (Powell & Opler, p. 91).

Tortricidae: *Decodes aneuretus*. *Decodes asapheus*. *Epinotia sagittana*.

Ribes cereum. **Wax Currant**. Grossulariaceae. Nectar: Anise Swallowtail, Desert Black Swallowtail, Indra Swallowtail, Two-tailed Swallowtail, Cabbage White, Desert Marble, Red Admiral, California Tortoiseshell, Hoary Comma (fq), Bramble Green Hairstreak, Meridian Duskywing, Persius Duskywing, Propertius Duskywing. June – July.

Caterpillar plant for Hoary Comma and Tailed Copper. Oviposition by Green Comma (*rusticus*) reported in the 1992 Season Summary, Humboldt County.

Geometridae: Handsome Carpet (*Dysstroma brunneata*). Formosa Carpet (*Dysstroma formosa*). Orange-spotted Carpet (*Dysstroma walkerata*). *Hesperumia latipennis*. Sulphur Wave (*Hesperumia sulphuraria*). Split-lined Angle (*Macaria bitactata*). The Canary Thorn (*Neoterpes trianguliferata*). Bruce Spanworm (*Operophtera bruceata*). October Thorn (*Tetracis jubararia*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Rusty Shoulder Knot (*Aseptis binotata*). Large Gray Pinion (*Lithophane georgii*). *Platypolia contadina*. *Platypolia loda*. *Stretchia plusiaeformis*.

Saturniidae: Nuttall's Buckmoth (*Hemileuca nuttalli*).

Ribes divaricatum. **Straggly Gooseberry**. Grossulariaceae. Varieties flower in the range of March – May.

Hostplant for Oreas Comma. Captive females of the Hoary Comma oviposited on it, were successfully reared. Warren reports Tailed Copper associated with it in the Willamette Valley (Oregon).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Tortricidae: *Argyrotaenia* sp. *Decodes opleri*.

Ribes inerme. **White-stemmed Gooseberry**. Grossulariaceae. Nectar: Green Comma, Oreas Comma. May – June.

Caterpillar plant for the Gray Comma, Green Comma, Hoary Comma and Pale Swallowtail (HOSTS).

Gelechiidae: *Gelechia ribesella* (Powell & Opler, p. 91).

Ribes lacustre. **Swamp Currant**. Grossulariaceae. June – July.

Hostplant for Hoary Comma. Nunnallee saw a female Oreas Comma showing great interest, indicating “an apparent food plant” (NorWestLeps #2006).

Arctiidae: Fall Webworm (*Hyphantria cunea*), Yellow-spotted Tiger Moth (*Lophocampa maculata*), Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Peppered Moth (*Biston betularia*). *Macaria quadrilinearia*. Day Emerald (*Mesothea incertata*). Horned Spanworm (*Nematocampa resistaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Alfalfa Semi-looper (*Autographa californica*). Army Cutworm (*Euxoa auxiliaris*). Variegated Cutworm (*Peridroma saucia*). *Platypolia contadina*. Clandestine Dart (*Spaelotis clandestina*). *Stretchia plusiaeformis*. Setaceous Hebrew Character (*Xestia c-nigrum*).

Ribes lobbii. **Gummy Gooseberry**. Grossulariaceae. May – July.

Geometridae: Horned Spanworm (*Nematocampa resistaria*).

Gelechiidae: *Gelechia dromicella*.

Ribes malvaceum. **Chaparral Currant**. Grossulariaceae. Nectar: Western Tiger Swallowtail (Plants of the San Gabriel Mountains), Painted Lady (Marc Kummel). Important for Anna's Hummingbird, notably long bloom season. October – April.

Geometridae: *Tetraxis hirsutaria*.

Noctuidae: an unidentified moth termed “near” being the Rusty Shoulder Knot (*Aseptis binotata*). Tobacco Budworm (*Chloridea virescens*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Decodes opleri*. *Epinotia sagittana*. *Epinotia vagana*.

Ribes menziesii. **Canyon Gooseberry**. Grossulariaceae. February - April.

Gelechiidae: *Gelechia ribesella* (Powell & Opler, p. 91).

Gracillariidae: *Caloptilia nondeterminata*. *Phyllonorycter ribefoliae*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Decodes aneuretus*. *Decodes asapheus*. *Epinotia sagittana*. *Epinotia vagana*.

Ribes montigenum. **Mountain Gooseberry**. Grossulariaceae. June – July.

A larval host for Hoary Comma and, far to the east, for the Virginia Copper, a segregate of the Tailed Copper.

Ribes nevadense. **Mountain Pink Currant**. Grossulariaceae. Nectar: Western Tiger Swallowtail (Las Pilitas Nursery photograph). May – June.

Gelechiidae: *Gelechia ribesella* (Powell & Opler, p. 91).

Ribes quercetorum. **Oak Gooseberry**. Grossulariaceae. Nectar: West Coast Lady (Monroes), Red Admiral (Las Pilitas Nursery photograph), *Epirrhoe plebeculata* (Geometridae) (Paul Johnson). March – May.

Foodplant for the Tailed Copper (Monroes).

Gelechiidae: *Gelechia ribesella* (Powell & Opler, p. 91).

Tortricidae: *Decodes aneuretus*. *Decodes asapheus*, a leafroller.

Ribes roezlii. **Sierra Gooseberry**. Grossulariaceae. Nectar: A butterfly favorite at U.C. Riverside Botanic Gardens (var. *cruentum* ‘Dixie Glade’). March – June.

Good larval host for the Tailed Copper.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*) (Haggard).

Tortricidae: *Epinotia* sp.

Ribes sanguineum var. *glutinosum*. **Pink Flowering Currant**. Grossulariaceae. Nectar: Margined White, Sara Orangetip, Mourning Cloak, Western Pine Elfin, Echo Azure, Western Brown Elfin, Nelson's Juniper Hairstreak. Likely often secondary for butterflies, outstanding for hummingbirds. February – April.

Hostplant: Hoary Comma, Tailed Copper, Cloudy Copper (segregate of the Tailed Copper).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Vestal Tiger Moth (*Spilosoma vestalis*).

Geometridae: Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Handsome Carpet (*Dysstroma brunneata*). Formosa Carpet (*Dysstroma formosa*) (fq). Orange-barred Carpet (*Dysstroma hersiliata*). Johnson's Euchlaena (*Euchlaena johnsonaria*). The Canary Thorn (*Neoterpes trianguliferata*). *Pero giganteus*. October Thorn (*Tetracis jubararia*). Taylor's Thallophaga (*Thallopaga taylorata*). Western Red Twin-spot (*Xanthorhoe defensaria*).

Gracillariidae: *Caloptilia nondeterminata*. *Phyllonorycter ribefoliae*.

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Noctuidae: *Acerra normalis*. *Agrochola pulchella*. *Agrochloa purpurea*. Rusty Shoulder Knot (*Aseptis binotata*). *Egira hiemalis*. Three-spotted Sallow (*Eupsilia tristigmata*). Garden Cutworm (*Fishia discors*). Common Hyppa (*Hyppa xylinoides*). Cuneate Arches (*Lacinipolia cuneata*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). *Pseudorthodes irrorata*. American Swordgrass Moth (*Xylena nupera*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneana*). Orange Tortrix (*Argyrotaenia franciscana*). *Decodes aneuretus*. *Decodes asapheus*. *Epinotia castaneana* (reported from Oregon, seems likely to utilize it in California based upon its range here). *Epinotia vagana* (California).

Ribes speciosum. **Fuchsia-flowered Gooseberry**. Grossulariaceae. Nectar: Important for Anna's Hummingbird. January-May.

Foodplant for the Tailed Copper.

Noctuidae: Protector Quaker (*Orthosia praeses*). *Stretchia inferior*. Fuchsia-flowered Gooseberry the only known host for *Stretchia inferior*.

Ribes velutinum. **Desert Gooseberry**. Grossulariaceae. April – June.

Caterpillar host for the Tailed Copper.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Noted in: Weaver, William P., Jr. "Does Previous Defoliation Affect Ovipositional Choice of the Western Tent Caterpillar?" *Plant Biology of Eastern California: The Mary DeDecker Symposium, 2nd annual* by the White Mountain Research Station. Edited by Clarence A. Hall, Jr. and Victoria Doyle-Jones. Pages 250-255.

Noctuidae: *Mesogona olivata*.

Saturniidae: Western Sheep Moth (*Hemileuca eglanterina*) – noted in Mono County, 1984 Season Summary.

Ribes viscosissimum. **Sticky Currant**. Grossulariaceae. May – July.

Foodplant for Hoary Comma.

Geometridae: Handsome Carpet (*Dysstroma brunneata*). Formosa Carpet (*Dysstroma formosa*). Split-lined Angle (*Macaria bitactata*). The Canary Thorn (*Neoterpes trianguliferata*).

Noctuidae: Gooseberry Streachia (*Stretchia muricina*).

Robinia neomexicana. **Desert Locust**. Fabaceae. Robinieae. Nectar: Orange Sulphur, Monarch (fq), Silver-spotted Skipper. April – August.

Hostplant for Mexican Yellow, Funereal Duskywing, and Silver-spotted Skipper.

Romanzoffia californica. **California Mistmaiden**. Boraginaceae. Nectar: Orange Sulphur (Mountain Plants of the Western Cascades web site photograph). March – May.

Romneya coulteri. **Matilija Poppy**. Papaveraceae. April – June.

Geometridae: *Neoterpes edwardsata*, an attractive little moth.

Rorippa sp. **Yellowcress**. Brassicaceae. Nectar: Johnson's Hairstreak (Shields).

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Noctuidae: Variegated Cutworm (*Peridroma saucia*).

Rorippa curvipes. **Bluntleaf Yellowcress**. Brassicaceae. Nectar: Occasional for Sara Orangetip and Gray Hairstreak (Paul Severns). May – September.

Rorippa curvisiliqua. **Western Yellowcress**. Brassicaceae. May – October.

Foodplant for Western White. Checkered White observed ovipositing on it in the Trinity Alps area (Shapiro). Listed as a foodplant for Checkered White and Cabbage White.

Rorippa nasturtium-aquaticum is now *Nasturtium officinale*. **Watercress**.

Rorippa palustris. **Bog Yellowcress**. Brassicaceae. Varieties flower in the range of May – September.

Foodplant for Gray-veined White (Margined White).

Rorippa palustris subsp. *hispida*. **Hispid Yellowcress**. Brassicaceae.

Hostplant for Cabbage White (Scott).

Rorippa palustris var. *occidentalis* is now *Rorippa palustris* subsp. *palustris*. **Western Bog Yellow Cress**.

Rorippa palustris subsp. *palustris*. **Western Bog Yellow Cress**. Brassicaceae. March – September.

Foodplant for Gray-veined White (Margined White), Cabbage White.

Rorippa sinuata. **Spreading Yellowcress**. Brassicaceae. Nectar: Clouded Sulphur, Red Admiral, Painted Lady, Field Crescent, Melissa Blue, Reakirt's Blue, and Common Checkered-Skipper (all from Scott). April – August.

Hostplant for Cabbage White (Scott).

Rosa spp. **Rose**. Rosaceae. Roseae.

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Linden Looper (*Erannis tiliaria*). Lesser Grapevine Looper (*Eulithis diversilineata*). Northwest Phoenix (*Eulithis xylinea*). *Eupithecia maestosa*. *Eupithecia nimbicolor*. Sulphur Wave (*Hesperumia sulphuraria*). Mountain Mahogany Looper (*Iridopsis clivinaris*). Citrus Looper (*Iridopsis fragilaria*). Brown-lined Looper (*Nealcis californiaris*). Bruce Spanworm (*Operophtera bruceata*). Rindge's Pero (*Pero mizon*). Oblique-striped Emerald (*Synchlora bistrisaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Fragile Dagger (*Acronicta fragilis*). Impressed Dagger (*Acronicta impressa*). *Agrochola pulchella*. *Agrochloa purpurea*. *Brachylomia algens*. *Lacinipolia patalis*. Large Gray Pinion (*Lithophane georgii*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). Purple-lined Sallow (*Pyrrhia experimens*). Gray Swordgrass Moth (*Xylena cineritia*). Lunate Zale (*Zale lunata*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna* [Haggard]).

Tortricidae: Red-edged Acleris (*Acleris albicomana*). Britannia Moth (*Acleris britannia*). *Acleris fragariana*. Garden Rose Tortricid (*Acleris variegana*). Allen's Tortrix (*Aphelia alleniana*). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*, Canada). Orange Tortrix (*Argyrotaenia franciscana*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Zapulata (*Choristoneura zapulata*). White-triangle Tortrix (*Clepsis persicana*). *Clepsis virescana* (BugGuide). Oriental Fruit Moth (*Grapholita molesta*). Off-white Hedya (*Hedya ochroleucana*). Pink-washed Leafroller Moth (*Hedya separatana*, BugGuide). *Notocelia culminana*. *Olethreutes* sp. (Oregon). Pandemis Leafroller (*Pandemis pyrusana*, California). Omnivorous Leafroller (*Platynota stultana*). *Sparganothis tunicana* (California). *Xenotemna pallorana*.

Rosa californica. **California Wild Rose**. Rosaceae. Roseae. Bumblebees. February – November.

Listed among the foodplants of the polyphagous Gray Hairstreak!

Pyralidae: *Ambesa laetella*, a distinctive species (Powell & Opler, p. 190).

Tortricidae: Red-edged Acleris (*Acleris albicomana*). *Acleris keiferi*. Robinson's Acleris (*Acleris robinsoniana*). Fruit Tortricid (*Acleris variegana*). Fruit-tree Leafroller (*Archips argyrospila*).

Rosa gymnocarpa. **Wood Rose**. Rosaceae. Roseae. Nectar: Mourning Cloak. Shapiro questions the possibility. Bumblebees. April – July.

According to Link, sometimes a foodplant for Mourning Cloak, which may account for its frequenting rose bushes.

Geometridae: Linden Looper (*Erannis tiliaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Gray Swordgrass Moth (*Xylena cineritia*). American Swordgrass Moth (*Xylena nupera*).

Pyralidae: *Ambesa laetella*, a distinctive species (Powell & Opler, p. 190).

Tortricidae: Red-edged Acleris (*Acleris albicomana* [Wikipedia]). *Notocelia culminana*.

Rosa minutifolia. **Small-leaved Rose**. Rosaceae. Roseae. February – April.

HOSTS lists it for Variable Checkerspot, seems doubtful. Perhaps hungry late instars, up for eating almost anything?

Rosa nutkana. **Nootka Rose**. Rosaceae. Roseae. Nectar: Reported for the Mourning Cloak. Shapiro questions the possibility of its seeking nectar. Perhaps on the flowers because it serves as a caterpillar foodplant. Bumblebees. April – July.

Geometridae: Linden Looper (*Erannis tiliaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Three-spotted Sallow (*Eupsilia tristigmata*, [Tatum]). Gray Sword-grass Moth (*Xylena cineritia*). American Sword-grass Moth (*Xylena nupera*).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*) (Tatum).

Tortricidae: Dusky Leafroller (*Orthotaenia undulana*).

Rosa woodsii subsp. *ultramontana*. **Interior Rose**. Rosaceae. Roseae. Nectar: Desert Black Swallowtail, Orange Sulphur in Clark County, Nevada (Austins). Bumblebees. May – July.

Prodoxidae: *Lampronia aenescens*.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Rubus spp. **Blackberries**. Rosaceae. Rubeae. Flowers attract Cabbage White, Clouded Sulphur, Lorquin's Admiral, Silver-spotted Skipper, Common Roadside-Skipper, Northern Arches (*Drasteria hudsonica*, Noctuidae).

Over-ripe blackberry fruits, especially late in the season, attract Tailed Copper, other butterflies, many moths. Great Britain's Leverton notes, "numerous moths can be found on blackberries after dark, especially in woodland" (*Enjoying Moths*). "The Herald [*Scoliopteryx libatrix*, also found in California] moth has a barbed proboscis able to pierce the skin of soft fruit, but other species can reach the juice only if the fruit is damaged". Most of the moths attracted are noctuids. Over-ripe fruit an important food for species that emerge late and overwinter as eggs, or hibernate as adults.

Shapiro notes *Rubus* spp. as hostplants for Echo Azure in the San Francisco Bay Region.

Arctiidae: Garden Tiger Moth (*Arctia caja*).

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Sharp-angled Carpet (*Euphyia intermediata*). Satyr Pug (*Eupithecia satyrata*). Western White Ribbed Carpet (*Mesoleuca gratulata*) – an early spring day-flying moth. Black-lined Synaxis (*Tetracis pallulata*). Wavy-lined Emerald (*Synchlora aerata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Abagrotis pulchrata*. *Adelphagrotis indeterminata*. *Agrochola pulchella*. Copper Underwing (*Amphipyra pyramidoides*). Garden Cutworm (*Fishia discors*). Nameless Pinion (*Lithophane innominata*, Canada). *Lacinipolia patalis*. *Trichordestra tacoma*. American Swordgrass Moth (*Xylena nupera*). Sesiidae: Raspberry Crown Borer (*Pennisetia marginatum* [Haggard]).

Tortricidae: *Acleris fragariana*. Strawberry Leafroller (*Ancylis comptana*). Allen's Tortrix (*Aphelia alleniana*). Fruit-tree Leafroller (*Archips argyrospila*). *Choristoneura obsoletana*. Oblique-banded Leafroller (*Choristoneura rosaceana*). *Clepsis fucana* (confirmed for California). White-triangle Tortrix (*Clepsis persicana*). Pink-washed Leafroller Moth (*Hedya separatana*, BugGuide). Dusky Leafroller (*Orthotaenia undulana*). Omnivorous Leafroller (*Platynota stultana*).

Rubus leucodermis. **Whitebark Raspberry**. Rosaceae. Rubeae. Nectar: Nelson's Hairstreak (<https://www.inaturalist.org/observations/13026604>).

Rubus parviflorus. **Thimbleberry**. Rosaceae. Rubeae. Nectar: Pale Swallowtail, Orange Sulphur, Variable Checkerspot, Northern Checkerspot, and Johnson's Hairstreak. Stuart Wechsler, Seattle: "a Rufous Hummingbird favorite". Bumblebees. March – August.

Tailed Copper feeds on juices of the berries.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Variable Carpet (*Anticlea vasiliata*). Dark Marbled Carpet (*Dysstroma citrata*). Columbia Pug (*Eupithecia columbiata*). Western White-ribboned Carpet (*Mesoleuca gratulata* [Tatum]).

Noctuidae: Funerary Dagger (*Acronicta funeralis*). Impressed Dagger (*Acronicta impressa*). *Agrochola pulchella*. Rusty Shoulder Knot (*Aseptis binotata*). American Angle Shades (*Euplexia benesimilis*, photograph of caterpillar by Illa Chavez on Flicker). Three-spotted Sallow (*Eupsilia tristigmata* [Tatum]). Western Yellowstriped Armyworm (*Spodoptera praefica*). *Trichordestra tacoma*. *Xestia plebeia*. Smith's Dart (*Xestia smithii*). Moon Umber (*Zale lunata*).

Pterophoridae: Himmelman's Plume Moth (*Geina tenuidactylus*).

Schreckensteiniidae: Blackberry Leaf Skeletonizer (*Schreckensteinia festaliella*).

Sesiidae: Blackberry Clearwing (*Pennisetia marginatum*) – resembles a Yellowjacket in flight (Duckworth & Eichlin).

Thyatiridae: Lettered Habrosyne (*Habrosyne scripta*).

Tortricidae: Britannia Moth (*Acleris britannia*). Orange Tortrix (*Argyrotaenia franciscana*, California). *Clepsis fucana* (California). Dusky Leafroller (*Orthotaenia undulana*).

Rubus spectabilis. **Salmonberry**. Rosaceae. Rubeae. Nectar: Orange Sulphur, Margined White, Johnson's Hairstreak. Bumblebees. March – June.

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Geometridae: Small Engrailed (*Ectropis crepuscularia*). Omnivorous Looper (*Sabulodes aegrotata*). Brown-tipped Thorn (*Selenia alciphearia*).

Noctuidae: Funerary Dagger (*Acronicta funeralis*). Impressed Dagger (*Acronicta impressa*). *Adelphagrotis stellaris*. *Agrochola pulchella* ([Tatum]). Rusty Shoulder Knot (*Aseptis binotata*). Enigmatic Dart (*Cerastis enigmatica*) (fq). Three-spotted Sallow (*Eupsilia tristigmata* [Tatum]). Soothsayer (*Graphiphora augur*). Hitched Arches (*Melanchra adjuncta*). *Pseudorthodes irrorata*. Smith's Dart (*Xestia smithii*).

Schreckensteiniidae: Blackberry Leaf Skeletonizer (*Schreckensteinia festaliella*).

Sesiidae: Blackberry Clearwing (*Pennisetia marginatum*).

Thyatiridae: Lettered Habrosyne (*Habrosyne scripta*) (fq). Its favorite host (Pacific Northwest Moths).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Rubus ursinus. **California Blackberry**. **Trailing Blackberry**. Rosaceae. Rubeae. Nectar: Pipevine Swallowtail, Pale Swallowtail, Anise Swallowtail, Clodius Parnassian, Large Marble, Cabbage White, Margined White, Sara Orangetip, Mylitta Crescent, Edith's Checkerspot (fq), Painted Lady, Western Pine Elf, Cedar Hairstreak, Green Hairstreak, Johnson's Hairstreak (fq), Silvery Blue, Northern White-Skipper, Persius Duskywing, Propertius Duskywing, Two-banded Checkered-Skipper, Dun Skipper, Umber Skipper, cf. *Adela septentrionella*. Recommended nectar plant for Green Hairstreak Corridor project in San Francisco. An important Taylor's Checkerspot (segregate of Edith's Checkerspot) nectar

plant in British Columbia. Noted as an important nectar plant for butterflies on San Juan Island (Pyle). Bumblebees. March – July.

Pyle strongly suspects it a hostplant for Two-banded Checkered-Skipper on San Juan Island (NorWestLeps #3283).

Geometridae: Dark Marbled Carpet (*Dysstroma citrata*). Johnson's Euchlaena (*Euchlaena johnsonaria*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: Hitched Arches (*Melanchra adjuncta*). Western Yellowstriped Armyworm (*Spodoptera praefica*). *Xestia plebeia*. Smith's Dart (*Xestia smithii*).

Sesiidae: Blackberry Clearwing (*Pennisetia marginata*).

Schreckensteiniidae: Blackberry Leaf Skeletonizer (*Schreckensteinia festaliella* – a bristle-legged moth), primary hostplant.

Tischeriidae: *Coptotriche splendida*.

Tortricidae: Britannia Moth (*Acleris britannia*). *Acleris keiferi*. Garden Rose Tortricid (*Acleris variegana*). Orange Tortrix (*Argyrotaenia franciscana*).

Rudbeckia californica. **California Coneflower**. Asteraceae. Heliantheae. Nectar: Photograph shows American Lady. Nectar – *The Butterfly Gardener's Guide*. July – August.

Zones 14-18.

Rudbeckia glaucescens. **Waxy Coneflower**. Asteraceae. Heliantheae. Nectar: Variable Checkerspot (Dee Shea Hines).

Rudbeckia klamathensis. **Klamath Coneflower**. Asteraceae. Heliantheae. Nectar: Glenn Fine notes 10 species of Lepidoptera visiting its flowers in Siskiyou County. August – September. Fine notes July – August for his area.

Rudbeckia occidentalis. **Western Coneflower**. Asteraceae. Heliantheae. Monarch, Hoary Comma – said to be “a bee and butterfly favorite” (Mountain Plants of the Western Cascades web site). June – August.

Rumex spp. **Dock**. Polygonaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Noctuidae: Dock Rustic (*Resapamea passer*) (PNW Moths).

Rumex hymenosepalus. **Wild Rhubarb**. Polygonaceae.

Foodplant for the Ruddy Copper, Great Copper and Purplish Copper.

Rumex maritimus. **Golden Dock**. Polygonaceae.

Foodplant for Purplish Copper.

Rumex paucifolius. **Alpine Sheep Sorrel**. Polygonaceae.

Foodplant for Lustrous Copper and Edith's Copper.

Rumex salicifolius. **Willow-leaved Dock**. Polygonaceae.

Foodplant for Purplish Copper, Great Copper, Ruddy Copper, Gray Hairstreak. In Oregon's Willamette Valley, strongly preferred by Great Copper females over the much more common non-native curly dock (*Rumex crispus*).

Rumex triangulivalvis. **Willow Dock**. Polygonaceae.

Scott found eggs of Purplish Copper on this species in Colorado.

Rumex venosus. **Veiny Dock**. Polygonaceae.

Foodplant for Ruddy Copper. Veiny Dock is native to Lassen County.

Rupertia physodes. **California Tea**. Fabaceae. Psoraleae. May – July.

Arthur Shapiro reports oviposition by Northern Cloudywing on it at his Cold Canyon study site (Napa County).

Oecophoridae: *Agonopterix posticella*. *Agonopterix psoraliella*.

Sagittaria spp. **Arrowhead**. Alismataceae.

Noctuidae: Golden Looper (*Argyrogramma verruca*). Cattail Borer (*Bellura obliqua*).

Pyralidae: *Elophila occidentalis* [Wikipedia].

Sagittaria latifolia. **Wapato**. Alismataceae. Nectar: Clouded Sulphur, Pearl Crescent, Lorquin's Admiral (very rarely, Paul Severns), Tawny-edged Skipper, and Yellow-Collared Scape Moth. July – August.

Sagittaria longiloba. **Longbarb Arrowhead**. Alismataceae: Nectar: Checkered White, Sachem (USGS Pollinator Library). May – June.

Salazaria mexicana is now *Scutellaria mexicana*. **Mexican Bladder Sage**. Lamiaceae. Nectar: Desert Black Swallowtail, White-lined Sphinx (fq). March – June.

Salicornia spp. **Pickleweed**. Chenopodiaceae.

Larval hosts for Western Pygmy Blue.

Salicornia depressa. **Virginia Glasswort**. Chenopodiaceae.

Hostplant: Western Pygmy Blue.

Geometridae: *Perizoma custodiata* may feed on new growth; it usually eats Alkali Heath (Wesley A Maffei).

Salicornia subterminalis is now *Arthrocnemum subterminale*. **Parish's Pickleweed**. Chenopodiaceae.

Salicornia pacifica was *Salicornia virginica*. **Pickleweed**. Chenopodiaceae.

Foodplant for Western Pygmy Blue.

Salix spp. **Willows**. Salicaceae. Nectar: Margined White, Acastus Checkerspot, Leanira Checkerspot, West Coast Lady, Weidemeyer's Admiral (Johnson & Nixon, 1967), Mourning Cloak, California Tortoiseshell, Zephyr Anglewing, Oreas Comma (fq), Small Wood-Nymph, Brown Elfin, Western Pine Elfin, Gray Hairstreak, California Hairstreak, Johnson's Hairstreak, Juniper Hairstreak, Great Purple Hairstreak, Thicket Hairstreak, Tailed Copper (fq), Juba Skipper. *Epirrhoe plebeculata* (Geometridae). *Litocala (Litocala sexsignata)*, Noctuidae). Shapiro: "Willow catkins produce nectar attractive to early spring butterflies such as hibernating Mourning Cloak, Anglewings, Tortoiseshells, and the Echo Blue [Echo Azure] and Elfins."

Leverton in England notes willow blossom is "the first great feast of the year for moths". He finds a dozen or so species of moths in great numbers on the flowers, mostly in the hour after dark.

Willow sap from sapsucker wounds draws Lorquin's Admiral, Red Admiral, Weidemeyer's Admiral (fq), Milbert's Tortoiseshell, Mourning Cloak, Common Wood-Nymph, Hoary Comma, Green Comma, Satyr Comma, and other sap feeders, especially moths.

Shapiro: "Willows are larval hosts for the Mourning Cloak, Lorquin's Admiral, Western Tiger Swallowtail, Willow Hairstreak and the Western Sheepmoth (*Hemileuca eglanterina*)". Willows are also foodplants for the Rustic Anglewing (aka Green Comma). Todd Stout finds any willow works as a lab host for Viceroy or Weidemeyer's Admiral.

Willows are difficult to identify, quite variable, hybridizing readily, which in part may account for the vagueness of many hostplant records.

Arctiidae: Ornate Tiger Moth (*Apantesis ornata*). Garden Tiger Moth (*Arctia caja*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Batrachedridae: *Batrachedra illusor*, reared from willow branches (Powell & Opler, p. 75).

Cossidae: Locust Borer (*Prionoxystus robiniae*).

Drepanidae: Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Erebidae: Black Witch (*Ascalapha odorata*) [Ken Davenport, DesertLeps post of 5 Sept 2016].

Gelechiidae: *Chionodes abitus* (Wikipedia). *Gnorimoschema vastificum* "larvae live in buried leaves [on riverine sand] of willow (*Salix*) and may be indiscriminate feeders" (Powell & Opler, p. 98).

Geometridae: Infant (*Archiearis infans*), The Vestal (*Cabera variolaria*), Pale Beauty (*Campaea perlata*),

Digrammia hebetata, *Digrammia irrorata*, for the Dark-bordered Granite (*Digrammia neptaria*), Dark-waved Angle (*Digrammia subminiata*), Small Engrailed (*Ectropis crepuscularia*), Autumnal Moth (*Epirrita autumnata*), Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena johnsonaria*). *Eulithis destinata*. Barred Yellow (*Eulithis propulsata*). Chevron (*Eulithis testata*). Northwest Phoenix (*Eulithis xylina*). Sharp-angled Carpet (*Euphyia intermediata*). Bryant's Eupithecia (*Eupithecia bryanti*). Columbia Pug (*Eupithecia columbiata*). *Eupithecia lachrymosa*. *Eupithecia maestosa*. *Eupithecia misturata*. *Eupithecia nimbicolor*. *Eupithecia perfusca*. Tawny Eupithecia (*Eupithecia ravocostaliata*). *Eupithecia rotundopuncta*. Satyr Pug (*Eupithecia satyrata*). Grey Pug (*Eupithecia subfuscata*). Sulphur Wave (*Hesperumia sulphuraria*). July Highflier (*Hydriomena furcata*). Oak Winter Highflier (*Hydriomena nubilofasciata*). Shattered Hydriomena (*Hydriomena perfracta*). Ruddy Highflier (*Hydriomena ruberata*). Emasculated Grey (*Iridopsis emasculatum*). Citrus Looper (*Iridopsis fragilaria*). Common Angle (*Macaria aemulataria*). Yellow-lined Thorn (*Metanema inatomaria*). Darwin's Green (*Nemoria darwiniata*). Brown-lined Looper (*Neolcicis californiaria*). Bruce Spanworm (*Operophtera bruceata*). Morrison's Pero (*Pero morrisonaria*, Canada). *Pero radiosaria*. Walnut Spanworm (*Phigalia plumogeraria*). Straight-line Plagodis (*Plagodis phlogosaria*). American Barred Umber (*Plagodis pulveraria*). George's Carpet (*Plemyria georgii*). Friendly Probole (*Probole amicarica*). *Prochoerodes forficaria*. *Protitame subalbaria*. Scallop Shell (*Rheumaptera undulata*). Brown-tipped Thorn (*Selenia alciphearia*). Lorquin's Angle (*Macaria lorquinaria*). *Spodolepis substriataria*. Falcate Synaxis (*Tetracis cervinaria*). October Thorn (*Tetracis jubararia*). Wavy-lined Emerald (*Synchlora aerata*). Pearsall's Carpet (*Venusia pearsalli*, Canada).

Hepialidae: Four-spotted Ghost Moth (*Sthenopsis purpurascens*). Larvae are root borers.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Lappet Moth (*Phyllodesma americana*).

Noctuidae: *Abagrotis erratica*. *Abagrotis reedi*. *Abagrotis variata*. Charred Dagger (*Acronicta brumosa*). Fragile Dagger (*Acronicta fragilis*). Henry's Marsh Moth (*Acronicta insularis*). *Adelphagrotis indeterminata*. Copper Underwing (*Amphipyra pyramidoides*). *Andropolia theodori*. Rusty Shoulder Knot (*Aseptis binotata*). Large Looper (*Autographa ampla*). *Brachylomia algens*. *Brachylomia rectifascia*. *Catocala californica*. *Catocala faustina* (especially low species). *Catocala faustina allusa*. *Catocala hermia*. Irene Underwing (*Catocala irene*). Jessica Underwing (*Catocala jessica*). *Catocala junctura*. Semirelict Underwing (*Catocala semirelictata*). Northern Arches (*Drasteria hudsonica*). Western Woodling (*Egira rubrica*). Simplex Cutworm (*Egira simplex*). Pale Enargia (*Enargia decolor*). Smoked Sallow (*Enargia infumata*). American Angle Shades (*Euplexia benesimilis*). Great Brocade (*Eurois occulta*). Garden Cutworm (*Fishia discors*). Soothsayer (*Graphiphora augur*). *Hillia maida*. *Homoglaea carbonaria*. *Homoglaea dives*. Cuneate Arches (*Lacinipolia cuneata*). *Lacinipolia pensilis*. American Brindle (*Lithomoia germana*). False Pinion (*Litholomia napaea*). *Lithophane amanda*. Large Gray Pinion (*Lithophane georgii*). Nameless Pinion (*Lithophane innominata*). Wanton Pinion (*Lithophane petulca*). *Melanchra pulverulenta*. Speckled Green Cutworm (*Orthosia hibisci*). Protector Quaker (*Orthosia praeses*). *Papestra cristifera*. *Parastichtis suspecta*. Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*). Polia Moth (*Polia piniae*) (PNW Moths). Purple Arches (*Polia purpurissata*). Purple-lined Sallow (*Pyrrhia experimens*). The Herald (*Scoliopteryx libatrix*). The Redwing (*Sideridis rosea*). Otter Spiramater (*Spiramater lutra*). Bicolored Sallow (*Sunira bicolorago*). Inscribed Looper (*Syngrapha epigaea*). Mountain Beauty (*Syngrapha ignea*). *Trichordestra tacoma*. *Ufeus faunus*. Rosy Dart (*Xestia oblata*). Gray Swordgrass Moth (*Xylena cineritia*). Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). American Swordgrass Moth (*Xylena nupera*). Western Swordgrass Moth (*Xylena thoracia*). Lunate Zale (*Zale lunata*). Colorful Zale (*Zale minerea*). *Zale rubi*. V-lined Quaker (*Zosteropoda hirtipes*).

In Canada, willows serve as larval hosts for the noctuids *Lithophane pertorrida*, *Papestra invalida*, and *Platypolia loda*, *Protolampra rufipectus*, and Battered Sallow (*Sunira verberata*), likely here, too.

Nolidae: Ceanothus Nola (*Nola minna*). *Nola involuta*. Grey Midget (*Nycteola cinereana*). *Nycteola columbiana*.

Notodontidae: Apical Prominent (*Clostera apicalis*). *Clostera brucei*. Angle-lined Prominent (*Clostera inclusa*). Banded Pebble Moth (*Gluphisia severa*, Canada). Pale Prominent (*Oligocentria pallida* [Haggard]). Black-rimmed Prominent (*Pheosia rimosa* [Haggard]). Red-humped Caterpillar (*Schizura concinna* [Haggard]).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Nevada Buckmoth (*Hemileuca nevadensis*). Both of these are conspicuous day-flying species.

Sphingidae: the western One-eyed Sphinx (*Smerinthus ophthalmica*) is “a Salicaceae specialist”. Big Poplar Sphinx (*Pachysphinx occidentalis*).

Tineidae: *Nemapogon defectella*. Associated with fungi that grow in association with willows.

Tortricidae: *Acleris hastiana*. Marbled Dog’s-tooth Tortrix (*Acleris maccana*, Canada). *Acleris maximana*. *Acleris nigrolinea*. *Acleris senescens* – “common on willow in the spring” (Powell & Opler). Small Festooned Roller (*Ancylis diminutana*). *Anopina triangulana* – wild host unknown but develops on willow leaves in California lab rearing. Allen’s Tortrix (*Aphelia alleniana*, Canada). Sallow Apotomis (*Apotomis capreana*). *Apotomis infida*. Green Aspen Leafroller (*Apotomis removana*). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). Orange Tortrix (*Argyrotaenia franciscana*). Large Aspen Tortrix (*Choristoneura conflictana*). Oblique-banded Leafroller (*Choristoneura rosaceana*, California). White-triangle Tortrix (*Clepsis persicana*). Willow Gall Moth (*Cydia gallaesaliciana*) -- feeds on willow stem galls (BugGuide). *Epinotia castaneana* (Canada). *Epinotia columbia* (California). Variable Oak Leafroller (*Epinotia emarginana*). Poplar Branchlet Borer (*Epinotia nisella*). *Epinotia plumbolineana*. *Epinotia rectiplicana* (California). *Epinotia seorsa* (California). Birch Leafroller (*Epinotia solandriana*). Spiraea Leaf-tier (*Evora hemidesma*, Canada). *Gypsonoma salicicolana* (webbed leaves). *Oreana unicolorella* (BugGuide). Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Pandemis limitata*). Pandemis Leafroller (*Pandemis pyrusana*, California). Poplar Leafroller (*Pseudosciaphila duplex*). Black-and-Gray Banded Leafroller (*Syndemis afflictana*). All of these from the Tortricidae Foodplant Database.

Ypsolophidae: *Ypsolopha flavistrigella* (E. H. Strickland Museum).

Salix bebbiana. **Gray Willow**. Salicaceae. April – June.

Larval host for Dreamy Duskywing and for the Mourning Cloak.

Arctiidae: Ruby Tiger Moth (*Phragmatobia fuliginosa*, Finland), a moth species also known from California.

Geometridae: Pale Beauty (*Campaea perlata*). Day Emerald (*Mesothea incertata*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: Alder Dagger (*Acronicta dactylina*). Large Looper (*Autographa ampla*). American Brindle (*Lithomoia germana*). *Lithophane amanda*. The Herald (*Scoliopteryx libatrix*). Otter Spiramater (*Spiramater lutra*). Rosy Dart (*Xestia oblata*). Colorful Zale (*Zale minerea*).

Notodontidae: Angle-lined Prominent (*Clostera inclusa*). Gray Kitten (*Furcula cinerea*).

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*, Gracillariidae), Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Oecophoridae: *Agonopterix argillacea*.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*).

Sphingidae: One-eyed Sphinx (*Smerinthus cerisyi* – likely also *Smerinthus ophthalmica*, a recently perceived “ringer” species commonly confused with it, native to the Pacific Northwest and California,).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). *Gypsonoma salicicolana*.

Salix boothii. **Booth’s Willow**. Salicaceae. Nectar plant for Green Comma. April – July.

Listed as a hostplant for the Eastern Tiger Swallowtail, likely for Western Tiger Swallowtail. A hostplant for the Mourning Cloak [web site of Mountain Plants of the Western Cascades, 15 July 2013].

Salix brachycarpa var. *brachycarpa*. **Short-fruited Willow**. Salicaceae. June – August.

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*).

Salix drummondiana. **Drummond’s Willow**. Salicaceae. April – July.

Foodplant for Weidemeyer’s Admiral.

Salix eastwoodiae. **Sierra Willow**. Salicaceae. Nectar plant for Green Comma. May – July.

Moldenke found the Mourning Cloak associated with Sierra Willow.

Noctuidae: *Homoglaea carbonaria*.

Salix exigua. **Narrowleaf Willow**. Salicaceae. A nectar or sweet sap source (listed as an “adult resource”) for Common Ringlet and Boisduval’s Blue (Austins). Scott found Mourning Cloak and Boisduval’s Blue at its flowers. Var. *exigua*. March – June.

Var. *hindsiana*. April – May.

Narrowleaf Willow is a larval foodplant for Western Tiger Swallowtail, Viceroy, Mourning Cloak, Lorquin’s Admiral, Weidemeyer’s Admiral, Sylvan Hairstreak and Dreamy Duskywing (Todd Stout). Shapiro notes that the segregate known as the Tailless Sylvan Hairstreak commonly uses Narrowleaf Willow (recorded specifically for var. *hindsiana* in the Caterpillar Hostplants Database). Deutsch and Levinson find it preferred by the Mourning Cloak in the San Francisco Bay area.

Gelechiidae: *Anacamptis sacramenta* [recorded for var. *hindsiana*]. *Aristotelia fungivorella*.

Gracillariidae: Poplar Caloptilia (*Caloptilia stigmatella*). Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Western Sheepmoth (*Hemileuca eglanterina*). Nevada Buckmoth (*Hemileuca nevadensis*). Ceanothus Silkmoth (*Hyalophora euryalus*). Mendocino Saturnia Moth (*Saturnia mendocino*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Salix exigua var. *hindsiana*. Sandbar Willow. Salicaceae. February – March.

Hostplant for Sylvan Hairstreak.

Gelechiidae: *Anacamptis sacramenta*.

Salix geyeriana. **Geyer's Willow**. Nectar for Green Comma. April - June.

Salix gooddingii. **Goodding's Black Willow**. Salicaceae. Nectar source. March – April.

Foodplant for Viceroy in Arizona (Jim Brock). Fred Heath reports it a Mourning Cloak foodplant in Arizona, very likely here as well. Listed as a Mourning Cloak hostplant under the synonym *Salix nigra*.

Noctuidae: Jessica's Underwing (*Catocala jessica*). Nice photograph of a couple of adult Irene Underwing (*Catocala irene*) in a Black Willow area on the Natural History of Orange County web site.

Its caterpillars eat *Populus* and *Salix* species, Goodding's Black Willow a likely hostplant.

Most likely a hostplant for yet other willow-feeding butterflies and moths.

Salix hookeriana. **Coastal Willow**. Salicaceae. Nectar for Mourning Cloak, Painted Lady. Bumblebees. April – June.

Foodplant for Western Tiger Swallowtail, Lorquin's Admiral [Haggard], Mourning Cloak [Haggard]. A captive Green Comma oviposited on it.

Arctiidae. Silver-spotted Tiger Moth (*Lophocampa argentata*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Geometridae. Linden Looper (*Erannis tiliaria*), Johnson's Euchlaena (*Euchlaena johnsonaria*), Emasculated Grey (*Iridopsis emasculatum*), October Thorn (*Tetraxis jubararia*), Western Red Twin-spot (*Xanthorhoe defensaria*).

Lasiocampidae. Lappet Moth (*Phyllodesma americana*).

Lymantriidae. Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: *Acerra normalis*. Gray Dagger (*Acrionicta grisea*). *Egira hiemalis*. Three-spotted Sallow (*Eupsilia tristigmata*). Garden Cutworm (*Fishia discors*). *Homoglaea dives*. False Pinion (*Litholomia napaea*). Large Gray Pinion (*Lithophane georgii*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). *Pseudorthodes irrorata*. Gray Sword-grass Moth (*Xylena cineritia*). American Sword-grass Moth (*Xylena nupera*). Moon Umber (*Zale lunata* [Haggard]).

Notodontidae: *Clostera brucei* [Haggard]. Zigzag Furcula (*Furcula scolopendrina* [Haggard]). Red-washed Prominent (*Oligocentria semirufescens*). Unicorn Caterpillar (*Schizura unicornis*).

Tortricidae: *Acleris hastiana*. *Acleris senescens*.

Salix jepsonii. **Jepson's Willow**. Salicaceae. June.

A favored larval plant for the Mourning Cloak in the Trinity Alps area (Shapiro).

Salix laevigata. **Red Willow**. Salicaceae. December – June.

Monroes: likely foodplant for Lorquin's Admiral.

Geometridae: Dark-bordered Granite (*Digrammia neptaria*). *Tetracis moresiani* (accepted by captive larvae).

Sesiidae: Willow Stem Borer (*Synanthedon albicornis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana* complex). Hasty Acleris (*Acleris hastiana*). *Acleris senescens*. *Epinotia* sp.

Salix lasiandra var. *caudata* was *Salix lucida* subsp. *caudata*. **Tail-leaf Willow**. Salicaceae. May – June.

Salix lasiandra var. *lasiandra* was *Salix lucida* subsp. *lasiandra*. **Pacific Willow**. **Shining Willow**. Salicaceae. Nectar: Sara Orangetip, Milbert's Tortoiseshell, Mourning Cloak, Brown Elfin, others. March – June.

Larval host for Mourning Cloak in Suisun Marsh "occasionally abundant" (Shapiro, 1974). Foodplant for Western Tiger Swallowtail, Lorquin's Admiral (Ventura County, 1983 Season Summary).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). *Phyllonorycter apicinigrella*.

Lymantriidae: White Satin (*Leucoma salicis*).

Noctuidae: The Herald (*Scoliopteryx libatrix*). Moon Umber (*Zale lunata* [Haggard]).

Notodontidae: *Clostera brucei* [Haggard]. Zigzag Furcula (*Furcula scolopendrina*). Black-rimmed Prominent (*Pheosia rimosa*). Unicorn Caterpillar (*Schizura unicornis*).

Saturniidae: Nevada Buckmoth (*Hemileuca nevadensis*).

Sesiidae: Willow Stem Borer (*Synanthedon albicornis*).

Sphingidae: David Nunnallee found a late instar One-eyed Sphinx (“*Smerinthus cerisyi*”—likely *Smerinthus ophthalmica*) on it (NorWestLeps #3175).

Salix lasiolepis. **Arroyo Willow**. Salicaceae. Nectar: Western Tiger Swallowtail, Monarch, Mourning Cloak (fq), Satyr Comma, Desert Elfin, Thicket Hairstreak, *Annaphila baueri* (Noctuidae) and *Epirrhoe plebeculata* (Geometridae) (Marc Kummel) day-flying moths. January – June.

Paul Johnson saw a Red Admiral feeding on its sap at a wound. Peter Bryant photographed a Lorquin’s Admiral.

Arroyo Willow a foodplant for Lorquin’s Admiral (noted specifically in Ventura County in 1983 Season Summary), Western Tiger Swallowtail, and the Sylvan Hairstreak. Helen Wood reports Mourning Cloak. A primary Lorquin’s Admiral hostplant in southern California (DesertLeps #9695).

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*) (Tony Iwane photo, 1976 Season Summary reports rearing from larvae found on this at the Santa Barbara Natural History Museum).

Batrachedridae: *Batrachedra salicipomonella*. *Batrachedra striolata*.

Geometridae: Dark-bordered Granite (*Digrammia neptaria*). *Hydriomena quinquefasciata*.

Gracillariidae: *Caloptilia palustriella*. *Phyllonorycter apicinigrella*. Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Heliozelidae: *Coptodisca saliciella*.

Lymantriidae: Western Tussock Moth (*Orgyia vetusta*) caterpillar on Arroyo Willow (Aaron Schusteff photograph).

Noctuidae: *Homoglaea dives*. Moon Umber (*Zale lunata*), found on the Google Corporation Mountain View campus by Shani Kleinhaus and Linda Ruthruff. They showed it to me.

Notodontidae: Apical Prominent (*Clostera apicalis*).

Oecophoridae: *Agonopterix argillacea*.

Saturniidae: Nevada Buckmoth (*Hemileuca nevadensis*).

Sphingidae: *Smerinthus ophthalmica* Boisduval, 1855 (Sphingidae – a Salicaceae specialist, ringer for the One-eyed Sphinx, *Smerinthus cerisyi*—which, properly, in the West, is known only from British Columbia).

Tortricidae: *Acleris hastiana*. *Acleris senescens*. Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). *Epinotia columbia*. *Epinotia keiferana*. *Gypsonoma salicicolana*. Pandemis Leafroller (*Pandemis pyrusana*).

Salix lucida ssp. *lasiandra* is now *Salix lasiandra* var. *lasiandra*. **Pacific Willow**. **Shining Willow**.

Salix lutea. **Yellow Willow**. Salicaceae. March – May.

Foodplant for Lorquin's Admiral and Mourning Cloak. Lorquin's Admiral oviposited on it in San Bernardino County (Emmel, Shields, Breedlove).

Gracillariidae: Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Salix melanopsis. **Dusky Willow**. Salicaceae. May – July.

Hostplant for Lorquin's Admiral.

Salix orestera. **Gray-leafed Sierra Willow**. Salicaceae. June – July.

Moldenke found the Mourning Cloak associated with Gray-leafed Sierra Willow.

Salix planifolia. **Tea-leafed Willow**. Salicaceae. Nectar: Western White (Scott). May – June.

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*).

Salix prolixa. **MacKenzie's Willow**. Salicaceae. Nectar: Western Pine Elfin (fq). March – June.

[http://images.peabody.yale.edu/lepsoc/jls/1950s/1959/1959-13\(2\)70-Hardy.pdf](http://images.peabody.yale.edu/lepsoc/jls/1950s/1959/1959-13(2)70-Hardy.pdf)

Salix scouleriana. **Scouler's Willow**. Salicaceae. Nectar: Western Pine Elfin (Scott). February – June.

A foodplant for the Western Tiger Swallowtail and Mourning Cloak; Nunnallee rears Green Comma on it. James and Nunnallee got oviposition on it by a captive Dreamy Duskywing.

Arctiidae. Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Geometridae. Johnson's Euchlaena (*Euchlaena johnsonaria*). Emasculated Grey (*Iridopsis emasculatum*). October Thorn (*Tetracis jubararia*).

Gracillariidae. Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Lasiocampidae. Lappet Moth (*Phyllodesma americana*).

Lymantriidae. the Vaporier (*Orgyia antiqua*). Douglas-fir Tussock Moth (*Orgyia pseudotsugata*).

Noctuidae. Luteous Dart (*Abagrotis trigona*). *Acerra normalis*. Gray Dagger (*Acronicta grisea*). Funerary Dagger (*Acronicta funeralis*). Cottonwood Dagger (*Acronicta lepusculina*). *Agrochola pulchella*. *Egira hiemalis*. Three-spotted Sallow (*Eupsilia tristigmata*). *Homoglaea dives*. Large Gray Pinion (*Lithophane georgii*). Speckled Green Cutworm (*Orthosia hibisci*). *Orthosia pacifica*. Variegated Cutworm (*Peridroma saucia*). *Pseudorthodes irrorata*. The Herald (*Scoliopteryx libatrix*). Gray Swordgrass Moth (*Xylena cineritia*). American Swordgrass Moth (*Xylena nupera*).

Notodontidae. Zigzag Kitten (*Furcula scolopendrina*), Red-washed Prominent (*Oligocentria semirufescens*), Black-rimmed Prominent (*Pheosia rimosa*), and the Unicorn Caterpillar (*Schizura unicornis*).

Salix sitchensis (this designation now includes *Salix coulteri*). **Sitka Willow**. Salicaceae. Nectar: Brown Elfin and Echo Azure (Tanya Harvey). March.

Hostplant for Mourning Cloak. James and Nunnallee found eggs of the Dreamy Duskywing on a leaf of this species. Nunnallee collected a second instar Green Comma caterpillar from it, and later found eggs and observed oviposition.

Gracillariidae: *Phyllonorycter apicinigrella*.

Tortricidae: *Acleris hastiana*. *Epinotia columbia*.

Saltugilia caruifolia was *Gilia caruifolia*. **Caraway-leaved Gilia**. Polemoniaceae. Nectar: *Adela* sp. May - August.

Saltugilia splendens was *Gilia splendens*. **Splendid Woodland-Gilia**. Polemoniaceae. Nectar: Long-tongued moths. May - August.

Noctuidae: Darker-spotted Straw Moth (*Heliothis phloxiphaga*).

Salvia spp. **Sages**. Lamiaceae. Nectar: Pale Swallowtail, Clouded Sulphur, American Painted Lady, Monarch, Common Buckeye, Red Admiral, Silvery Blue, Silver-spotted Skipper, White-lined Sphinx. Butterworth adds: Mournful Duskywing, Callippe Fritillary, Coronis Fritillary, West Coast Lady, California Dogface, Western Tiger Swallowtail. In Clark County, Nevada, California Patch, Variable Checkerspot. Shapiro says most *Salvias* not built for butterflies; moths are more likely lepidopteran visitors, if any. He finds the genus of little value to butterflies in northern California. The genus seems to be of more interest to butterflies in southern California.

Salvia mellifera is a Gray Hairstreak hostplant (HOSTS). “*Salvia*” is a Painted Lady hostplant (HOSTS).

Arctiidae: Virginian Tiger Moth or Yellow Woollybear (*Spilosoma virginica*) (HOSTS).

Cosmopterigidae: *Anoncia conia* (HOSTS).

Noctuidae: Caramel Looper (*Autographa corusca*) (HOSTS).

Salvia apiana. **White Sage**. Lamiaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Callippe Fritillary, Variable Checkerspot, Rural Skipper (Marc Kummel). April – August. The Grants (1964) noted much less insect activity on its flowers than on Black Sage (see). Anna’s Hummingbird visits it near Claremont with Costa Hummingbird reported from desert and drier habitats (Grants, 1964).

Marc Kummel photographed a Variable Checkerspot (San Marcos Pass, 15 June 2015) at nectar with abdomen bending down – his comment “I assume it is just folded under. It “surely” couldn’t be ovipositing!” However, it might have been; *Trichostema lanatum* observed previously to support larvae (Emmel & Emmel, p. 33). Another photograph of his, 27 June 2017, shows a mature larva which seems to be Gray Hairstreak on White Sage flowers.

Bucculatricidae: Sage Leafminer (*Bucculatrix taeniola*).

Geometridae: *Stamnodes affiliata*.

Noctuidae: *Abagrotis orbis* (now includes *Abagrotis barnesii*). *Euxoa atomaris* (Powell, 2004).

Salvia ‘**Bee’s Bliss**’ (*S. clevelandii* X *S. sonomensis*). Lamiaceae. Pipevine Swallowtail.

Salvia brandegei. **Santa Rosa Island Sage**. Lamiaceae. Nectar: Western Tiger Swallowtail, California Dogface, Gulf Fritillary, Checkerspots, Hairstreaks, Mournful Duskywing and Fiery Skipper, White-lined Sphinx. Attested one of the more attractive shrubby sage species for adult butterflies (California Gardens). February – August.

Salvia carduacea. **Thistle Sage**. Lamiaceae. Theodore Payne Butterfly Mix. Hartmut Wisch reports seeing a beautiful diurnal moth on it cf. *Schinia suetus* (Noctuidae), White-lined Sphinx. March – May.

Salvia ‘**Carl Nielson**’. Lamiaceae.

Salvia x ‘**Celestial Blue**’. Lamiaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Painted Lady.

Salvia clevelandii. **Cleveland’s Sage**. Lamiaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Pipevine Swallowtail, Anise Swallowtail, Orange Sulphur, Monarch, Common Checkerspot, Gulf Fritillary, American Lady, Silvery Blue, Mournful Duskywing, Fiery Skipper, Orange Skipperling, Western Snowberry Clearwing, White-lined Sphinx. Important butterfly plant in southern California. In Shapiro’s experience, cultivated in northern California, gets nothing. April – July.

‘Deer Spring Silver’ is a butterfly favorite at U. C. Riverside Botanic Gardens.

Salvia clevelandii ‘**Alpine**’. Lamiaceae. Las Pilitas Nursery photographs show Pale Swallowtail, California Dogface, White-lined Sphinx, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae) and Costa’s Hummingbird at nectar on this selection. They find it very hardy, and more garden tolerant than other selections, the “longest flowering sage we grow”. Selected from near the town of Alpine in San Diego County.

Salvia clevelandii ‘**Winifred Gilman**’. Lamiaceae. Nectar: Dogface, White-lined Sphinx, Western Snowberry Clearwing.

Salvia columbariae. **Chia**. Lamiaceae. Nectar: Phyllis’s Indra Swallowtail, Large Marble (Mount Diablo Interpretive Association), Sara Orangetip (<https://www.inaturalist.org/observations/12067195>). Painted Lady, Common Buckeye, Variable Checkerspot (Horner, Dagmar Collins), Quino Checkerspot (fq) – a segregate of Edith’s Checkerspot, Gray Hairstreak, Acmon Blue (Lynn Watson), Propertius Duskywing, Clark’s Day Sphinx (fq). March – June.

Pyralidae: *Salvia* Snout Moth (*Pyrausta dapalis*); adults, found on flowers in the daytime, underwings mostly red.

Salvia dorrii. **Desert Sage**. Lamiaceae. Nectar: Pipevine Swallowtail, Desert Black Swallowtail, Sleepy Orange, Becker's White, Checkered White, Painted Lady, Coronis Fritillary (fq), Silvery Blue, Western Branded Skipper (fq), Juba Skipper, and White-lined Sphinx. April – July.

Tortricidae: *Sparganothis tunicana* (Nevada).

Salvia funerea. **Death Valley Sage**. Lamiaceae. Nectar: Painted Lady (great photographs by David Schwaegler taken during the 2005 migration). March – June.

Salvia x '**Gracias**' = 'Bee's Bliss'. Lamiaceae. Flowers gets some butterflies, including West Coast Lady.

Probably *S. clevelandii* x *S. sonomensis*.

Salvia greatae. **Orocopia Sage**. Lamiaceae. Calflora says butterflies and hummingbirds visit its flowers. March - April.

Salvia leucophylla. **Purple Sage**. Lamiaceae. Nectar: Western Tiger Swallowtail (fq), Anise Swallowtail, California Dogface (Lynn Watson), Painted Lady, Monarch, Hedgerow Hairstreak, Northern White-Skipper, Mournful Duskywing, Umber Skipper. April – June.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Caramel Looper (*Autographa corusca*), an 'eye candy' noctuid moth. Stephen's Gem (*Megalographa biloba*), another attractive noctuid.

Salvia mellifera. **Black Sage**. Lamiaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail. Cabbage White (rare), Sara Orangetip. Monarch, Variable Checkerspot (occasional), Gabb's Checkerspot (fq), Common Buckeye, West Coast Lady (occasional), Painted Lady, American Lady, Lorquin's Admiral, Mylitta Crescent. Mormon Metalmark (occasional). Bramble Green Hairstreak, Hedgerow Hairstreak, Acmon Blue, Silvery Blue. Funereal Duskywing, Mournful Duskywing, Northern White-Skipper, Harbison's Dun Skipper, Western Branded Skipper (J. Maughn). Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), White-lined Sphinx, Alfalfa Semilooper (rare). "We have seen Bramble Hairstreak, Fiery Skipper, Funereal Duskywing, Mournful Duskywing, Gulf Fritillary, Painted Lady and Sara Orangetip nectaring on Black Sage." (Plants of the San Gabriel Mountains). Leslie Saul: "very popular with many species" of butterflies. Alfalfa Looper (*Autographa californica*). Hummingbirds may visit also. March – June. Occasional and rare ratings from: Grant, Karen A., and Verne Grant. 1964. "Mechanical Isolation of *Salvia apiana* and *Salvia mellifera* (Labiatae)." *Evolution* 18 (2): 196-212. doi:10.2307/2406392. They thought Lepidoptera "somewhat effective" as pollinators; they found Anna's Hummingbird a frequent flower visitor and considered it probably effective at pollination.

According to HOSTS, Black Sage is a caterpillar plant for the polyphagus Gray Hairstreak.

Geometridae: *Pherne subpunctata*. *Stamnodes affiliata*.

Salvia munzii. **Munz Sage**. Lamiaceae. January – May.

Salvia pachyphylla. **Rose Sage**. Lamiaceae. Nectar: Two-tailed Swallowtail, Pale Swallowtail, Western Tiger Swallowtail, and Variable Checkerspot. February – October.

Salvia '**Pozo Blue**'. (*S. clevelandii* x *leucophylla*). Lamiaceae. Las Pilitas Nursery: "THE NATIVE BUTTERFLY BUSH! Attracts about 30 species". Western Tiger Swallowtail (fq), California Dogface, Painted Lady, American Lady, Common Buckeye, Callippe Fritillary, hairstreaks, skippers, Mournful

Duskywing, White-lined Sphinx, Western Snowberry Clearwing (fq) (Las Pilitas Nursery).
Hummingbirds.

Salvia 'Poza Blue' said to be an F1 hybrid, originating as a chance seedling at Las Pilitas Nursery in 1989.

Salvia sonomensis. **Sonoma Sage**. Lamiaceae. Nectar – *The Butterfly Gardener's Guide*. Painted Lady. Shapiro finds it unvisited in parts of its native range he studies, even where butterfly nectar plants are scarce – though it gets loads of bumblebees. March – July.

Salvia spathacea. **Hummingbird Sage**. Lamiaceae. Nectar: Swallowtails. Western Tiger Swallowtail (Lotusland). White-lined Sphinx. In his Davis garden and in a northern California population he has studied for 35 years, Shapiro has not seen a butterfly visit it – likely another case of butterfly “regional cuisine”. Great hummingbird plant. March – May.

Pterophoridae: *Anstenoptilia marmarodactyla*.

Pyralidae: Salvia Snout Moth (*Pyrausta dapalis*).

Salvia vaseyi (*Audibertia vaseyi*). **Vasey's Sage**. Lamiaceae. Calflora reports butterflies and hummingbirds visit its flowers. April – June.

Salvia 'Vicki Romero' (*S. apiana* x *S. leucophylla* or *clevelandii*). Nectar: butterflies including Monarch.

Sambucus sp. **Elderberry**. Adoxaceae. Nectar: Thicket Hairstreak.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Geometridae: Linden Looper (*Erannis tiliaria*). White-spotted Pug (*Eupithecia tripunctaria*). Emasculated Grey (*Iridopsis emasculatum*).

Noctuidae: *Trichordestra tacoma*.

Sambucus mexicana is now *Sambucus nigra* ssp. *caerulea*. **Mexican Elderberry**.

Sambucus nigra ssp. *caerulea* was *Sambucus mexicana*. **Mexican Elderberry**. Adoxaceae. Nectar: Anise Swallowtail, Variable Checkerspot. Northern White-Skipper, Great Purple Hairstreak in southernmost Nevada (Austins). John Kehoe photographed a Fiery Skipper. Shapiro has never seen any nectaring visits. Shields finds them very rare, only at times when other plants are not available. Mexican Elderberry seems to be a rather secondary butterfly nectar source. Scott says *Sambucus* flowers do not offer nectar! March - September.

Marc Kummel photograph (15 February 2017) documents a Brown Elfin ovipositing on its flower buds.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: *Eupithecia maestosa*. *Hesperumia latipennis*. October Thorn (*Tetracis jubararia*).

Noctuidae: *Acerra normalis*. *Admetovis oxymorus*. *Drasteria divergens*. *Drasteria ochracea*. February Miller (*Feralia februalis*). Garden Cutworm (*Fishia discors*). Zebra Caterpillar (*Melanchra picta*).

Speckled Green Cutworm (*Orthosia hibisci*), Protector Quaker (*Orthosia praeses*). *Paradiarsia littoralis*. *Trichordestra tacoma*. Smith's Dart (*Xestia smithii*). Gray Swordgrass Moth (*Xylena cineritia*). Elderberry Moth (*Zothea tranquilla*) a nocturnal moth with green and white wings -- its larvae are a "very colorful" yellow and black and make tightly closed leaf nests. "If the larvae are present at all, they are usually abundant on a single plant" (McFarland, 1965).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Sambucus racemosa. **Red Elderberry**. Adoxaceae. Nectar: Western Pine Elfin, Echo Azure. Shapiro has never seen any butterfly visits to its flowers. May - July.

Arctiidae: Yellow Woolly Bear (*Spilosoma virginica*).

Geometridae: Pale Beauty (*Campaea perlata*). Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: *Drasteria ochracea* -- a diurnal flower-visiting species with orange underwings. Elderberry Moth (*Zothea tranquilla*).

Sanicula arctopoides. **Footsteps-of-spring**. Apiaceae. Saniculeae. Nectar: Edith's Checkerspot, Brown Elfin, Moss's Elfin, Acmon Blue, Bramble Green Hairstreak. February - May.

Oecophoridae: *Agonopterix oregonensis*.

Sanicula arguta. **Sharp-Toothed Snakeroot**. Apiaceae. Saniculeae. Nectar: females of Catalina Orangetip, a segregate of the Desert Orangetip, on Santa Catalina Island (Gall). March – April.

Sanicula bipinnatifida. **Purple Sanicle**. Apiaceae. Saniculeae. Nectar: Pipevine Swallowtail (Bert Johnson); Bay Checkerspot (a segregate of Edith's Checkerspot), California Ringlet (J. Maughn), Acmon Blue (David H. Bartholomew), *Schinia* sp. (Moldenke); cf. *Scopula sideraria* (Geometridae) (Aaron Schusteff BugGuide photograph). March - May.

Oecophoridae: *Agonopterix oregonensis*.

Sanicula crassicaulis. **Pacific Sanicle**. Apiaceae. Saniculeae. *Adela* sp. associated with its flowers (Moldenke). March – May.

Oecophoridae: *Agonopterix oregonensis*.

Prodoxidae: *Greya reticulata*, oviposition seen on Albany Hill (Powell & Opler).

Sanicula graveolens. **Sierra Sanicle**. Apiaceae. Saniculeae. Nectar: Juniper Hairstreak, Green Hairstreak (Mountain Plants of the Western Cascades photographs). March – May.

Epermeniidae: *Epermenia californica* may be abundant on it (Powell & Opler).

Oecophoridae: *Agonopterix oregonensis*.

Sanicula laciniata. **Coast Sanicle**. Apiaceae. Saniculeae. February – May.

Oecophoridae: *Agonopterix oregonensis*.

Sanicula tuberosa. **Turkey Pea**. Apiaceae. Saniculeae. March – July.

Oecophoridae: *Agonopterix oregonensis*.

Sap. Sapsuckers (*Sphyrapicus* spp., Picidae, Class Aves) are woodpeckers that peck lines of holes in many woody plant species, causing sap to flow. The sap has some sugar – boiled down it makes maple syrup. Many butterflies and moths, especially woodland species, along with other insects, come to eat it. Other damages, such as breakage caused by high winds make sap available to Lepidoptera.

Some butterflies drawn to sap flows are Viceroy, Painted Lady, Lorquin's Admiral, Red Admiral, Weidemeyer's Admiral, Rustic Anglewing [Green Comma], Oreas Comma, Satyr Anglewing [Satyr Comma], California Sister, California Tortoiseshell, Milbert's Tortoiseshell, Mourning Cloak (especially to willow, cottonwood and oak sap), Common Wood-Nymph (especially to willow and poplar sap) (fq), and Hackberry Emperor. Scott notes the typical approach to feed upon sap is from above, less risky for being stuck!

Sapsucker wells important for Rufous Hummingbird (Wechsler, NorWestLeps #4732) and Anna's Hummingbird.

Noctuidae: Obelisk Dart (*Euxoa obeliscoides*) comes to sugar baits (PNW Moths), seems a likely sap feeder.

Nickell, Walter P. 1965. "Birds and Insects Feed at Sapsucker Trees." *Bird-Banding* 36 (3): 192-93. doi:10.2307/4511188

Sarcobatus vermiculatus. **Greasewood**. Chenopodiaceae.

Listed as a larval host for California Tortoiseshell (HOSTS).

Gelechiidae: Goosefoot Groundling (*Scrobipalpa atriplicella*), an introduced moth (HOSTS).

Pyralidae: *Loxostege lepidalis* (Powell & Opler, p. 175-176).

Noctuidae: *Abagrotis discoidalis*. Red Cutworm (*Abagrotis placida*).

Tortricidae: Snakeweed Borer (*Eucosma ridingsana*).

Sarcodes sanguinea. **Snow Plant**. Ericaceae. Nectar: Anise Swallowtail (<https://www.inaturalist.org/observations/12739413>). Pale Swallowtail (Ron Wolf photograph, 10 June 2007, Tahoe National Forest, near Calpine, Sierra County, CA), others elsewhere. Mostly get hummingbirds, bees. May – July.

Sarcostemma cynanchoides ssp. *hartwegii* is now *Funastrum cynanchoides* ssp. *hartwegii*. **Climbing Milkweed**.

Sarcostemma hirtellum is now *Funastrum hirtellum*. **Smooth Milkvine**. **Trailing Townula**.

Satureja douglasii is now *Clinopodium douglasii*. **Yerba Buena**.

Saxifraga californica is now *Micranthes californica*. **California Saxifrage.**

Scat. Many butterflies feed on fresh, moist mammal manure (feces) and bird dung. Some sap and scat feeders, such as the Green Comma, are less likely seen on flowers. Pipevine Swallowtail (especially fresh deer dung). California Dogface (fresh horse manure), Sleepy Orange (deer dung, manure piles). Viceroy [manure – Michigan], Pearl Crescent (deer dung, manure piles), Bordered Patch, Red Admiral, Atlantis Fritillary [Michigan to manure], Lorquin's Admiral, Weidemeyer's Admiral (coyote scat, likely others), California Sister, Green Comma, Hoary Comma (bear scat, Ameet), Oreas Comma, Satyr Comma (coyote scat), California Tortoiseshell (coyote scat), Milbert's Tortoiseshell, Mourning Cloak (horse manure), Common Wood-Nymph, and Hackberry Emperor. Coral Hairstreak [taken once on manure in Michigan], Eastern-tailed Blue (coyote scat) (Bryan E. Reynolds, BugGuide). Northern Cloudywing [manure – Michigan], Small Checkered-Skipper, Sonora Skipper, Dun Skipper (bird droppings). These observations, as almost all in this work, merely samplings!

Many moths visit feces as well.

Dried scat is mentioned as among detritus eaten by caterpillars of a common Californian moth, *Tinea niveocapitella* (Tineidae).

Schoenoplectus acutus formerly *Scirpus acutus*. **Hardstem Bulrush.** Cyperaceae.

Noctuidae: Yellow Sedge Borer (*Globia subflava*).

Schoenoplectus tabernaemontani was *Scirpus tabernaemontani*. **Softstem Bulrush.** Cyperaceae.

Noctuidae: Yellow Sedge Borer (*Globia subflava*).

Scirpus acutus is now *Schoenoplectus acutus*. **Hardstem Bulrush.**

Scirpus maritimus is now *Bolboschoenus maritimus* spp. *paludosus*. **Alkali Bulrush.**

Scirpus tabernaemontani is now *Schoenoplectus tabernaemontani*. **Softstem Bulrush.**

Scrophularia atrata. **Black-flowered Figwort.** Scrophulariaceae. Nectar: Eastern Tailed Blue, mostly other insects. April – July.

Larval host for the Variable Checkerspot.

Scrophularia californica. **California Bee Plant. California Figwort.** Scrophulariaceae. Nectar: Anna's Hummingbird. Important for bumblebees; produces much nectar. March-July.

Host plant for Variable Checkerspot, sometimes Common Buckeye. Season Summary 1949 reports a case of over 1000 Variable Checkerspot eggs on one plant!

Caterpillar forage for these moths:

Hepialidae: *Phymatopus hectoides* [aka *Paraphymatopus hectoides*].

Noctuidae: Protector Quaker (*Orthosia praeses*). *Autographa labrosa* (California Figwort the only known foodplant for it). Figwort Stem Borer (*Papaipema sauzalitae*): “On Brooks Island [San Francisco Bay] larvae were abundant in stems of *Scrophularia californica* in the spring, and adults were numerous in September” (Powell, 2005).

Pterophoridae: Snapdragon Plume Moth (*Amblyptilia pica*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*, California). *Clepsis fucana* (California). Garden Tortrix (*Clepsis peritana*). Omnivorous Leaf-tier (*Cnephasia longana*, California). *Dichrorampha radicolana*, recorded for “*Scrophularia* sp.” may apply here.

Scrophularia villosa. **Santa Catalina Figwort**. Scrophulariaceae. Eastern Tailed Blue among mostly other insects visiting the flowers. February – May.

Scutellaria galericulata. **Marsh Skullcap**. Lamiaceae. Nectar: Melissa Blue. June – September.

Scutellaria lateriflora. **Side-flowering Skullcap**. Lamiaceae. May – July.

Tortricidae: Verbena Bud Moth (*Endothenia hebesana*).

Scutellaria mexicana was *Salazaria mexicana*. **Paperbag Bush. Mexican Bladder Sage**. Lamiaceae. Nectar: Desert Black Swallowtail (David Horner) (fq). David: They “go crazy” for the flowers. Gray Hairstreak (David Horner). White-lined Sphinx (David Horner). March - June.

Sedella pumila. **Sierra Mock Stonecrop**. Crassulaceae. March – May.

This annual species is a caterpillar foodplant for Moss’s Elfin.

Sedum divergens. **Cascades Stonecrop**. Crassulaceae. July – August.
Foodplant for the Rocky Mountain Parnassian.

Sedum lanceolatum. **Spearleaf Stonecrop**. Crassulaceae. Nectar: Rocky Mountain Parnassian (fq), Western White, Cabbage White, Checkered White, Clouded Sulphur, Dainty Sulphur, Orange Sulphur, Queen Alexandra’s Sulphur, Sleepy Orange, Painted Lady, Northern Checkerspot, Callippe Fritillary (fq), Coronis Fritillary, Northwestern Fritillary, Variegated Fritillary (fq), Milbert’s Tortoiseshell, Common Ringlet (fq), Ridings’s Satyr, Chryxus Arctic, Western Pine Elfin, ‘Siva’ Juniper Hairstreak, Hedgerow Hairstreak, Thicket Hairstreak, Lilac-bordered Copper, Ruddy Copper, Boisduval’s Blue, Echo Azure, Arrowhead Blue, Melissa Blue, Reakirt’s Blue, Western Tailed Blue, Pacuvius Duskywing, Persius Duskywing (fq), Mexican Cloudywing, Common Checkered-Skipper, Nevada Skipper, Pahaska Skipper, Tawny-edged Skipper, Western Branded Skipper. Most of these from Scott, who rates it as “enormously popular”. May – August.

Foodplant for Moss’s Elfin, Variegated Fritillary, Sierra Nevada Parnassian, and Rocky Mountain Parnassian.

Considered difficult to grow, grows best in Zones 6 & 7.

Sedum laxum ssp. *heckneri*. **Heckner’s Stonecrop**. Crassulaceae. Flowers attract butterflies (Yerba Buena Nursery). May – September.

Sedum niveum. **Davidson's Stonecrop**. Crassulaceae. June – August.

Sedum obtusatum. **Sierra Stonecrop**. Crassulaceae. Nectar: Clodius Parnassian (Moldenke), Variable Checkerspot (Desolation Valley Wilderness), Moss's Elfin, Tecumseh Skipper (Moldenke). June – August.

Hostplant for Moss's Elfin.

Sedum oreganum. **Oregon Stonecrop**. Crassulaceae. Nectar: Arctic Blue, Anna's Blue. Moss's Elfin. July.

Mike Patterson saw oviposition on it by Great Arctic (NorWestLeps, message #260, 7/25/2003) – its foodplants thought to be exclusively grasses and graminoids. Sometimes Lepidoptera oviposit off the food plant but near it on some other plant or object. Hostplant for Moss's Elfin.

Sedum oregonense. **Cream Stonecrop**. Crassulaceae. Nectar: Moss's Elfin. June - August.

Foodplant for Moss's Elfin.

Sedum roseum ssp. *integrifolium* is now *Rhodiola integrifolia* ssp. *integrifolia*. **Rosy Stonecrop**.

Sedum spathulifolium. **Pacific Stonecrop**. Crassulaceae. Nectar: Painted Lady, Red Admiral, Edith's Checkerspot, Bramble Green Hairstreak, Juniper Hairstreak, Moss's Elfin, Echo Azure, Propertius Duskywing. April – August.

Larval host for Moss's Elfin and Fotis Hairstreak.

Commonly cultivated; best in Zones 4-6 (well-drained soil situation), 7 (with drainage, irrigation, shade), 14-16 (with drainage, irrigation, some shade), 17 (with drainage and irrigation, can take more sun in this zone).

Tortricidae: *Sparganothis senecionana* – reported developing in Lake County, 1980 Season Summary.

Sedum stenopetalum. **Narrowleaf Stonecrop**. Crassulaceae. Nectar: Rocky Mountain Parnassian, Variable Checkerspot, Purplish Copper, Moss's Elfin. May – August.

Foodplant for Rocky Mountain Parnassian and Moss's Elfin.

Senecio spp. **Groundsels, Ragworts**. Asteraceae. Senecioneae. Nectar: Northern Checkerspot, Thicket Hairstreak. Shapiro found most "Senecio" species disappointing as nectar draws in northern California – many former "Senecio" recently assigned to other genera, notably *Packera*., which seems to more consistently be good for nectar.

Ck HOSTS to add many entries.

Gelechiidae: *Prolita maenadis* (Wikipedia).

Geometridae: Wormwood Pug (*Eupithecia absinthiata*). Red Carpet (*Xanthorhoe decoloraria*) (Powell & Opler, p. 227).

Pterophoridae: Morning Glory Plume Moth (*Emmelina monodactyla*).

Pyralidae: American Sunflower Moth (*Homoeosoma electella*). *Phycitodes mucidella*.

Tortricidae: *Sparganothis senecionana*.

Senecio aronicoides. **California Butterweed**. Asteraceae. Senecioneae. Stephen Parry photograph shows three checkerspots on one flower head. April – July.

Oecophoridae: *Agonopterix fusciterminella*.

Pterophoridae: Williams' Plume Moth (*Platyptilia williamsii*).

Senecio breweri is now *Packera breweri*. **Brewer's Ragwort**.

Senecio blochmaniae. **Dune Ragwort**. Asteraceae. Senecioneae. May – November.

Pyralidae: *Ephesiodes gilvescentella*.

Scythrididae: Sand-dune Grasshopper Moth (*Areniscythis brachypteris*).

Tortricidae: *Argyrotaenia* sp.

Native to the coast in San Luis Obispo and Santa Barbara counties.

Senecio californicus. **California Ragwort**. Nectar: Lompoc Blue [a segregate of Small Blue] (Alice Abela). March – June.

Senecio canus is now *Packera cana*. **Woolly Groundsel**.

Senecio cymbalarioides is now *Packera subnuda* var. *subnuda*. **Cleftleaf Groundsel**.

Senecio flaccidus var. *douglasii*. **Butterweed. Creek Senecio. Threadleaf Groundsel**. Asteraceae. Senecioneae. Nectar: 'Desert' Black Swallowtail. Checkered White, Orange Sulphur, California Dogface, Sleepy Orange, Dainty Sulphur. Monarch, Queen, Painted Lady, American Lady, West Coast Lady, Common Buckeye, Acastus Checkerspot, Leanira Checkerspot, Mylitta Crescent, Coronis Fritillary, California Patch, California Ringlet. American Snout. Mormon Metalmark (fq), Lange's Metalmark. Great Purple Hairstreak, Gray Hairstreak, Thicket Hairstreak, Juniper Hairstreak, Purplish Copper, Western Pygmy Blue, Marine Blue, Acmon Blue, Ceraunus Blue, Reakirt's Blue, Boisduval's Blue, Echo Azure. Northern White-Skipper, Mournful Duskywing, Funereal Duskywing, Meridian Duskywing, Common Checkered-Skipper, Western Branded Skipper, Fiery Skipper, Woodland Skipper (fq). White-lined Sphinx (David Horner). Alfalfa Semilooper (*Autographa californica*, Noctuidae) and a Coffee Fern leaf-mining noctuid, *Pseudobryomima fallax*. Also gets the colorful diurnal *Lycomorpha regulus* (Arctiidae).

Serves as a surrogate nectar source for adults in the artificial rearing of the rare Lange's Metalmark. Paul Johnson photographed of many of these species working the flowers of Butterweed in Pinnacles National

Monument, Marc Kummel similarly in Santa Barbara County. The Monroes record 13 species of butterflies at nectar on it in the Anza-Borrego area of San Diego County. Las Pilitas Nursery: "Great for butterflies." June – October.

Oecophoridae: *Agonopterix dammersi* (HOSTS).

Pyalidae: Sunflower Moth (*Homeosoma electella*) (HOSTS).

Tortricidae: *Sonia vovana* (HOSTS).

Zones 7-9, 14-16, 19-24.

Senecio flaccidus var. *monoensis*. **Smooth Threadleaf Ragwort**. Asteraceae. Senecioneae. Nectar: Online photograph shows two California Patch (John Marquis), another, Mormon Metalmark. Orange Skipperling (Liz Makings). *Lycomorpha regulus* (Arctiidae) – a showy diurnal moth (male specimen) September – November.

Senecio fremontii. **Dwarf Mountain Ragwort**. Asteraceae. Senecioneae. July – September.

Association with adult Rockslide Checkerspot reported in 1974 Season Summary, Mono County, 14 July.

Senecio fremontii var. *occidentalis*. **Western Dwarf Mountain Ragwort**. Asteraceae. Senecioneae. Nectar: Edith's Checkerspot, Chryxus Arctic, Lustrous Copper, Tecumsah Skipper (Moldenke). July – September.

Senecio hydrophilus. **Alkali Marsh Ragwort**. Asteraceae. Senecioneae. Nectar: many insects. May – September.

Noctuidae: Ragwort Stem Borer (*Papaipema insulidens*).

Senecio integerrimus. **Forest Groundsel**. Asteraceae. Senecioneae. Nectar: Rocky Mountain Parnassian, a Swallowtail, Orange Sulphur, Monarch, Checkerspot, Callippe Fritillary, Mormon Fritillary, Milbert's Tortoiseshell, Zephyr Anglewing, Ringlet, Ladies, California Hairstreak, Greenish Blue, Common Checkered-Skipper, Tecumsah Skipper. In Colorado a top choice for Edith's Checkerspot.

To "yellow" segregate(s) Scott notes flower visits by: Anise Swallowtail, Rocky Mountain Parnassian, Large Marble, Painted Lady, Field Crescent, Milbert's Tortoiseshell, Hydaspe Fritillary, Mormon Fritillary (fq), Zerene Fritillary, Hoary Comma, Arrowhead Blue, Greenish Blue, Persius Duskywing, Varieties flower May – August.

Senecio integerrimus var. *exaltatus*. **Columbia Groundsel**. Asteraceae. Senecioneae. Nectar: Western Tiger Swallowtail, Indra Swallowtail, Clodius Parnassian, Phoebus Parnassian, Western White, Spring White, Orange Sulphur, Milbert's Tortoiseshell (Christopher Christie), Mourning Cloak, Hoary Comma [Zephyr Anglewing], West Coast Lady, Northern Blue, Greenish Blue, Tecumsah Skipper, and Comma Skipper, blues, skippers, etc. May – July.

Senecio lyonii. **Island Senecio**. Asteraceae. Senecioneae. Nectar: Powell & Opler found *Arotrura longissima* (Scythrididae) diurnally at nectar in early spring (Powell & Opler, p. 79). February – May.

Senecio multilobatus is now *Packera multilobata*. **Basin Butterweed**.

Senecio serra var. *serra*. **Tall Ragwort. Sawtooth Groundsel.** Asteraceae. Senecioneae. Nectar: Fifteen fritillaries shown at nectar in close proximity on flowers of this species! Northern Checkerspot. Asteraceae. July – August.

Oecophoridae: Canadian Agonopterix (*Agonopterix canadensis*).

Tortricidae: *Eucosma elongana* (HOSTS).

Senecio scorzonella. **Sierra Ragwort.** Asteraceae. Senecioneae. Nectar: Zephyr Anglewing [a Hoary Comma subspecies], Arctic Blue, Greenish Blue, and Shasta Blue (Moldenke). July – August.

Senecio spartioides. **Broom-like Ragwort.** Asteraceae. Senecioneae. Nectar: Cabbage White, Checkered White, Orange Sulphur, Clouded Sulphur, Monarch, Red Admiral, Field Crescent, Pearl Crescent, Weidemeyer's Admiral, Variegated Fritillary, American Snout, Coral Hairstreak, Purplish Copper, Common Checkered-Skipper (Scott). July – September.

Senecio triangularis. **Arrowleaf Ragwort.** Asteraceae. Senecioneae. Nectar: Clodius Parnassian, Monarch, Pine White (fq), Margined White (fq), Orange Sulphur, West Coast Lady, Painted Lady, Hoffman's Checkerspot, Northern Checkerspot, Weidemeyer's Admiral, Pacific Fritillary (Mike Patterson), Callippe Fritillary, Coronis Fritillary, Mormon Fritillary, Leto Fritillary, Northwestern Fritillary, Zerene Fritillary, Green Comma, Hoary Comma, Great Arctic, Juniper Hairstreak, Ruddy Copper, Greenish Blue. Sierra Pericopid (*Gnophaela latipennis*, Arctiidae). June – September.

Foodplant for Northern Checkerspot.

Arctiidae: Tanya Harvey finds Cinnabar Moth (*Tyria jacobaeae*) caterpillars eating it in the western Cascades. It was introduced to control the related weedy non-native Tansy Ragwort (*Senecio jacobaea* aka *Jacobaea vulgaris*).

Choreutidae: *Caloreas augustella* (HOSTS).

Senecio werneriiifolia is now *Packera werneriiifolia*. **Hoary Groundsel.**

Senegalia greggii, formerly *Acacia greggii*. **Catclaw Acacia.** Fabaceae. Acacieae. Nectar: Desert Black Swallowtail, Checkered White, Queen, Marine Blue, Ceraunus Blue, Reakirt's Blue, Palmer's Metalmark, Great Purple Hairstreak(fq), Leda Ministreak, Gray Hairstreak, Northern White-Skipper, Funereal Duskywing, *Annaphila astrologa* (Noctuidae). Attracts mostly small butterflies. April - June.

Hostplant for Marine Blue, Reakirt's Blue, and Ceraunus Blue. It supports parasitic Desert Mistletoe (*Phoradendron californicum*, Viscaceae), a Great Purple Hairstreak hostplant.

Noctuidae: *Melipotis novanda*. Cruel Toxonprucha (*Toxonprucha crudelis*). *Toxonprucha repentis*. Bird Toxonprucha (*Toxonprucha volucris*).

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*). Hubbard's Small Silk Moth (*Sphingicampa hubbardi*).

Zones 7-16, 19-24.

Senna armata. **Desert Cassia**. Fabaceae. Cassieae. Monroes: Nectar: Tiny Checkerspot. Bumblebees. March – July.

Its primary value is as a larval host for the Sleepy Orange and Cloudless Sulphur. Also supports Gray Hairstreak.

Senna covesii. **Coues' Cassia**. Fabaceae. Cassieae. March – April (fall).

Foodplant for Cloudless Sulphur, Sleepy Orange. Favorite of Cloudless Sulphur (Firefly Forest web site). Among 'Most Recommended' by *Desert Butterfly Gardening*.

Sequoia sempervirens. **Coast Redwood**. Cupressaceae.

Sometimes a Monarch winter roosting tree (*Mariposa Road*, p.18).

Geometridae: Brown-lined Looper (*Neocalcis californiaria*).

Sesiidae: Sequoia Pitch Moth (*Synanthedon sequoiae*).

Tortricidae: *Argyrotaenia cupressae*. Orange Tortrix (*Argyrotaenia franciscana*). *Cochylis dormitoria*. Fir Seed Moth (*Cydia bracteata*). *Syndemis* (new species).

Sequoiadendron giganteum. **Giant Sequoia**. Cupressaceae.

Piirto found two geometers and unidentified cutworms important seedling predators:

Geometridae: *Pero behrensaria*. Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: unidentified cutworms.

Sericocarpus oregonensis subsp. *oregonensis* formerly *Aster oregonensis*. **Oregon Whitetop Aster**. Asteraceae. Astereae. July-September.

Northern Checkerspot hostplant [Haggard].

Sesbania herbacea. **Colorado River Hemp**. Fabaceae. Robinieae. April - October.

Hostplant for the Orange Sulphur and Funereal Duskywing.

Sesuvium verrucosum. **Western Sea-purslane**. Aizoaceae. Nectar: Gray Hairstreak and MacNeill's Sootywing (fq). April - November.

A foodplant for Western Pygmy Blue (*Butterflies of Arizona*) as at Suisun Marsh in central California (Shapiro). Reported from Kings County in 1972 Season Summary.

Heliodinidae: *Aetole prenticei* (Powell & Opler, p. 111)

Shepherdia argentea. **Buffalo Berry**. Elaeagnaceae. Also known as *Eleagnus utilis*. Perhaps this is meant when E. H. Strickland Museum mentions *Protogygia enalaga* (Nocutidae) “is fond of *Eleagnus* flowers”. April – May.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Papestra cristifera*. Otter Spiramater (*Spiramater lutra*). Likely hostplant for many others.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Zones 1-3, 7-10, 14-22.

Shepherdia canadensis. **Canadian Buffalo Berry**. Elaeagnaceae. April – May.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Small Engrailed (*Ectropis crepuscularia*). Emasculated Gray (*Iridopsis emasculatum*). Twilight Moth (*Lycia rachelae*). Day Emerald (*Mesothea incertata*). Morrison’s Pero (*Pero morrisonaria*).

Noctuidae: Canadian Giant (*Andropolia contacta*). Rusty Shoulder Knot (*Aseptis binotata*). Large Looper (*Autographa ampla*). *Brachylomia algens*. Northern Arches (*Drasteria hudsonica*). Wandering Brocade (*Fishia illocata*). Large Gray Pinion (*Lithophane georgii*). *Papestra cristifera*. *Papestra quadrata*. Otter Spiramater (*Spiramater lutra*). Gray Swordgrass Moth (*Xylena cineritia*).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*).

Sidalcea calycosa subsp. *rhizomata*. **Point Reyes Checkerbloom**. Malvaceae. May – July.

Larner Seeds notes it supports caterpillars.

Proves quite adaptable to cultivation; best in Zones 15-17, 24.

Sidalcea diploscypha. **Fringed Checkerbloom**. Malvaceae. My field notes show the first time I encountered this plant a Common Checkered-Skipper was visiting it ... 21 May 1985. April – May.

Sidalcea glaucescens. Malvaceae. **Waxy Checkermallow**. June – August.

Larval host for the West Coast Lady and the Common Checkered-Skipper. Shapiro, Arthur M. 1977. "The alpine butterflies of Castle Peak, Nevada County, California." *The Great Basin Naturalist* 37(4): 443-52. <http://www.jstor.org/stable/41711594>

Grows well with irrigation and sun in Zones 6, 15, 16, 17.

Sidalcea hickmanii ssp. *anomala*. **Cuesta Pass Checkerbloom**. Malvaceae. A butterfly favorite at U.C. Riverside Arboretum. May – June.

Sidalcea malachroides. **Mapleleaf Checkerbloom**. Malvaceae. Butterflies visit flowers (Camper). April – August.

Sidalcea malviflora. **Checker Mallow**. Malvaceae. Nectar: Anise Swallowtail. Mission Blue [a segregate of Boisduval's Blue] in San Francisco and on San Bruno Mountain. J. Maughn photograph shows Common Flower Moth (*Schinia pulchripennis*) hanging out on it. Shapiro never sees butterflies at nectar on its flowers. March – July.

Hostplant for West Coast Lady, Gray Hairstreak, Rural Skipper, and Common Checkered-Skipper.

Oecophoridae: *Exaeretia nechlys*. *Exaeretia thoracefasciella*.

Commonly cultivated with cultivars available; best in Zones 6-9, 14-24.

Sidalcea neomexicana. **Salt Spring Checkerbloom**. Malvaceae. April – June.

Foodplant for the Common Checkered-Skipper.

Sidalcea oregana. **Oregon Checkerbloom**. Malvaceae. Nectar for HesperIIDae skippers. Glenn Fine notes 3 Lepidoptera species as flower visitors in his Siskiyou County study. May – September.

Foodplant for West Coast Lady, Common Checkered-Skipper.

Sesiidae: *Zenodoxus sidalceae*.

Best in Zones 6, 7, 14-17.

Sidalcea oregana ssp. *spicata*. **Oregon Checkerbloom**. Malvaceae. Skippers visit its flowers. June-August.

Hostplant for West Coast Lady and Common Checkered-Skipper.

Best in Zones 6, 7, 14-17.

Sidalcea pedata. **Bird-footed Checkerbloom**. Malvaceae. Flowers visited by Cabbage White. May-August.

Silene spp. **Pinks**. Caryophyllaceae.

Noctuidae: Capsule Moth (*Hadena capsularis*). *Hadena ectrapela* seems likely (PNW Moths). Variable Capsule Moth (*Hadena variolata*). Rufous Quaker (*Protorthodes rufula*).

Silene douglasii var. *douglasii*. **Douglas' Catchfly**. Caryophyllaceae. Nectar: Pacific Fritillary. Summer.

Considered worthy of cultivation.

Silene laciniata subsp. *californica*. **Indian Pink**. Caryophyllaceae. Nectar: Pipevine Swallowtail (Larry Miller photograph). California Dogface (Pete Veilleux). Hummingbirds. Spring-summer.

Best cultivated in Zones 7, 14, 18 with good drainage and some shade; thought difficult.

Silene lemmonii. **Lemmon's Catchfly**. Caryophyllaceae. Insect visits to flowers were infrequent, with nocturnal noctuid moths observed 8 times at the flowers. (Hove, Alisa A. 2007. "Pollination biology of *Silene lemmonii* (Caryophyllaceae), a montane perennial herb." *Madroño* 54 (4): 293-305).

Silene sargentii. **Sargent's Catchfly**. Caryophyllaceae. Nectar: White-lined Sphinx (*Hyles lineata*, Sphingidae). July-August.

Simmondsia chinensis. **Jojoba**. Simmondsiaceae.

Indirectly potentially supports Great Purple Hairstreak as a host for Desert Mistletoe.

Geometridae: Fortunate *Idaea* (*Idaea bonifata*), possibly the smallest North American geometrid, found in stored seeds: Gentry, Howard Scott. 1958. "The Natural History of Jojoba (*Simmondsia chinensis*) and Its Cultural Aspects." *Economic Botany* 12 (3): 261-95. <http://www.jstor.org/stable/4287990>. Also Powell & Opler, p. 222.

Saturniidae: Electra Buckmoth (*Hemileuca electra*).

Tortricidae: *Epinotia kasloana*.

Sisyrinchium bellum. **Blue-eyed Grass**. Iridaceae. Nectar: Large Marble (Moldenke). Common Buckeye (Scott noted two flower visits). Mission Blue [segregate of Boisduval's Blue] in San Francisco and on San Bruno Mountain. Likely secondary, not usually noted as a butterfly plant! March-May.

Sium suave. **Water Parsnip**. Apiaceae. Oenantheae. Nectar: Cabbage White, Monarch, American Snout, eastern Spring Azure. Paul Severns has noticed rare visits by Nelson's Hairstreak. July - August.

Hostplant for Anise Swallowtail.

Oecophoridae: Gorse Tip Moth (*Agonopterix nervosa*).

Smilacina stellata is now *Maianthemum stellatum*. **Slim Solomon**.

Smilacina racemosa is now *Maianthemum racemosum*. **False Solomon's Seal**.

Solanum douglasii. **Douglas Nightshade**. Solanaceae. Flowers most of the year.

Sphingidae: Carolina Sphinx (*Manduca sexta*), documented on Natural History of Orange County web site.

Gelechiidae: *Symmetrischema striatella* (Powell & Opler).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Solanum umbelliferum. **Blue Witch**. Solanaceae. A diurnal moth associated with its flowers (Moldenke). All year.

Gelechiidae: *Keiferia elmorei* (Powell & Opler).

Tortricidae: *Argyrotaenia* sp.

Cultivated; best in Zones 7, 14, 15-17, 19-23, 24.

Solanum wallacei. **Catalina Nightshade**. Solanaceae. March – August.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Gelechiidae: *Symmetrischema striatellum* (Powell & Opler).

Cultivated; best in Zones 14, 17, 19-23, 24.

Solanum xanti. **Purple Nightshade**. Solanaceae. Nectar: Sara Orangetip (Hartmut Wisch). February – June.

Gelechiidae: *Keiferia elmorei*. *Symmetrischema striatella* (Powell & Opler).

Scythrididae: *Rhamphura altisierrae* (Powell & Opler p. 79).

Best in Zones 17, 22-24.

Solidago spp. **Goldenrods**. Asteraceae. Astereae. Nectar: Giant Swallowtail. Orange Sulphur, Becker's White, Checkered White, Pine White. Monarch, American Lady, Painted Lady, Common Buckeye, Mylitta Crescent, Coronis Fritillary, Leto Fritillary, Lorquin's Admiral, Milbert's Tortoiseshell, Green Comma, California Ringlet. Gray Hairstreak, Thicket Hairstreak, Great Purple Hairstreak, Sooty Hairstreak, Purplish Copper, Marine Blue, Western Pygmy Blue, Anna Blue, Eastern Tailed Blue. Sachem, Columbian Skipper, Dun Skipper. Yellow-collared Scape Moth. Shapiro finds all goldenrods excellent, except for very pale varieties and Solidaster hybrids.

Geometridae: Wormwood Pug (*Eupithecia absinthiata*). Confused Eusarca (*Eusarca confusaria*). Wavy-lined Emerald (*Synchlora aerata*). Oblique-striped Emerald (*Synchlora bistrifaria*).

Noctuidae: Fine-lined Sallow (*Catabena lineolata*). Soybean Looper (*Chrysodeixis includens*). *Eupsilia fringata* [McFarland, 1975 – 'strikingly velvet black larvae']. Dark Grey Fishia (*Fishia yosemitae*). *Lacinipolia umbrosa*. Lunate Zale (*Zale lunata*).

Tortricidae: Strawberry Leafroller (*Ancylis comptana*). Allen's Tortrix (*Aphelia alleniana*). Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). White-triangle Tortrix (*Clepsis persicana*). Verbena Bud Moth (*Endothenia hebesana*). Sumac Leaf-tier (*Episimus argutana*). Triangle-backed Eucosma (*Pelochrista dorsisignatana*). *Pelochrista juncitciliana*. *Pelochrista comatulana*. *Xenotemna pallorana*.

Solidago californica is now *Solidago velutina* ssp. *californica*. **California Goldenrod**.

Solidago canadensis ssp. *elongata* is now *Solidago elongata*. **Canada Goldenrod**.

Solidago confinis. **Southern Goldenrod**. Asteraceae. Astereae. Particularly good for butterflies (Las Pilitas Nursery). California Sister, Mylitta Crescent, Gray Hairstreak. April – October.

Less rambunctious than California Goldenrod.

Solidago elongata was *Solidago canadensis* ssp. *elongata*. **Canada Goldenrod**. Asteraceae. Astereae. Nectar: Giant Swallowtail, Clodius Parnassian, Clouded Sulphur, Pine White, Monarch, Painted Lady, West Coast Lady, Red Admiral, California Tortoiseshell, Oregon Silverspot, Mylitta Crescent, Pearl Crescent, American Snout, Gray Hairstreak, Banded Hairstreak, Edith's Copper, Ruddy Copper, Tailed Copper, Echo Azure, Acmon Blue, Common Checkered-Skipper, Woodland Skipper, Yellow-collared Scape Moth, Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae), Bent-line Dart (*Feltia jaculifera*, Noctuidae), Corn Earworm (*Helicoverpa zea*, Noctuidae) (fq), Armyworm (*Mythimna unipuncta*, Noctuidae). May – October.

Geometridae: Wormwood Pug (*Eupithecia absinthiata*). Wavy-lined Emerald (*Synchlora aerata*). The Southern Emerald (*Synchlora frondaria*, Geometridae) feeds on *Solidago canadensis* in the East.

Noctuidae: Hitched Arches (*Melanchra adjuncta*).

Zones 4-7, 14-24. Garden invasive.

Solidago guiradonis. **Guirado's Goldenrod**. Asteraceae. Astereae. September – October.

Solidago lepida var. *salebrosa*. **Western Goldenrod**. Asteraceae. Astereae. Very showy. May – September.

Solidago multiradiata. **Northern Goldenrod** or **Rocky Mountain Goldenrod**. Asteraceae. Astereae. Nectar: Rocky Mountain Parnassian (fq), Cabbage White, Western White (fq), Orange Sulphur, Clouded Sulphur. Mourning Cloak, Milbert's Tortoiseshell, Green Comma, and West Coast Lady. California Hairstreak, Edith's Copper, Shasta Blue, blues, and at least three species of diurnal moths. June – September.

Foodplant for caterpillars of the Northern Checkerspot and Rockslide Checkerspot.

Zones 1, 7, 15-18.

Solidago spathulata also known as *Solidago simplex* ssp. *simplex* var. *spathulata*. **Coast Goldenrod**. **Dune Goldenrod**. Asteraceae. Astereae. Nectar: Cabbage White (fq), Orange Sulphur (fq), Painted Lady, Mylitta Crescent (JAC), Oregon Silverspot (fq), Common Ringlet (fq), Gray Hairstreak (JAC), Purplish Copper (fq), Acmon Blue (JAC), Woodland Skipper (fq), Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae), Lempke's Gold Spot (*Plusia putnami*, Noctuidae). Most of these from Mike Patterson.

Coast Golden Rod proved the all-around favorite Lepidoptera nectar plant on the Clatsop Plains, Oregon (Mike Patterson). May – November.

Zones 5, 14-17.

Solidago spectabilis. **Showy Goldenrod**. Asteraceae. Astereae. Nectar: Monarch, West Coast Lady, Mormon Metalmark, Great Purple Hairstreak, Gray Hairstreak, Meridian Duskywing, Yuma Skipper, Orange Skipperling (Austins). July – September.

Solidago velutina ssp. *californica* was *Solidago californica*. **California Goldenrod**. Asteraceae. Astereae. Nectar: Cabbage White, Dainty Sulphur, Monarch, American Lady, Painted Lady, Lorquin's

Admiral, Northern Checkerspot, Field Crescent, Mylitta Crescent, California Sister, Mormon Metalmark, Brown Elfin, Mariposa Copper, Purplish Copper, Gray Hairstreak (Robert Ivens), Great Purple Hairstreak, hairstreaks, checkerspots, Western Pygmy Blue (Robert Ivens), Acmon Blue, Tailed Copper (fq), Mariposa Copper, Northern White-Skipper, Mournful Duskywing, Funereal Duskywing, Fiery Skipper, Sagem, Sandhill Skipper. May – November.

Reported as a caterpillar plant for the Northern Checkerspot and Field Crescent.

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Zones 4-7, 14-23.

Sorbus spp. **Mountain Ash**. Rosaceae. Maleae. Nectar for Callippe Fritillary, Green Comma (Pyle).

Geometridae: Emasculated Grey (*Iridopsis emasculatum*).

Noctuidae: Fragile Dagger (*Acronicta fragilis*). Speckled Green Cutworm (*Orthosia hibisci*).

Sesiidae: Fireweed Clearwing (*Albuna pyramidalis*, [Haggard]).

Tortricidae: Large Aspen Tortrix (*Choristoneura conflictana*, Canada). Off-white Hedya (*Hedya ochroleucana*, Canada) – a weirdly ornamented little moth. Three-lined Leafroller (*Pandemis limitata*, Canada). Eye-spotted Bud Moth (*Spilonota ocellana*) – a naturalized non-native species.

Sorbus scopulina. **Greene's Mountain Ash**. Rosaceae. Maleae. June – July.

Drepanidae: *Ceranemota tearlei*.

Geometridae: Northwest Phoenix (*Eulithis xylyna*). *Eupithecia misturata*.

Noctuidae: Large Gray Pinion (*Lithophane georgii*). Nameless Pinion (*Lithophane innominata*).

Tortricidae: Snowy-shouldered Acleris (*Acleris nivisellana*).

Sorbus sitchensis. **Sitka Mountain Ash**. Rosaceae. Maleae. May – July.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: *Acronicta barnesii*. Radcliffe's Dagger (*Acronicta radcliffei*).

Sparganium spp. **Bur-Reed**. Typhaceae.

Butterflies and moths: a companion to your field guide, Jo Brewer and Dave Winter: “We have seen mourning cloak (*Nymphalis antiopa*) larvae leave a stripped willow and finish feeding on burr reed (*Sparganium*), a totally unrelated plant” (p. 49). “Strange” foodplant records may reflect hungry late instars finishing up!

Noctuidae: Cattail Borer (*Bellura obliqua*). Lempke's Gold Spot (*Plusia putnami*).

Spergularia macrotheca. **Sticky Sand-spurry**. Caryophyllaceae. Adult *Lipographis fenestrella* associated with the plant. Spring – fall.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Spermolepis echinata. **Bristly Scaleseed**. Apiaceae. Selineae. March – April.

Tortricidae: Divided Olethreutes (*Olethreutes bipartitana*).

Sphaeralcea spp. **Globemallow**. Malvaceae.

Noctuidae: *Bagisara buxea*.

Sphaeralcea ambigua. **Desert Mallow**. Malvaceae. Nectar: Mormon Metalmark, Marine Blue (Bruce Edward Watts), Western Pygmy Blue, Northern White-Skipper, Common Checkered-Skipper, Eufala Skipper, Orange Skipperling (Austins). February – July.

Hostplant for West Coast Lady (fq), Painted Lady, Gray Hairstreak, Northern White-Skipper, Common Checkered-Skipper, and Small Checkered-Skipper. Varieties *ambigua* and *rosacea* consistent for Painted Lady, Inyo County 1991 migration event.

Gelechiidae: *Chionodes petro* (Powell & Opler).

Noctuidae: Chalky Bird Dropping Moth (*Acontia cretata*, Jennifer Bundy). *Tarache major*.

Sesiidae: *Zenodoxus palmii*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Best cultivated in Zones 7-12, 14, 18-23.

Sphaeralcea angustifolia. **Copper Globemallow**. Malvaceae. Nectar: Southern Dogface (Jim McCulloch). Marine Blue (Bob Beatson), White/Common Checkered Skipper. March – October.

Foodplant for West Coast Lady, Gray Hairstreak, Northern White-Skipper, Common Checkered-Skipper, White Checkered-Skipper, Small Checkered-Skipper.

Considered worthy of cultivation.

Sphaeralcea emoryi. **Emory's Globemallow**. Malvaceae. Nectar: Mexican Yellow (Liz Makings). February - July.

Sphaeralcea grossulariifolia. **Gooseberryleaf Globemallow**. Malvaceae. Nectar: Checkered White (Austins). May – June.

Larval host for Northern White-Skipper.

Considered worthy of cultivation.

Sphaeralcea munroana. **Munro's Globemallow**. Malvaceae. May-June.

Foodplant for Northern White-Skipper and Common Checkered-Skipper.

Oecophoridae: *Exaeretia thoracefasciella*.

Sesiidae: *Zenodoxus palmii*.

Best cultivated in Zones 7-9, 14-24.

Sphenosciadium capitellatum. **Ranger's Buttons. Woollyhead Parsnip**. Apiaceae. Selineae. Nectar: Lorquin's Admiral (Las Pilitas Nursery). Mariposa Copper (Steve Laymon). Leto Great Spangled Fritillary and *Polia nugatis* (Noctuidae) (Linda Vassallo, BugGuide photograph). An unidentified moth shows up in a Flickr collection; likely serves other Lepidoptera. Steve Laymon photo shows a mating pair of Mariposa Copper on a flower head. Pete Veilleux photographed mating Sierran Pericopid (*Gnophaela latipennis*, Arctiidae) on it (they met seeking nectar, or merely a convenient platform). July - August.

Larval host for Indra Swallowtail near Tioga Pass (Whaley); also a hostplant for Anise Swallowtail, favored over *Ligusticum*, *Lomatium* and *Angelica* in the Western Cascades, says Tanya Harvey.

Spiraea spp. Rosaceae. Spiraeaceae.

Geometridae: *Eupithecia misturata*. Satyr Pug (*Eupithecia satyrata*).

Noctuidae: Large Gray Pinion (*Lithophane georgii*). False Pinion (*Litholomia napaea*). Protector Quaker (*Orthosia praeses*). Inscribed Looper (*Syngrapha epigaea*).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Spiraea Leaf-tier (*Evora hemidesma*). *Olethreutes siderana chalybeana*.

Spiraea douglasii. **Western Spiraea. Hardhack**. Rosaceae. Spiraeaceae. Nectar: Pale Swallowtail, Mourning Cloak, Lorquin's Admiral, Common Wood-Nymph, and Lilac-bordered Copper. A butterfly favorite at U. C. Riverside Botanic Gardens. June – September.

Foodplant for Pale Swallowtail, Lorquin's Admiral, and the Echo Azure (Tatum).

Arctiidae: Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Geometridae: Northwest Phoenix (*Eulithis xyliana*). *Eupithecia misturata*. Scallop Shell (*Rheumaptera undulata*). Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: *Adelphagrotis indeterminata*. Langton's Forester (*Alypia langtoni*). *Egira crucialis*. Large Gray Pinion (*Lithophane georgii*). Protector Quaker (*Orthosia praeses*). Otter Spiramater (*Spiramater lutra*). Gray Swordgrass Moth (*Xylena cineritia*).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*, a preferred host on southern Vancouver Island -- Tatum). Ceanothus Silkmoth (*Hyalophora euryalus*, primary hostplant on southern Vancouver Island--Tatum).

Sphingidae: Blinded Sphinx (*Paonias excaecata*, Tatum).

Tortricidae: Spiraea Leaf-tier (*Evora hemidesma*, California). *Olethreutes siderana chalybeana*, California.

Best in Zones 4-6, 15-16, 17. Spreads quickly readily in the garden.

Spiraea splendens. **Rose Meadowsweet**. Rosaceae. Spiraeaceae. A diurnal moth associated with its flowers (Moldenke). June – September.

Spiranthes romanzoffiana. **Hooded Lady's Tresses**. Orchidaceae. Nectar: Common Buckeye in Michigan (fq) and Inscribed Looper Moth, *Syngrapha epigaea* (Noctuidae) in the Midwest. The butterfly, moth, and orchid are native to California – likely, the relationships hold here. Mike Patterson finds it a favored nectar plant in Oregon; in 2013 he photographed a fritillary at nectar. May – September.

Considered very difficult to cultivate.

Sporobolus airoides. **Alkali Sacaton**. Poaceae. Zoysieae.

Bucculatricidae: only known foodplant for the Alkali Sacaton Moth (*Bucculatrix sporobolella*), a micromoth.

Best cultivated in Zones 7 -24; also used in revegetation.

Stachys spp. Lamiaceae. **Hedgenettle**. Nectar: California Dogface (Butterworth), Clark's Day Sphinx, Cabbage White, Margined White. Shapiro saw Columbian Skipper and Sleepy Duskywing try to get nectar from a *Stachys* sp., but they seemed to give up without getting any. California Dogface and Clark's Day Sphinx Moth seem to be the primary conspicuous diurnal lepidopteran users of this genus.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Clepsis fucana*. Garden Tortrix (*Clepsis peritana*). Omnivorous Leaf-tier (*Cnephasia longana*, California, moth ID uncertain, thought to be this species). Verbena Bud Moth (*Endothenia hebesana*). *Endothenia montanana* feeds on stem bases (BugGuide). *Endothenia nubilana*.

Stachys albens. **Whitestem Hedgenettle**. Lamiaceae. May – October.

Pterophoridae: *Capperia ningoris*.

Best cultivated in Zones 5-9, 14-17, 18, 19-23; garden invasive.

Stachys ajugoides. **Hedge Nettle**. Lamiaceae. June – September.

Noctuidae: *Autographa pasiphaeia*. Stephen's Gem (*Megalographa biloba*). Both are attractive noctuids.

Tortricidae: Allen's Tortrix (*Aphelia alleniana*).

Used in revegetation.

Stachys ajugoides var. *ajugoides*. **Wood Mint**. 'Persnickety Pink'. Lamiaceae.

Stachys ajugoides var. *rigida* is now *Stachys rigida* var. *rigida*. **Hedge Nettle**. July – August.

Pterophoridae: *Capperia ningoris*.

Stachys bullata. **California Hedgenettle**. Lamiaceae. Nectar: Western Tiger Swallowtail (Mother Nature's Backyard). Sara Orangetip (Hartmut Wisch BugGuide photograph). Red Admiral (Marc Kummel & John Kehoe photos). Fiery Skipper, Umber Skipper (Mother Nature's Backyard). A grass skipper (Kummel, 8 May 2004). March – September.

Pterophoridae: *Capperia ningoris*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Clepsis fucana*.

Best in Zones 8, 9, 14, 15-17, 19-23, 24; garden invasive, used in revegetation.

Stachys chamissonis. **Magenta Butterfly Flower**. Lamiaceae. Butterfly nectar plant. Good hummingbird plant. May-October.

Best cultivated in Zones 5, 8, 9, 14, 15-17, 24; garden invasive.

Stachys pycnantha. **Shortspike Hedgenettle**. Lamiaceae. Nectar: California Dogface. June-October. Considered worthy of cultivation.

Stachys rigida var. *rigida*. **Hedge Nettle**. Lamiaceae. Nectar: Mission Blue [segregate of Boisduval's Blue] (photograph by Scott Cox on CalPhotos) – seems to be on this species. A photograph of a Common Checkered-Skipper by Ken-ichi Ueda at Lake Temescal. Harbison's Dun Skipper. Stephen Rosenthal photographed Calliope Hummingbird in his San Jose yard. July – August.

Var. *quercetorum*. March – October.

Tortricidae: *Endothenia conditana* (reported from California, thought to be this plant species, plant ID uncertain to the lepidopterist). *Sparganothis senecionana*.

Used in revegetation.

Stanleya elata. **Panamint Prince's Plume**. Brassicaceae. Nectar: Painted Lady commonly in migration in eastern California. Northern White-Skipper in southernmost Nevada (Austins). May-July.

Foodplant for Becker's White.

Stanleya pinnata. **Prince's Plume**. Brassicaceae. Nectar: Checkered White (fq), Becker's White, Pearly Marble, Orange Sulphur, Juniper Hairstreak, Mojave Sootywing (Sharon Muczynski Flickr photograph) and White-lined Sphinx (Stephen Pollard photograph). April-September.

Hostplant for Becker's White, caterpillars feed on the flower buds, develop rapidly; Checkered White (Todd Stout), also for Pearly Marble [including *lotta*, the Desert Marble segregate].

Best cultivated in Zone 18; considered difficult.

Stenotus acaulis. **Stemless Mock Goldenweed**. Asteraceae. Astereae. Nectar: Rockslide Checkerspot, Juniper Hairstreak (Christopher Christie), Juba Skipper. May-August.

Association with adult Rockslide Checkerspot reported in 1974 Season Summary, Carson Pass, Alpine County.

Stephanomeria sp. **Wire-lettuce**. Asteraceae. Cichorieae. Nectar: Desert Black Swallowtail, Mormon Metalmark, Orange Skipperling and Fiery Skipper (Austins), Dainty Sulphur (Liz Makings), Mojave Sootywing (Monroes).

Noctuidae: *Schinia scarletina*.

Stephanomeria cichoriacea. **Silver Rock-lettuce**. Asteraceae. Cichorieae. Nectar: Cabbage White, Mormon Metalmark, Woodland Skipper (Hartmut Wisch photo), Umber Skipper (Marc Kummel). May – November.

Stephanomeria diegensis. **San Diego Milk Aster**. Asteraceae. Cichorieae. Showy, likely a good nectar plant. August – November.

Stephanomeria exigua. **Small Wire-lettuce**. Asteraceae. Cichorieae. Nectar: Reakirt's Blue. April – July for var. *exigua* and as late as October – November for other varieties.

Noctuidae: *Cucullia eulepis*. *Schinia scarletina*.

Stephanomeria pauciflora. **Desert Straw**. Asteraceae. Cichorieae. Nectar: Marine Blue (Anne Reeves photograph). March – November.

Arctiidae: *Kodiosoma fulvum*, a small, colorful tiger moth.

Noctuidae: *Cucullia basipuncta*. *Schinia scarletina*.

Stephanomeria virgata. **Wand Wire-lettuce**. Asteraceae. Cichorieae. Nectar: Pipevine Swallowtail. American Lady (Paul Johnson), Umber Skipper (David L. Magney), Woodland Skipper (David Horner). Seed Hunt catalog says its flowers attract many butterflies. June - November.

Noctuidae: *Schinia scarletina*.

Stipa spp., some were *Achnatherum* spp., others *Nassella* spp. **Needlegrasses**. Poaceae.

Likely suspects as butterfly larval hosts. Those formerly classified as *Nassella* are hostplants for Common Ringlet.

Stipa cernua was *Nassella cernua*. **Nodding Needlegrass**. Poaceae. Stipeae.

Hostplant for Common Ringlet.

Stipa hymenoides was *Achnatherum hymenoides*. **Sand Rice Grass**. Poaceae. April – July.

Very likely hostplant for Uncas Skipper (Warren, 2005).

Stipa lemmonii was *Achnatherum lemmonii*. **Lemmon's Needlegrass**. Poaceae. Stipeae.

Stipa lepida was *Nassella lepida*. **Foothill Needlegrass**. Poaceae. Stipeae.

Hostplant for Common Ringlet.

Stipa nevadensis was *Achnatherum nevadense*. **Nevada Needlegrass**. Poaceae. Stipeae.

Hostplant for Uncas Skipper (Garth & Tilden) and perhaps Juba Skipper.
Thought difficult to cultivate.

Stipa occidentalis var. *occidentalis* was *Achnatherum occidentale* ssp. *occidentale*. **Western Needlegrass**. Poaceae. Stipeae.

Preferred foodplant for the Nevada Skipper.

Cultivated and used in revegetation. Check 1993 Jepson Manual for guidance on cultivation of varieties.

Stipa pinetorum was *Achnatherum pinetorum*. **Pinewoods Needlegrass**. Poaceae. Stipeae.

Foodplant for the Uncas Skipper.

Considered worthy of cultivation.

Stipa pulchra was *Nassella pulchra*. **Purple Needlegrass**. Poaceae. Stipeae.

Larval host for Common Ringlet.

Stipa thurberiana was *Achnatherum thurberianum*. **Thurber Needlegrass**. Poaceae. Stipeae.

Larval host for the Western Branded Skipper [Harpalus Skipper] (Garth & Tilden).

Best cultivated in Zones 2, 3, 7, 10, 14-24.

Streptanthella longistrostris. **Longbeak Twistflower**. Brassicaceae. March – June.

Foodplant for Desert Orangetip, including the Pima Orangetip; also Becker's White and Pearly Marble [lotta, the Desert Marble segregate].

Streptanthus spp. **Jewelflower**. Brassicaceae.

Hostplants for Spring White, Pearly Marble. Shapiro says "tall species" are favored hostplants for the Gray Marble.

Streptanthus barbatus. **Pacific Jewelflower**. Brassicaceae. June – August.

Larval host for Spring White and Western White.

Strictly endemic to serpentine soil, considered worthy of cultivation.

Streptanthus bernardinus. **Laguna Mountain Jewelflower**. Brassicaceae. June – August.

Hostplant for Pearly Marble.

Streptanthus breweri. **Brewer's Jewelflower**. Brassicaceae. May – July.

Hostplant for Sara Orangetip, California Marble and Spring White (HOSTS).

Streptanthus cordatus var. *cordatus*. **Heartleaf Jewelflower**. April – July.

Hostplant for Spring White (*nigravenosa* segregate) and Pearly Marble (Desert Marble, the *lotta* segregate) (Todd Stout, CalFlora).

Streptanthus glandulosus. **Bristly Jewelflower**. Brassicaceae. April – July.

Larval host for Spring White (Steiner). Sara Orangetip and Pearly Marble (HOSTS). Western White (Shapiro).

Streptanthus howellii. **Howell's Jewelflower**. Brassicaceae. June – July.

Foodplant for Boisduval's Marble and California Marble (1988 Season Summary).

Streptanthus polygaloides. **Milkwort Jewelflower**. Brassicaceae. May – July.

Foodplant for Pearly Marble and Spring White (HOSTS).

A strict serpentine endemic.

Streptanthus tortuosus. **Shieldleaf**. Brassicaceae. Pearly Marble visits the flowers of this, its larval host (Shapiro). Moldenke found the Nevada Cloudywing on its flowers. Mainly gets bumblebees, some Anna's Hummingbird (Preston, 1994). April-September.

Foodplant for Sara Orangetip, Western White, Spring White, California Marble aka Pearly Marble, Boisduval's Marble, Cabbage White.

For some insight especially on Pearly Marble: Karban, Richard, and Steven Courtney. "Intraspecific Host Plant Choice: Lack of Consequences for *Streptanthus Tortuosus* (Cruciferae) and *Euchloe Hyantis* (Lepidoptera: Pieridae)." *Oikos* 48, no. 3 (1987): 243-48. doi:10.2307/3565508.

Preston, Robert E. 1994. "Pollination Biology of *Streptanthus tortuosus* (Brassicaceae)." *Madroño* 41 (2): 138–147.

Shapiro, Arthur M. 1981. "The Pierid fauna of jewel flower at a mid-elevation Sierran locality." *Journal of the Lepidopterists' Society* 35 (4): 322-324.

Styrax redivivus. **Snowdrop Bush**. Styracaceae. Nectar: Pipevine Swallowtail (fq), Pale Swallowtail (Marc Kummel), Western Tiger Swallowtail (California Flora Nursery, Fulton). Noted as a butterfly

flower by photographer Karen Callahan. “The flowers have a strong, sweet fragrance like perfume” (Mark Kummel).

A pollination ecology study found Pipevine Swallowtail its most effective pollinator (Sugden); Anise Swallowtail occasionally visits the flowers and per flower visit was judged to be about as effective. Some Nymphalidae and Hesperidae also come to the flowers, though, as is usually the case with most plants, honeybees and other bees were the most common flower visitors. April – June.

Under-used beauty in cultivation; best in Zones 7, 14, 15, 16, 18-21, 22-24.

Suaeda californica. **California Seablite**. Chenopodiaceae. July – October.

Favorite foodplant for Western Pygmy Blue.

Suaeda moquinii is now *Suaeda nigra*. **Bush Seepweed**.

Suaeda nigra. **Bush Seepweed**. Chenopodiaceae. May – September.

Foodplant for the Western Pygmy Blue (fq) – supports so many larvae as to be ‘a potentially significant threat to its seed production, at least locally’ (Shapiro).

Cossidae: Alkali Blite Borer (*Comadia suaedivora*).

Gelechiidae: *Chionodes sistrella*.

Suaeda taxifolia. **Woolly Seablite**. Chenopodiaceae. All year.

A favorite foodplant for the Western Pygmy Blue. 1977 Season Summary is first report.

Suaeda torreyana is now *Suaeda nigra*. **Bush Seepweed**.

Sweat. Some butterflies are attracted to imbibe sweat: California Sister (fq), Mourning Cloak, California Tortoiseshell, Pearl Crescent [Michigan], various Checkerspot species, Commas, Hackberry Emperor (fq). Rob Santry provided most of these observations. Acmon Blue (Tanya Harvey).

Swertia radiata is now *Frasera speciosa*. **Monument Plant**. Gentianaceae.

Symphoricarpos spp. **Snowberries**. Caprifoliaceae.

Erebidae: *Lygephila victoria* (Powell & Opler, p. 257).

Geometridae: Northwest Phoenix (*Eulithis xyliana*).

Noctuidae: *Pleromelloida bonuscula* [likely hostplants says PNW Moths]. *Pseudorthodes irrorata*. *Sympistis fifia* (Powell & Opler, p. 285). *Sympistis figurata* – probable (PNW Moths). Battered Sallow (*Sunira verberata*, Canada).

Sphingidae: Vashti Sphinx (*Sphinx vashti* [Haggard]).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*). Southern Ugly-nest Caterpillar (*Archips rileyana*). Zapulata (*Choristoneura zapulata*).

Uraniidae: Gray Scoopwing (*Callizzia amorata*).

Ypsolophidae.: *Eucercata castella* – a leaf tier (Powell & Opler, p. 108).

Symphoricarpos albus var. *laevigatus*. **Common Snowberry**. Caprifoliaceae. Nectar: Monarch, Lorquin's Admiral, Red Admiral (fq), Weidemeyer's Admiral, Painted Lady, Callippe Fritillary, Northwestern Fritillary, Pacific Fritillary, Variable Checkerspot, Pearl Crescent, Coral Hairstreak, Tailed Copper, Mexican Cloudywing, Northern Cloudywing, Afranius Duskywing, Pacuvius Duskywing, Dun Skipper, Pahaska Skipper, Tawny-edged Skipper (fq). Moths seeking its nectar include Western Snowberry Clearwing (*Hemaris diffinis*, Sphingidae), Celery Moth (*Anagrapha falcifera*, Noctuidae), and Armyworm (*Mythimna unipuncta*, Noctuidae). Shapiro has not seen butterflies visiting its flowers, likely secondary for them. May – July.

Common Snowberry listed as a larval host for Variable Checkerspot.

Alucitidae: a likely hostplant for an unusual micromoth, *Alucita montana*, a “many plumed moth”.

Arctiidae: Red-shouldered Ctenucha (*Ctenucha multifaria*). Fall Webworm (*Hyphantria cunea*).

Elachistidae: *Perittia cygnodiella* (Powell & Opler, p. 71).

Geometridae: Pale Beauty (*Campaea perlata*). Small Engrailed (*Ectropis crepuscularia*). *Hesperumia latipennis*. Sulphur Wave (*Hesperumia sulphuraria*). Brown-lined Looper (*Nealcis californiaria*). Bruce Spanworm (*Operophtera bruceata*). Rindge's Pero (*Pero mizon*). Sharp-lined Yellow (*Sicya macularia* [Tatum]), October Thorn (*Tetracis jubararia*.) *Xanthorhoe macdunnoughi*.

Noctuidae: *Abagrotis erratica*. *Adelphagrotis indeterminata*. *Adelphagrotis stellaris*. Copper Underwing (*Amphipyra pyramidoides*). *Anhimella perbrunnea*. Rusty Shoulder Knot (*Aseptis binotata*). *Behrensia conchiformis*. Zebra Caterpillar (*Melanchra picta*). Purple Arches (*Polia purpurissata*). Ashy Pleromelloida (*Pleromelloida cinerea*). *Pleromelloida conserta* (both grey and black forms). *Pseudorthodes irrorata*. *Sunira decipiens*.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Nuttall's Buckmoth (*Hemileuca nuttalli*).

Sphingidae: Western Snowberry Clearwing (*Hemaris thetis*) – a day-flying bumblebee mimic. One-eyed Sphinx (*Smerinthus ophthalmica*). Elegant Sphinx (*Sphinx perelegans*). Vashti Sphinx (*Sphinx vashti* – Haggard, Tatum).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Best in Zones 4, 6, 7, 8, 9, 15-17, 18-24. Good for erosion control.

Symphoricarpos mollis. **Creeping Snowberry**. Caprifoliaceae. April – May.

Reported as a foodplant for the Variable Checkerspot.

Noctuidae: *Pleromelloida conserta*.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*).

Ypsolophidae: *Ypsolopha dentiferella* – a suspected hostplant (Powell & Opler, p. 107).

Best in Zones 4, 6, 7, 14, 15, 16, 17, 18. Good for erosion control.

Symphoricarpos rotundifolius. **Mountain Snowberry**. Caprifoliaceae. Scott notes flower visits by Red Admiral, Painted Lady, and Silver-spotted Skipper. June – August.

Alucitidae: Likely one of the hostplants for an unusual micromoth, *Alucita montana*.

Foodplant for Variable Checkerspot, Colon Checkerspot.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*). Nuttall's Sheepmoth (*Hemileuca nuttalli*).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*, California).

Symphotrichum ascendens. **Western Aster**. Asteraceae. Astereae. Nectar: Margined White, Orange Sulphur, Clouded Sulphur, Field Crescent, Northwestern Fritillary, Zerene Fritillary (Liam O'Brien), Hoary Comma (Tony Frates and Andrey Zharkikh photographs), Small Wood-Nymph, Common Wood-Nymph, Edith's Copper, Ruddy Copper, Melissa Blue, Common Checkered-Skipper, Sandhill Skipper, Sonora Skipper, Western Branded Skipper, Woodland Skipper. July - September.

Foodplant for Field Crescent.

Considered worthy of cultivation.

Symphotrichum chilense. **Pacific Aster**. Asteraceae. Astereae. Nectar: Orange Sulphur, California Dogface, Cabbage White. Monarch, Common Buckeye, American Lady, West Coast Lady, Painted Lady, Lorquin's Admiral, Mylitta Crescent, Field Crescent (fq), Oregon Silverspot, Silverspots, California Ringlet. Mormon Metalmark. Gray Hairstreak, Great Purple Hairstreak, Acmon Blue, Western Pygmy Blue, Western Tailed Blue (T.J. Gehling), Purplish Copper. Mournful Duskywing, Common Sootywing, Northern White-Skipper, Common Checkered-Skipper (fq), Fiery Skipper (fq), Field Skipper (Sachem), Eufala Skipper, Sandhill Skipper, Umber Skipper, Woodland Skipper (Avis Boutell). An important butterfly nectar plant. June - October.

Hostplant for Field Crescent and Northern Checkerspot.

Coleophoridae: *Coleophora annulicola*, a case bearer, collected from the plants in June (Powell & Opler, p. 76).

Zones 4-6, 7-10, 14-24. Easy to grow, too easy for some gardeners! Used in revegetation.

Symphotrichum foliaceum. **Leafy Aster**. Asteraceae. Astereae. Nectar: Monarch, Common Buckeye, Mylitta Crescent, Northern Blue (Terry Gray), Woodland Skipper, doubtless others. July - August.

Foodplant for Field Crescent.

Considered worthy of cultivation.

Symphyotrichum foliaceum var. *parryi*. **Parry's Aster**. Asteraceae. Astereae. Nectar: Green Comma (Paul Slichter photograph). July – August.

Considered worthy of cultivation.

Symphyotrichum greatae. **Greata's Aster**. Asteraceae. Astereae. Nectar: Western Tiger Swallowtail, Cabbage White, California Dogface (David Horner), Hoary Comma, Great Purple Hairstreak, Behr's Metalmark, Funereal Duskywing, skippers. August - October.

Larval host for Field Crescent.

Symphyotrichum hendersonii. **Henderson's Aster**. Asteraceae. Astereae. Nectar: Common Buckeye. July – August.

Symphyotrichum lanceolatum. **Panicled Aster**. Asteraceae. Astereae. Nectar: Clouded Sulphur, Orange Sulphur (fq), Cabbage White (fq), Checkered White, Monarch, Mourning Cloak, Common Wood-Nymph, Red Admiral, Painted Lady, American Lady, West Coast Lady, Field Crescent (fq), Pearl Crescent, Texan Crescent, Variegated Fritillary, Gray Hairstreak, Purplish Copper (fq), Melissa Blue, Common Checkered-Skipper, Sandhill Skipper, Sachem, Tawny-edged Skipper (fq), Woodland Skipper (fq), Yellow-collared Scape Moth, Celery Moth . July - August.

Foodplant for Field Crescent and Pearl Crescent.

Symphyotrichum lanceolatum var. *hesperium*. **Western Lance Leaf Aster**. Asteraceae. Astereae. Western White (Scott). Dennis Walker (SoCal Butterflies) photographed a Field Crescent at nectar, identifies it as a hostplant.

Considered worthy of cultivation.

Symphyotrichum lentum. **Suisun Marsh Aster**. Asteraceae. Astereae. Nectar: Variegated Fritillary, Silver-spotted Skipper. Bert Johnson notes it attracts many butterflies. May – November.

Pterophoridae: *Hellinsia glenni* (syn. *Oidaematophorus glenni*) (Powell & Opler).

In cultivation.

Symphyotrichum spathulatum was *Aster occidentalis*. **Western Mountain Aster**. Asteraceae. Astereae. Heavily used as a nectar plant in its native range; Shapiro says the 8 - 14 butterfly species observed at nectar in his study sites on September 9 and 10, 2009 are typical. Orange Sulphur, Lorquin's Admiral, Great Basin Fritillary, Mormon Fritillary, Purplish Copper (Slichter photograph shows five specimens on adjacent flowers!), Boisduval's Blue, Melissa Blue (Ron Wolf). June – September.

Larval host for Northern Checkerspot and Field Crescent.

Zones 4-6, 7, 15-17.

Symphyotrichum subspicatum. **Douglas Aster**. Asteraceae. Astereae. Nectar for Anise Swallowtail, Orange Sulphur, Common Ringlet, Mylitta Crescent (fq), West Coast Lady, American Lady, Painted Lady, Red Admiral, Oregon Silverspot, Green Comma, Hoary Comma, Gray Hairstreak, Great Purple

Hairstreak, Purplish Copper, Juba Skipper, Woodland Skipper (fq), Lempke's Gold Spot (*Plusia putnami*, Noctuidae). The best butterfly nectar plant in its season in Bob Pyle's Washington garden. July – September.

Symphotrichum subulatum var. *parviflorum* was *Aster subulatus*. **Salt Marsh Aster**. Asteraceae. Astereae. Nectar: In Missouri, a closely related variety photo-documented Orange Sulphur, Dainty Sulphur, Gulf Fritillary, Common Buckeye, Painted Lady, and Fiery Skipper. July – October.

Synthyris reniformis. **Snow Queen**. Plantaginaceae. Nectar: Margined White, Gray Hairstreak, Propertius Duskywing (Ann Potter). Early nectar source – “a good nectar plant” according to Pyle. February – June.

Tanacetum bipinnatum was *Tanacetum camphoratum*. **Dune Tansy**. Asteraceae. Anthemideae. Common Ringlet, Painted Lady, Purplish Copper, Woodland Skipper, Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae) (fq). Good butterfly nectar plant – Growing Native. July – October.

Noctuidae: Dune Tansy feeds caterpillars of *Psammopolia wyatti*, a nocturnal noctuid that flies over sandy beaches in late May to early September; it comes to light (Wikipedia). The article says it ranges north to southern Oregon; it occurs as far south as Inglenook Fen, Mendocino County according to the Essig Museum California Moth Database.

Dune Tansy is uncommon in the wild, but easy to cultivate.

Tanacetum camphoratum is now *Tanacetum bipinnatum*. **Dune Tansy**.

Tauschia arguta. **Southern Umbrellawort**. Apiaceae. Selineae. Shapiro: “I have seen the flowers visited by Leanira Checkerspot (American River Canyon).” April - June.

Southern Umbrellawort is a major Anise Swallowtail hostplant in southern California mountains; also for Indra Swallowtail and Desert Black Swallowtail.

Arctiidae: Vestal Tiger Moth (*Spilosoma vestalis*).

Tauschia hartwegii. **Hartweg's Umbrellawort**. Apiaceae. Selineae. March - May.

Larval host for Anise Swallowtail.

Tauschia parishii. **Parish's Umbrellawort**. Apiaceae. Selineae. May - July.

Hostplant for Indra Swallowtail, Desert Black Swallowtail and Anise Swallowtail. Seems a primary hostplant for Anise Swallowtail at the eastern base of the Sierra Nevada Mountains.

Taxus brevifolia. **Pacific Yew**. Taxaceae.

Tortricidae: A principal coniferous hostplant for non-native Red-barred Tortrix (*Ditula angustiorana*) (BugGuide).

Best cultivated in Zones 2, 4-6, 7, 15-17, 24.

Tellima grandiflora. **Fringe Cups**. Saxifragaceae. Nectar: Anise Swallowtail (Mike Patterson) – possibly a rare occurrence. Hummingbirds. April – July.

Geometridae: Tatum finds caterpillars of Ten-spotted Rhododendron Moth (*Dysstroma sobria*) on its leaves and flowers on southern Vancouver Island.

Prodoxidae: *Greya punctiferella*.

Groundcover; grows best in Zones 4, 5, 6, 7, 14-16, 17.

Tetradymia axillaris. **Longspine Horsebrush**. Asteraceae. Senecioneae. Nectar: Common Buckeye, Ceraunus Blue, Reakirt's Blue, Acmon Blue, Gray Hairstreak, Northern White-Skipper, Funereal Duskywing, and Orange Skipperling (Austins). Hundreds of *Ypsolopha maculatella* (a micromoth whose caterpillars eat *Ephedra* species) seen congregating on flowering Longspine Horsebrush (*Tetradymia axillaris* var. *longispina*) and Desert Goldenhead (*Acamptopappus sphaerocephalus*, Asteraceae) by Aaron Schusteff. April – May.

Recorded as a consistent hostplant for Painted Lady in the 1991 migration in Inyo County.

Bucculatricidae: *Bucculatrix tetradymiae* (Wikipedia).

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*). (Powell & Opler).

Tetradymia canescens. **Gray Horsebrush, Spineless Horsebrush**. Asteraceae. Senecioneae. Nectar: Becker's White, Orange Sulphur, Southern Dogface. American Painted Lady, Common Buckeye, Queen, Great Basin Wood-Nymph. Mormon Metalmark. Gray Hairstreak, Thicket Hairstreak, Juniper Hairstreak, Great Purple Hairstreak, Marine Blue, Acmon Blue, Echo Azure. Common Checkered-Skipper, Small Checkered-Skipper, Funereal Duskywing (Austins). Scott finds it a popular in western Colorado, noting: Small Wood-Nymph, Behr's Hairstreak, California Hairstreak (fq), Sagebrush Sooty Hairstreak, Blue Copper, July – October.

Tortricidae: *Phaneta* sp. (ID uncertain, reported from California).

Considered worthy of cultivation.

Tetradymia comosa. **Cotton-Thorn**. Asteraceae. Senecioneae. Bernard Field Station photographs show flower visits by various insects such as Mexican Cactus Fly (*Copestylum mexicanum*). June – November.

Tetradymia glabrata. **Littleleaf Horsebrush**. Asteraceae. Senecioneae. April – July.

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*) (Powell & Opler).

Considered worthy of cultivation.

Tetradymia spinosa. **Shortspine Horsebrush**. Asteraceae. Senecioneae. Attracts many butterflies (Las Pilitas Nursery). April – June.

Saturniidae: Burns' Buckmoth (*Hemileuca burnsi*) (Hostplants).

Tetranuris acaulis. **Stemless Four-Nerve Daisy**. Asteraceae. Helenieae. Scott notes flower visits by Western White, Field Crescent, Ridings's Satyr, Western Pine Elfin, Melissa Blue, Reakirt's Blue, Silvery Blue, Afranius Duskywing, and Common Checkered-Skipper. April – September.

Thalapsi montanum is now *Noccacea fendleri* ssp. *glauca*. **Pennycress**.

Thalictrum sp. **Meadow rue**. Ranunculaceae.

Geometridae: among the foodplants of the polyphagous Satyr Pug (*Eupithecia satyrata*).

Noctuidae: *Pseudeva palligera* is associated with the plant, a likely host (PNW Moths). Among foodplants for the polyphagous Setaceous Hebrew Character (*Xestia c-nigrum*).

Thamnosma montana. **Turpentine Broom**. Rutaceae. Nectar: Desert Black Swallowtail. Ford's Swallowtail (Shields), Pahaska Skipper. February-May.

Monroes and others: hostplant for 'Desert' Black Swallowtail.

Thelypodium crispum. **Wavy-leaved Thelypodium**. Brassicaceae. Nectar: Carson Wandering Skipper. June-August.

Thelypodium laciniatum. **Cutleaf Thelypody**. Brassicaceae. April – August.

Foodplant for Becker's White.

Thelypodium stenopetalum. **Slender Petaled Thelypodium**. Brassicaceae. Nectar: Pearly Marble. May – August.

Larval host for Pearly Marble aka California Marble.

Thermopsis californica var. *semota* was *Thermopsis macrophylla* var. *semota*. **San Diego Goldenpea**. Fabaceae. Thermopsidae. Nectar: Nelson's Hairstreak (Monroes). April – June.

Thermopsis macrophylla. **False Lupine**. Fabaceae. Thermopsidae. Nectar: Afranius Duskywing. May-June.

Foodplant for Edwards's Sulphur (a segregate of Queen Alexandra's Sulphur). Afranius Duskywing and Persius Duskywing eat legumes, including *Thermopsis* species, possibly this or others.

Tortricidae: a distinctive unnamed or unidentified *Grapholita* "*thermopsae*" reported by Powell from California. *Sparganothis senecionana* (California).

Best in Zones 6, 7, 14, 15-17, 18-21, 22-24; used in revegetation.

Thermopsis macrophylla var. *semota* is now *Thermopsis californica* var. *semota*. **San Diego Goldenpea**.

Thuja plicata. **Western Red Cedar**. Cupressaceae.

Foodplant for Western Pine Elfin and Nelson's Hairstreak.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: Common Grey (*Anavitrinella pampinaria*). Pale Beauty (*Campaea perlata*). Gray Spruce Looper Moth (*Caripeta divisata*). Packard's Girdle (*Enypia packardata*). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata*, Canada). Larch Pug (*Eupithecia annulata*). Freyer's Pug (*Eupithecia intricata*). *Eupithecia longipalpata*. *Eupithecia maestosa*. *Eupithecia placidata*. *Eupithecia sabulosata*. Dyar's Looper (*Gabriola dyari*). *Hydriomena irata*. Renounced Hydriomena (*Hydriomena renunciata*, Canada). Hemlock Looper (*Lambdina fiscellaria*). Brown-lined Looper (*Neocalcis californiaria*). *Nepytia umbrosaria* (Canada). Rindge's Pero (*Pero mizon*). Black-lined Synaxis (*Tetracis pallulata*, Canada).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*, Canada).

Lymantriidae: the Vaporor (*Orgyia antiqua*).

Noctuidae: *Abagrotis glenni*. Common Idia (*Idia aemula* – said to eat the dead leaves). Speckled Green Cutworm (*Orthosia hibisci*). Brown Angle Shades (*Phlogophora periculosa*). Hooked Silver Y (*Syngrapha alias*, Canada). Otter Spiramater (*Spiramater lutra*). *Xestia mustelina* (Canada).

Tortricidae: *Argyrotaenia dorsalana* (Canada). Orange Tortrix (*Argyrotaenia franciscana*). *Cydia cupressana* (ID uncertain). Red-barred Tortrix (*Ditula angustiorana*, Canada). Red-striped Needleworm (*Epinotia radicana*, Canada). *Epinotia subviridis* (Canada). Light Brown Apple Moth (*Epiphyas postvittana*, Australia).

Thymophylla pentachaeta var. *belenidium*. **Dyssodia**. Asteraceae. Tageteae. Dainty Sulphur nectar source and larval host. Nectar likely attracts other species as well. (March) April – June, September – October.

Foodplant for Dainty Sulphur.

Best in Zones 3, 4-6, 7, 14-24.

Thysanocarpus curvipes. **Lacepod**. Brassicaceae. Fred Heath noticed a Desert Marble at nectar on this species in Arizona (12 Feb 2012), prompting him to consider it may possibly be a host plant. February – June.

Others observed oviposition by Desert Marble on a Lacepod on March 10, 2011 (SoWestLep #11040); seems almost certainly a hostplant for it. Foodplant for Sara Orangetip, Desert Orangetip, and Spring White.

In cultivation.

Tiarella trifoliata. **Sugar Scoop**. Saxifragaceae. Varieties flower in the range of May – August.

Prodoxidae: *Greya punctiferella*.

Var. *unifoliata* best in Zones 4-5, 6, 15, 16, 17.

Tidestromia lanuginosa. **Woolly Tidestromia**. Amaranthaceae. Nectar: Anne Reeves photographs show Checkered White and Dainty Sulphur hanging out on flowering specimens. Ceraunus Blue (Anne Reeves), Reakirt's Blue (Anne Reeves). Western Pygmy Blue (Anne Reeves), White Checkered Skipper (Anne Reeves). *Aetole unipunctella* (Heliodinidae) (Anne Reeves photograph). July – October.

Tiquilia plicata. **Fanleaf Crinklemat**. Boraginaceae. March – July.

Depressariidae: *Pseudethmia protuberans*, strong association noted (Powell & Opler, p 70-71).

Tolmiea menziesii. **Pig a Back Plant**. Saxifragaceae. May – August.

Prodoxidae: *Greya punctiferella*.

Groundcover; cultivars; best in Zones 5, 6, 7, 14-16, 17, 24.

Tonestus lyallii. **Lyall's Goldenweed**. Asteraceae. Astereae. Scott notes flower visits by Mormon Fritillary, Rockslide Checkerspot, and Lustrous Copper. July - August.

Toxicodendron diversilobum. **Poison Oak**. Anacardiaceae. Nectar: Variable Checkerspot, and the rare Hermes Copper. April - June.

Poison Oak is a hostplant for California Dodder (*Cuscuta californica*), a nectar and hostplant for some butterflies (see its account).

Cosmopterigidae: Midrib Gall Moth (*Sorhagenia nimbosa*).

Gelechiidae: *Teliopsis baldiana* (Powell & Opler, p. 89).

Gracillariidae: Poison Oak Leafminer (*Caloptilia diversilobiella*).

Tortricidae: Verbena Bud Moth (*Endothenia hebesana*). Sumac Leaf-tier (*Episimus argutana*).

Cultivated in England, for fall color!

Toxicoscordion fremontii was *Zigadenus fremontii*. Melanthiaceae. Marc Kummel photographed a diurnal micromoth at nectar. February – June.

Toxicoscordion paniculatum was *Zigadenus paniculatus*. Melanthiaceae. **Foothill Deathcamas**. May – June.

Tortricidae: *Sparganothis senecionana* (California).

Toxicoscordion venenosum. **Meadow Death Camas**. Melanthiaceae. Nectar: Large Marble (on islands of NW Washington, Xerces Society). May – July.

Trametes versicolor (aka *Polyphorus versicolor*). **Turkey Tail**. Kingdom Fungi, Division Basidiomycota, Polyporaceae Grows on hardwoods, such as California Laurel (*Umbellularia californica*).

Tineidae: *Morphogoides burkerella*.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Trautvetteria carolinensis. **Carolina Bugbane. False Bugbane. Tassel Rue.** Ranunculaceae. Nectar: flowers white, fragrant; Quakin' Grass Nursery claims it is "a good butterfly plant". July - September.

Likes moist soil, said to be undemanding. Showy, considered underused.

Triantha occidentalis was *Tofieldia occidentalis*. **Western False Asphodel.** Tofieldiaceae. Nectar: Pine White (Aaron Schusteff, BugGuide). July – September.

Trianthema portulacastrum. **Desert Horse-purslane.** Amaranthaceae. Nectar: Tropical Buckeye. Flowers spring – fall.

Foodplant for the Western Pygmy Blue (Wesley A. Maffei).

Trichoptilium incisum. **Yellowhead. Yellowdome.** Asteraceae. Helenieae. Nectar: 'Henne's' Variable Checkerspot in the Anza-Borrego area (Monroes). January – May, October – December.

Trichostema lanatum. **Woolly Blue-curls.** Lamiaceae. Nectar: Western Tiger Swallowtail (fq), Anise Swallowtail, California Dogface (fq), Monarch, Painted Lady, Variable Checkerspot, Northern White-Skipper, Common Branded Skipper, Rural Skipper, Umber Skipper, unidentified skippers, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae) –an effective pollinator (Marc Kummel), hawkmoths. Beautiful Wildlife Garden says Woolly Blue Curls is a favorite nectar source for the California Dogface.

Outstanding for hummingbirds. Black-chinned Hummingbird, Costa's Hummingbird: Spira, Timothy P. 1980. "Floral Parameters, Breeding System and Pollinator Type in *Trichostema* (Labiatae)." 1980. *American Journal of Botany* 67 (3): 278-84. <http://www.jstor.org/stable/2442337>. Most of the actual pollinators were bees, as with most plants.

April – July.

Henne observed Woolly Blue-curls serve as a Variable Checkerspot foodplant Santa Monica Mountains, an atypical choice (Emmel & Emmel, 1973). Richard James has also seen it in the Santa Monica Mountains.

Cosmopterigidae: *Stigmatophora enchrysa*.

Trichostema lanceolatum. **Vinegarweed.** Lamiaceae. Nectar: Pipevine Swallowtail (Shapiro). Orange Sulphur (Pete Veilleux). Northern White-Skipper (Paul Johnson). A Peter J. Bryant photograph indicates Woodland Skipper pollinates it. Shapiro finds it 'addicted' and 'swarms over it', with some visits by other grass skippers. Common Branded Skipper. Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae) (fq) (Paul Johnson). June – November.

Cosmopterigidae: *Stigmatophora iridella*.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*).

Trichostema parishii. **Mountain Blue Curls**. Lamiaceae. Nectar: Marine Blue (Alan King photo). March-July.

Tridens muticus. **Slim Tridens**. Poaceae. Chlorideae.

Likely hostplant for Common Wood-Nymph. Hostplant for Green Skipper (*Hesperia viridis*) – not recorded for California, but very similar to Pahaska Skipper.

Trientalis latifolia. **Starflower**. Myrsinaceae. Gray Hairstreak visits its flowers. April-July.

Trifolium spp. **Clovers**. Fabaceae. Trifolieae. Nectar: Clodius Parnassian, Large Marble, Orange Sulphur, Southern Dogface, California Dogface. American Painted Lady, Common Buckeye, Weidemeyer's Admiral (Johnson & Nixon, 1967), Variable Checkerspot (to large clovers). Gray Hairstreak, American Copper [Michigan], Lustrous Copper, Purplish Copper, Echo Azure, Acmon Blue, Marine Blue, Eastern Tailed Blue, Gray Blue. Strong favorite nectar sources for Greenish Blue, for which they are also hostplants. Common Sootywing, Northern Cloudywing, Mexican Cloudywing, Silver-spotted Skipper, Sachem, Dun Skipper, Dogstar Skipper (a segregate of Sonora Skipper), Arctic Skipper, Nevada Cloudywing, *Pyrausta insequialis* (Glenn Fine).

Unspecified clovers recorded as hostplants for Orange Sulphur, Clouded Sulphur, Southern Dogface, Eastern Tailed Blue, Acmon Blue, Greenish Blue, Shasta Blue, Nevada Skipper, and Northern Cloudywing. As with other plants, many native clovers are difficult to identify and little known; likely most serve many more Lepidoptera species than yet specifically recorded.

Arctiidae: Ornate Tiger Moth (*Apantesis ornata*). Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Geometridae: Confused Eusarca (*Eusarca confusaria*).

Noctuidae: Clover Looper (*Caenurgina crassiuscula*). Forage Looper (*Caenurgina erechtea*). Nutmeg (*Anarta trifolii*). *Lacinipolia vicina*. *Papestra cristifera*. Variegated Cutworm (*Peridroma saucia*). Gray Looper (*Rachiplusia ou*). V-lined Quaker (*Zosteropoda hirtipes*).

Tortricidae: *Celypha cespitana*. Zapulata (*Choristoneura zapulata*). Three-lined Leafroller (*Pandemis limitata*). Omnivorous Leafroller (*Platynota stultana*). *Xenotemna pallorana*.

Trifolium amoenum. **Showy Indian Clover**. Fabaceae. Trifolieae. Flowers attract butterflies. A very rare species in the wild. Somewhat showy, it is in cultivation. April – June.

Trifolium andersonii. **Fiveleaf Clover**. Fabaceae. Trifolieae. May-August.

Foodplant for Shasta Blue.

Trifolium breweri. **Forest Clover**. Fabaceae. Trifolieae. May-August.

Larval host for Greenish Blue.

Arctiidae: a tiger moth, *Kodiosoma fulvum*.

Trifolium ciliolatum. **Foothill Clover**. Fabaceae. Trifolieae. March-June.

Foodplant for Persius Duskywing.

Arctiidae: *Kodiosoma fulvum*, a small tiger moth.

Trifolium cyathiferum. **Bowl Clover**. Fabaceae. Trifolieae. May-August.

Foodplant for the Greenish Blue.

Noctuidae: Western Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Trifolium gracilentum. **Pinpoint Clover**. Fabaceae. Trifolieae. “Loved by butterflies and bees” -- Lerner Seeds. March – June.

Trifolium gymnocarpon ssp. *plummerae*. **Plummer’s Clover**. Fabaceae. Trifolieae. May-June.

Foodplant for the Shasta Blue.

Trifolium longipes. **Longstalk Clover**. Fabaceae. Trifolieae. Nectar: Orange Sulphur, Pacific Fritillary, Greenish Blue. Many varieties, flowering mostly June – September.

Foodplant for Orange Sulphur, Clouded Sulphur, Greenish Blue, Reakirt’s Blue, and Mexican Cloudywing.

Trifolium macraei. **Macrae’s Clover**. Fabaceae. Trifolieae. Nectar: Common Checkered-Skipper. March – May.

Trifolium macrocephalum. **Largehead Clover**. Fabaceae. Trifolieae. April-May.

Greenish Blue hostplant. Very likely caterpillar plant for Alexandra Sulphur (Shapiro). Zones 1-3.

Trifolium microcephalum. **Woolly Clover**. Fabaceae. Trifolieae. Nectar: Common Checkered-Skipper. April – August.

Trifolium microdon. **Thimble Clover**. Fabaceae. Trifolieae. Nectar: Common Checkered-Skipper. March – June.

Trifolium monanthum. **Mountain Carpet Clover**. Fabaceae. Trifolieae. June-August.

Larval host for Greenish Blue and Mexican Cloudywing.

Noctuidae: Alfalfa Semilooper (*Autographa californica*).

Trifolium obtusiflorum. **Creek Clover**. Fabaceae. Trifolieae. April-July.

Supports caterpillars of the Bramble Green Hairstreak.

Trifolium oliganthum. **Minitomcat Clover**. Fabaceae. Trifolieae. March-June.

Larval host for Gray Hairstreak.

Trifolium productum. **Shasta Clover**. Fabaceae. Trifolieae. Nectar: Greenish Blue. June – August.

Hostplant for Greenish Blue.

Shasta clover is considered showy enough to be worthy of cultivation.

Trifolium variegatum. **Whitetip Clover**. Fabaceae. Trifolieae. April-June.

Foodplant for the Greenish Blue.

Trifolium willdenovii. **Tomcat Clover**. Fabaceae. Trifolieae. Nectar: Orange Sulphur, Bay Checkerspot (a segregate of Edith's Checkerspot). March – June.

Hostplant for Orange Sulphur, Acmon Blue, Eastern Tailed Blue, and Gray Hairstreak.

In cultivation.

Trifolium wormskioldii. **Springbank Clover**. Fabaceae. Nectar: The Grinnells caught a Western Pine Elf on it in 1907. Trifolieae. May-October.

Foodplant for Orange Sulphur, Greenish Blue, and Western Cloudywing.
Tortricidae: *Grapholita conversana*.

In cultivation.

Triphysaria eriantha. **Johnny-tuck**. Orobanchaceae. March-May.

Noctuidae: Common Flower Moth, *Schinia pulchripennis*, at Mather Field.

Triphysaria pusilla. **Dwarf Owl's-clover**. Orobanchaceae. April-June.

A post-diapause larval host of Taylor's Checkerspot (a segregate of Edith's Checkerspot) in Oregon.

Triteleia spp. **Triplet Lilies**. Themidaceae. Likely most or all are good nectar sources for Lepidoptera.
Thicket Hairstreak.

Triteleia bridgesii. **Bridge's Brodiaea**. Themidaceae. Nectar: Pipevine Swallowtail (fq). April – June.

Triteleia hyacinthina. **White Brodiaea**. Themidaceae. Nectar: Pipevine Swallowtail (fq), Anise Swallowtail, Western Tiger Swallowtail, Clodius Parnassian, Northern Checkerspot (Ron Wolf photograph), California Ringlet, Boisduval's Blue (Paul Slichter photographs), Propertius Duskywing (Ann Potter), Northern Cloudywing (fq) (Chris Carvalho), Sonora Skipper (iNaturalist, Will Richardson), Three-striped Longhorn (*Adela trigrpha*) and three other day-flying moths. March – July.

Best in Zones 7, 15-17.

Triteleia ixioides. **Yellow Brodiaea**. Themidaceae. A photograph of what appears to be this species shows Acmon Blue at nectar. An Aaron Schusteff photo shows Callippe Fritillary on *Triteleia ixioides* ssp. *scabra*. March – May.

Ssp. *ixioides* best in Zones 15-17.

Ssp. *scabra* best in Zones 7, 14-16.

Triteleia laxa. **Ithuriel's Spear**. Themidaceae. Nectar: Pipevine Swallowtail (fq), Anise Swallowtail, Pale Swallowtail (Butterworth, Shapiro) (fq), Two-tailed Swallowtail (Ken Wilson, on Mt. Diablo), Western Tiger Swallowtail, Variable Checkerspot, Painted Lady, Mission Blue [segregate of Boisduval's Blue] (San Francisco), Propertius Duskywing, Mournful Duskywing (Shapiro), Northern Cloudywing, Skippers, Alfalfa Looper (*Autographa californica*, Noctuidae). Ithuriel's Spear is an excellent nectar plant. Near an agricultural area in Bidwell Park, Chico, Pipevine Swallowtail the most frequent butterfly visitor and a pollinator (Chamberlain and Schlising). April – June.

Long cultivated with named varieties available; best in Zones 7, 14-17, 19-24.

Triteleia lilacina. **Lilac Pretty Face. Foothill Tritelia**. Themidaceae. Nectar: Pipevine Swallowtail (fq). March – July.

Triteleia peduncularis. **Marsh Brodiaea**. Themidaceae. In late May 1987, I observed a female Acmon Blue seriously at nectar on it. Good butterfly nectar plant – *Growing Native*. May – July.

Likes wet in spring, dry in summer. Best cultivated in Zones 7, 14-17.

Triodanis perfoliata. **Clasping Venus Looking Glass**. Campanulaceae. Nectar: Cabbage White, Eastern Tailed Blue. June-July.

Trixis californica var. *californica*. **Trixis or American Threefold**. Asteraceae. Nassauvieae. Nectar: Checkered White (Liz Makings), many Northern Cloudywing seen on it (Alice Anderson, NABA-Chat, Oct 2014, New Mexico). Northern White-Skipper (Monroes). January – May, July – August.

Tsuga heterophylla. **Western Hemlock**. Pinaceae.

Foodplant for the Pine White, Western Pine Elfin and Nelson's Hairstreak.

Western Hemlock supports dwarf mistletoes (*Arceuthobium campylopodum*) which are foodplants for Johnson's Hairstreak and Douglas-fir Tussock Moth (*Orgyia pseudotsugata*, Lymantriidae).

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). *Antepirrhoe fasciata*. Pale Beauty (*Campaea perlata*). Red Girdle (*Caripeta aequaliaria* Canada). Gray Spruce Looper (*Caripeta divisata*). Mottled Gray Carpet (*Cladara limitaria nigroangulata*). Dark Marbled Carpet (*Dysstroma citrata*). Small Engrailed (*Ectropis crepuscularia*). Mountain Girdle (*Enypia griseata*). Packard's Girdle (*Enypia packardata*) (fq). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata* Canadian record). Whitelined Looper (*Epirrita pulchraria*, Canada, an important host). Linden Looper (*Erannis tiliaria*). Barred Yellow (*Eulithis propulsata*). Northwest Phoenix (*Eulithis xyliana*). Larch Pug (*Eupithecia annulata*). *Eupithecia longipalpata*. *Eupithecia olivacea*. *Eupithecia placidata*. Dyar's Looper (*Gabriola dyari*) (fq). Sulphur Wave (*Hesperumia sulphuraria*). *Hydriomena californiata*.

Hydriomena irata. *Hydriomena marinata*. Renounced *Hydriomena* (*Hydriomena renunciata* Canada). *Hydriomena speciosata*. Hemlock Looper (*Lambdina fiscellaria*). Adonis Angle (*Macaria adonis*). Pale-marked Angle (*Macaria signaria*). Brown-lined Looper (*Nealcis californiaria*). *Nepytia umbrosaria*. Rindge's Pero (*Pero mizon*). American Barred Umber Moth (*Plagodis pulveraria*). Bowling Pin (*Sabulodes edwardsata*). Black-lined Synaxis (*Tetracis pallulata*, Canada). Taylor's Thallophaga (*Thallopaga taylorata* Canada).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*), at least in Canada. *Tolyte dayi*.

Lymantriidae: Pine Tussock Moth (*Dasychira grisefacta*).

Noctuidae: *Agrochola pulchella* (in Canada, at least). Rusty Shoulder Knot (*Aseptis binotata*). *Cosmia epipaschia*. *Cosmia praeacuta*. Brown Woodling (*Egira perlubens*). Western Woodling (*Egira rubrica*). American Angle Shades (*Euplexia benesimilis*). Nameless Pinion (*Lithophane innominata*). *Mniotype tenera* (Canada). Speckled Green Cutworm (*Orthosia hibisci*). *Papestra cristifera*. Brown Angle Shades (*Phlogophora periculosa*). *Pseudorthodes irrorata*. Otter Spiramater (*Spiramater lutra*). *Sunira decipiens* (Canada). Hooked Silver Y (*Syngrapha alias*, Canada). Western Conifer Looper (*Syngrapha celsa*). *Xestia mustelina*. Colorful Zale (*Zale minerea*, Canada).

Tortricidae: Western Black-headed Budworm (*Acleris gloveranus*) (fq). *Argyrotaenia dorsalana* (fq). *Apotomops wellingtoniana*. Spruce Budworm (*Choristoneura fumiferana*, Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*, Canada). Red-striped Needleworm (*Epinotia radicana*, Canada). *Zeiraphera canadensis* (Canada).

Various cultivars available. Best in Zones 3, 4-6, 7, 15-17.

Tsuga mertensiana. **Mountain Hemlock**. Pinaceae.

Arctiidae: Silver-spotted Tiger Moth (*Lophocampa argentata*).

Geometridae: Packard's Girdle (*Enypia packardata*). Variable Girdle (*Enypia venata*). Autumnal Moth (*Epirrita autumnata* Canada). Whitelined Looper (*Epirrita pulchraria*, Canada). Larch Pug (*Eupithecia annulata*). *Eupithecia longipalpata*. *Eupithecia spermaphaga*. Dyar's Looper (*Gabriola dyari*). *Hydriomena irata*. *Hydriomena speciosata*. Western Carpet (*Melanolophia imitata*). Brown-lined Looper (*Nealcis californiaria* Canada). Black-lined Synaxis (*Tetracis pallulata* – Canadian record).

Noctuidae: *Xestia mustelina* (Canada).

Tortricidae: *Apotomops wellingtoniana*. *Argyrotaenia dorsalana*. Spruce Budworm (*Choristoneura fumiferana*, Canada).

Best cultivated in Zones 2, 6.

Turricula parryi is now *Eriodictyon parryi*. **Poodle-dog Bush**.

Turritis glabra was *Arabis glabra*. **Tower Mustard**. Brassicaceae. White butterflies – no doubt those that use it as a larval host, occasionally visit the flowers. Scott noted flower visits by Large Marble and Spring White. April - July.

A hostplant for Sara Orangetip (fq), Cabbage White, Gray-veined White (Margined White), Checkered White, Western White, Spring White, Boisduval's aka Gray Marble (fq), Pearly Marble, and Large Marble. This large leafy native annual is prime caterpillar pasture!

Easy to grow.

Typha spp. **Cattails**. Typhaceae.

Noctuidae: Henry's Marsh Moth (*Acronicta insularis*). Oblong Sedge Borer (*Globia oblonga*). *Eudryas brevipennis*.

Pyralidae: *Elophila occidentalis*.

Tortricidae: *Choristoneura obsoletana* (BugGuide).

Typha latifolia. **Broad-leaved Cattail**. Typhaceae.

Noctuidae: Henry's Marsh Moth (*Acronicta insularis*). Oblong Sedge Borer (*Globia oblonga*) -- Tatum notes that the caterpillars may be found inside the stems near the water level -- "the moth escapes through a hole in the stem which it carefully planned while it was still a caterpillar and planning to pupate". Quite providentially, I suppose! Cattail Borer (*Bellura obliqua*). Yellow Sedge Borer (*Globia subflava*).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*).

Umbellularia californica. **California Laurel**. Lauraceae. Nectar: Tailed Copper, Western Brown Elfin, Johnson's Hairstreak (Shields). November - May.

Reported as a larval host for the Two-tailed Swallowtail and Echo Azure. Supports Oak Mistletoe (*Phoradendron leucarpum* subsp. *tomentosum*), a hostplant for Great Purple Hairstreak.

Geometridae: Brown-lined Looper (*Neocalcis californiaria*). Omnivorous Looper (*Sabulodes aegrotata*).

Gracillariidae: Powell & Opler mention "an apparently undescribed species of *Caloptilia*" that feeds on it. California Laurel Leafminer (*Cameraria umbellulariae*).

Tineidae: *Morophagoides burkerella*. Feeds on Turkey Tail (*Trametes versicolor*), a common polypore mushroom on California Laurel (Powell & Opler).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Orange Tortrix (*Argyrotaenia franciscana*).

Best cultivated in Zones 5, 6, 7-9, 14-17, 18-24.

Urtica dioica. **Stinging Nettle**. Urticaceae.

Foodplant for Milbert's Tortoiseshell, Satyr Comma, West Coast Lady (fq), Painted Lady, and Red Admiral. Green Comma successfully reared on it.

Arctiidae: Great Tiger Moth (*Arctia caja*).

Noctuidae: Impressed Dagger (*Acronicta impressa*). The Mouse (*Amphipyra tragopoginis*). Soothsayer (*Graphiphora augur*). *Hypena californica*. *Hypena decorata*. Hop Looper (*Hypena humuli*). *Hypena modestoides*. Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*). Smith's Dart (*Xestia smithii* [Tatum]). Listed simply under "Urtica", which probably applies here: Soybean Looper (*Chrysodeixis includens*) and Inscribed Looper (*Syngrapha epigaea*).

Pyralidae: False Greenhouse Leaf-tier (*Udea profundalis*) (fq).

Tortricidae: *Clepsis fucana* (California).

Famous for being cultivated in the garden of Sir Winston Churchill – who appreciated its value for butterfly production! Some grow it for edible cooked greens -- harvest and prepare with care!

Vaccinium spp. Ericaceae. Nectar for Sleepy Duskywing.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Geometridae: Autumnal Moth (*Epirrita autumnata*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Lesser Grapevine Looper (*Eulithis diversilineata*). July Highflyer (*Hydriomena furcata*). Hemlock Looper (*Lambdina fiscellaria*).

Noctuidae: *Abagrotis brunneipennis*. American Brindle (*Lithomoia germana*). Speckled Green Cutworm (*Orthosia hibisci*). *Papestra cristifera*. Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*). *Platypolia contadina* (a polyphagous noctuid feeding on flowering woody plants; BugGuide says it especially favors *Vaccinium* species). Stormy Arches (*Polia nimbosa*). Purple Arches (*Polia purpurissata*). Inscribed Looper (*Syngrapha epigaea*). Mountain Beauty (*Syngrapha ignea*). *Syngrapha orophila*. *Trichordestra tacoma*. Smith's Dart (*Xestia smithii*). American Swordgrass Moth (*Xylena nupera*). Elderberry Moth (*Zothea tranquilla*).

Tortricidae: *Acleris hastiana*. Fruit-tree Leafroller (*Archips argyrospila*). Large Aspen Tortrix (*Choristoneura conflictana*, Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*). Zapulata (*Choristoneura zapulata*). White-triangle Tortrix (*Clepsis persicana*). *Grapholita conversana*. Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Pandemis limitata*).

Vaccinium cespitosum. **Dwarf Bilberry**. Ericaceae. May-July.

Hostplant for Brown Elfin (Salix Associates). Hostplant for Sierra Sulphur, also known as Behr's Sulphur, in Hudsonian Zone meadows of the Sierra Nevada Mountains. Hostplant for Mariposa Copper and Northern Blue.

Best cultivated in Zones 4, 5, and 6; needs moist acidic soil.

Vaccinium membranaceum. **Thin-leaf Huckleberry**. Ericaceae. June-July.

Geometridae: American Barred Umber (*Plagodis pulveraria occiduaria*). Small Engrailed (*Ectropis crepuscularia*). *Eulithis destinata*. Northwest Phoenix (*Eulithis xylina*). *Eupithecia misturata*. Sulphur Wave (*Hesperumia sulphuraria*). Emasculated Grey (*Iridopsis emasculatum*). Taylor's Thallophaga (*Thallopaga taylorata*).

Noctuidae: Otter Spiramater (*Spiramater lutra*). *Trichordestra tacoma*.

Considered difficult to cultivate.

Vaccinium ovatum. **Western Huckleberry**. Ericaceae. Nectar: Anise Swallowtail, Margined White. “As usual for Ericaceae, hard to get in, but some Lycaenids do” (Shapiro). March – May.

Hostplant for Echo Azure.

Copromorphidae: *Lotisma trigonana*.

Geometridae: *Eulithis destinata*. Brown-lined Looper (*Neocalcis californiaria*).

Gracillariidae: *Cameraria nemoris* – very common, its mine may take entire leaves.

Noctuidae: *Adelphagrotis stellaris*. Brown Angle Shades (*Phlogophora periculosa*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Best cultivated in Zones 4, 5, 6, 15, 16, 17. Cultivars available.

Vaccinium parvifolium. **Red Huckleberry**. Ericaceae. The Echo Azure and Brown Elfin visit its flowers for nectar. May – June.

Hostplant for the Brown Elfin (Salix Associates).

Geometridae: Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Johnson’s Euchlaena (*Euchlaena johnsonaria*). Northwest Phoenix (*Eulithis xyлина*). *Eupithecia subapicata*. Black-banded Carpet (Black-banded Carpet (*Antepirrhoe semiatrata*). *Hesperumia latipennis*. Sulphur Wave (*Hesperumia sulphuraria*). Emasculated Grey (*Iridopsis emasculatum*). Brown-lined Looper (*Neocalcis californiaria*). Rindge’s Pero (*Pero mizon*). Friendly Probole (*Probole amicaria*). October Thorn (*Tetracis jubararia*).

Noctuidae: Luteous Dart (*Abagrotis trigona*). Funerary Dart (*Acronicta funeralis*). Rusty Shoulder Knot (*Aseptis binotata*). Wandering Brocade (*Fishia illocata*). Brown Angle Shades (*Phlogophora periculosa*). *Platypolia contadina*. Otter Spiramater (*Spiramater lutra*). *Xestia mustelina*.

Best cultivated in Zones 4, 6.

Vaccinium scoparium. **Grouseberry**. Ericaceae. June-July.

James and Nunnallee, surprisingly, found Grouseberry an acceptable larval host for the Two-banded Checkered-Skipper – it usually develops on rose and mallow family hostplants.

Vaccinium uliginosum ssp. *occidentale*. **Blueberry**. Ericaceae. June-July.

Some Californian moth species reported by HOSTS as utilizing *Vaccinium uliginosum* (including records from abroad, some plants and moths being cosmopolitan) as a foodplant include:

Arctiidae: Garden Tiger Moth (*Arctia caja*, Finland).

Geometridae: Autumnal Moth (*Epirrita autumnata*, Finland). Chevron (*Eulithis testata*, Finland). July Highflier (*Hydriomena furcata*, Finland). Spear-marked Black (*Rheumaptera hastata*). White-banded Black (*Rheumaptera subhastata*, Finland). *Xanthorhoe incurvata*.

Noctuidae: Great Brocade (*Eurois occulta*, Finland). American Brindle (*Lithomoia germana*, Finland).

Valeriana californica. **California Valerian**. Valerianaceae. Nectar: Painted Lady (<https://www.inaturalist.org/observations/13785661>). No doubt others. June - August.

Valeriana sitchensis. **Sitka Valerian**. Valerianaceae. Nectar: Clodius Parnassian, Spring White, Western White, Edith's Checkerspot, Red Admiral, Pacific Fritillary (John Davis), Green Comma (John Davis), Arctic Skipper (Tanya Harvey). "A butterfly favorite" (Mountain Plants of the Western Cascades web site, others). Flowers "copiously" nectarous and very sweet-scented, butterflies and skippers among its pollinators (Pojar, 1970). June-August.

Ssp. *sitchensis* considered difficult; best in Zones 4-6, 15-17.

Valeriana sitchensis ssp. *scouleri*. **Scouler's Valerian**. Valerianaceae. Nectar: Pale Swallowtail (Mike Patterson photograph). Taylor's Checkerspot (a segregate of Edith's Checkerspot) in Washington. April – June.

Best in Zones 4-6, 15-17.

Vancouveria hexandra. **Deciduous Vancouveria**. Berberidaceae. May – July.

Pyrilidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*).

Groundcover, slow; best in Zones 5, 15-17.

Venegasia carpesioides. **Canyon Sunflower**. Asteraceae. Madieae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Cabbage White, California Dogface, Variable Checkerspot, Gabb's Checkerspot, Mylitta Crescent, Red Admiral, American Lady, West Coast Lady, Fatal Metalmark, Echo Azure, Funereal Duskywing, Mournful Duskywing and Umber Skipper. Usual main flowering from February to July.

May do well in a large container if protected from hot sun. Zones 20 -24.

Veratrum. **Corn Lily**. Melanthiaceae.

Geometridae: *Eupithecia creatacea*.

Noctuidae: *Xestia infimatis*.

Veratrum californicum. **California Corn Lily**. Melanthiaceae. Moldenke captured seven species of nocturnal moths on its flowers. The Sierran Pericopid (*Gnophaela latipennis*, Arctiidae) is a diurnal moth seen at nectar on its flowers (Aaron Schusteff). July-August.

Noctuidae: Smith's Dart (*Xestia smithii*).

Tortricidae: *Olethreutes deprecatorius*.

Best cultivated in Zone 2.

Veratrum viride. **American False Hellebore**. Melanthiaceae. August-September.

Geometridae: *Eupithecia cretacea*, caterpillars feed on the flowers.

Noctuidae: Smith's Dart (*Xestia smithii* [Tatum]), caterpillars feed upon the leaves.

Considered difficult to cultivate.

Verbena spp. **Vervains**. Verbenaceae. Nectar: Pipevine Swallowtail, Gray Marble, Common Buckeye, Zebra Longwing, Mournful Duskywing (especially taller Verbenas, says Shapiro), Propertius Duskywing and the Juba Skipper. Hartmut Wisch BugGuide photograph shows *Neoterpes edwardsata* (Geometridae) at nectar on a Verbena (likely *V. lilacina*).

Geometridae: Citrus Looper (*Iridopsis fragilaria*).

Noctuidae: Fine-lined Sallow (*Catabena lineolata*).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*). Verbena Bud Moth (*Endothenia hebesana*) – caterpillar eats seeds. *Xenotemna pallorana*.

Verbena bracteata. **Creeping Vervain**. Verbenaceae. Nectar: Dainty Sulphur, Checkered White, Gray Hairstreak, Eastern Tailed Blue, Reakirt's Blue, Common Checkered-Skipper, Small Checkered-Skipper. May – October.

Verbena gooddingii. (Syn. *Glandularia gooddingii*). **Gooding Verbena**. Verbenaceae. Nectar: Pipevine Swallowtail (fq), Desert Black Swallowtail, Orange Sulphur, Painted Lady, American Lady, Gulf Fritillary, Northern White-Skipper. Appears to be the species visited by *Hemaris thetis* in a Liz Makings photograph, Deer Creek. Various sources attest it attracts “many” species. April – June. The “Living Collection” portion of the Theodore Payne Foundation web site shows a Gray Hairstreak caterpillar on a flower head of Gooding Verbena.

Best in Zones 7-9, 10, 11-16, 18-23.

Verbena hastata. **Blue Vervain**. Verbenaceae. Nectar: Western Tiger Swallowtail. Cabbage White, Checkered White, Dainty Sulphur, Clouded Sulphur, Orange Sulphur (fq). Monarch, Common Buckeye, Lorquin's Admiral, Variegated Fritillary, Pearl Crescent. Gray Hairstreak, Acmon Blue, Eastern Tailed Blue, Melissa Blue. Silver-spotted Skipper, Common Sootywing, Sachem (fq), Common Checkered-Skipper (fq), Eufala Skipper, Fiery Skipper, Woodland Skipper, Common Roadside-Skipper. Yellow-collared Scape Moth. June – September.

Best in Zones 7-10, 14-16, 19-23.

Verbena lasiostachys. **Western Vervain**. Verbenaceae. Nectar: Sara Orangetip, California Dogface, Southern Dogface. Monarch, West Coast Lady, Unsilvered Fritillary (one visit), Field Crescent. Great Copper, Acmon Blue. Mournful Duskywing, Sleepy Duskywing, Sandhill Skipper, Fiery Skipper, Sachem. May – September.

Said to be a foodplant for caterpillars of the Common Buckeye.

Noctuidae: Fine-lined Sallow (*Catabena lineolata*).

Best in Zones 7-9, 15, 15-16, 18-24.

Verbena lilacina ‘de la Mina’. **Cedros Island Verbena**. Verbenaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail. Cabbage White, Orange Sulphur. Monarch, West Coast Lady (Paul Furman), Painted Lady, American Lady, Common Buckeye, Mylitta Crescent, Variable Checkerspot, Gulf Fritillary, Coronis Fritillary, Pacific Fritillary. Acmon Blue. Funereal Duskywing, Mournful Duskywing, Common Checkered-Skipper, Fiery Skipper, Umber Skipper. White-lined Sphinx. Doubtless others. It was the top butterfly draw in an early September visit to Yerba Buena Nursery in Woodside (San Mateo County). Spring through fall.

Popular in cultivation. ‘Paseo Rancho’ is another selection.

Verbesina dissita. **Big-leaved Crownbeard**. Asteraceae. Nectar plant. May – August.

Veronica americana. **American Brooklime**. Plantaginaceae. Nectar: Great Spangled Fritillary, Silver-spotted Skipper. May – August.

Foodplant for Common Buckeye.

Vicia spp. **Vetch**. Fabaceae. Fabeae. Shapiro notes: “ALL swallowtails nectar eagerly” on vetches, such as Pipevine Swallowtail, Anise Swallowtail, Western Tiger Swallowtail and Pale Swallowtail. Others: Sara Orangetip, Orange Sulphur, Monarch, American Lady, Northern Checkerspot, Arrowhead Blue, Silvery Blue, Western Tailed Blue, Silver-spotted Skipper, Propertius Duskywing, Northern Cloudywing, Pacuvius Duskywing, Propertius Duskywing, Arctic Skipper, Common Roadside-Skipper, Eufala Skipper, Mardon Skipper, Sachem (David Horner), Clark’s Day Sphinx.

Vetches are preferred hostplants for Behr’s Silvery Blue in the San Bruno Mountains.

Arctiidae: Garden Tiger Moth (*Arctia caja*).

Noctuidae: Cerulean Looper (*Caenurgina caerulea*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). *Epinotia infuscana*. *Grapholita conversana* (California). *Grapholita lunatana* (California).

Veronica serpyllifolia. **Thyme Leaf Speedwell**. Plantaginaceae.

Haggard finds Common Buckeye common near it, a very likely hostplant.

Vicia americana var. *americana*. **American Vetch**. Fabaceae. Fabeae. Nectar: Black Swallowtail, Pipevine Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Clouded Sulphur, Silvery Blue, Western Tailed Blue (fq), Propertius Duskywing (Ann Potter), Northern Cloudywing, Tawny-edged Skipper, Umber Skipper. “Highly sought after by butterflies”. March – June.

Hostplant for Orange Sulphur, Clouded Sulphur, Queen Alexandra's Sulphur, Edwards's Sulphur, Eastern Tailed Blue, Western Tailed Blue, Silvery Blue, Boisduval's Blue, Mexican Cloudywing and Northern Cloudywing. Adults of Western Cloudywing associated with it near Mather, so likely a host for it. "Adults common associated with *Vicia americana*, tiny coniferous forest clearings S of Mather, Tuolumne Co., Calif., June 11, 1972." (Scott, 1992).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Gelechiidae: *Mirificarma eburnella*, an introduced species that can be quite damaging.

Used in revegetation.

Vicia gigantea. **Giant Vetch**. Fabaceae. Fabeae. March-August.

The Western Tailed Blue is associated with this species in the San Luis Obispo area. Pyle observed oviposition (21 May 2018 NorWestLeps).

Tortricidae: *Grapholita lunatana*.

Used in revegetation.

Vicia ludoviciana subsp. *ludoviciana*. **Deerpea Vetch**. Fabaceae. Fabeae. March – June.

Hostplant for Little Yellow (Ajilvsgi), Northern Blue and Funereal Duskywing.

Viguiera laciniata is now *Bahiopsis laciniata*. **San Diego Sunflower**.

Viguiera multiflora var. *nevadensis* is now *Heliomeris multiflora* var. *nevadensis*. **Nevada Goldeneye**.

Viguiera parishii is now *Bahiopsis parishii*. **Goldeneye**.

Viola spp. **Violets**. Violaceae. Nectar: Large Marble.

Most if not all native violets are host plants for various fritillaries. Notorious genus for defensive chemicals (Powell & Opler).

Noctuidae: Smith's Dart (*Xestia smithii*).

Pyralidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*) (Powell & Opler).

Viola adunca. **Western Dog Violet**. Violaceae. Nectar: Sara Orangetip, Oregon Silverspot. For Mardon Skipper dense patches are a "strongly preferred" nectar source. Propertius Duskywing (Ann Potter). April – August.

Hostplant for Atlantis Fritillary, Great Basin Fritillary, Hydaspe Fritillary, Mormon Fritillary, Pacific Fritillary (James & Nunnallee) and Zerene Fritillary.

Presumed hostplant for Myrtle's Silverspot.

Easy to grow. Best in Zones 1, 4-6, 7, 15-17.

Viola bakeri. **Baker's Violet**. Violaceae. May – July.

Baker's Violet not listed as a foodplant, but formerly classified as a variety of *Viola nuttallii*, a foodplant for Callippe Fritillary, Coronis Fritillary, Great Basin Fritillary, Hydaspe Fritillary, Mormon Fritillary, and Zerene Fritillary. Therefore, likely, it has values not yet recorded!

Considered difficult to cultivate.

Viola beckwithii. **Great Basin Violet**. Violaceae. March – May.

Foodplant for Callippe Fritillary, Coronis Fritillary.

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*), a generalist, eats Great Basin Violet (PNW Moths).

Considered difficult to cultivate.

Viola cuneata. **Wedge-leaved Violet**. **Northern Two-eyed Violet**. Violaceae. March – September.

Foodplant for Zerene Fritillary.

Considered difficult to cultivate.

Viola douglasii. **Golden Violet**. Violaceae. Nectar: Sara Orangetip, Common Roadside-Skipper (Rob Santry). February – July.

Foodplant for Callippe Fritillary, Coronis Fritillary.

Considered difficult to cultivate; best in Zone 7.

Viola glabella. **Stream Violet**. Violaceae. Nectar: Margined White (Michael Shepard), Sara Orangetip, Echo Azure. March – August.

Hostplant for Hydaspe Fritillary, Great Spangled Fritillary, Zerene Fritillary (James & Nunnallee), and Pacific Fritillary.

With moist soil, good drainage may be garden invasive. Best in Zones 4-6, 15, 16, 17.

Viola hallii. **Oregon Violet**. **Wild Pansy**. Violaceae. April – July.

A primary foodplant for Coronis Fritillary in southwest Oregon in a 2011 Survey (Reilly & Black) quoting Eric Scheuering (2006).

Difficult to cultivate.

Viola lobata. **Pine Violet**. Violaceae. April – August.

Foodplant for Zerene Fritillary.

Difficult to cultivate.

Viola nephrophylla. **Leconte Violet. Northern Bog Violet.** Violaceae. January – September.

Scott (1986) finds it a foodplant for Nokomis Fritillary, Mormon Fritillary, Atlantis Fritillary and likely for Pacific Fritillary.

Viola ocellata. **Western Heart's Ease. Two-eyed Violet.** Violaceae. Nectar: Pacific Fritillary (Western Meadow Fritillary), Unsilvered Fritillary. March – July.

Foodplant for Pacific Fritillary; one that Shapiro specifically notes for the San Francisco Bay region. Also for Unsilvered Fritillary and Great Basin Fritillary.

Best cultivated in Zones 5, 17.

Viola palustris. **Marsh Violet.** Violaceae. April – July.

A hostplant for Erinna Fritillary, a segregate of Mormon Fritillary, at least in central Oregon (Hammond & Dornfield), Great Spangled Fritillary (HOSTS), Zerene Fritillary (James & Nunnallee).

Considered worthy of cultivation.

Viola pedunculata. **Johnny-Jump-Up.** Violaceae. Nectar: “relished by Anise Swallowtails” in the Benecia State Recreation Area (Bert Johnson). Bert thinks it may also be a Pipevine Swallowtail nectar plant. Sara Orangetip, Propertius Duskywing. An acquaintance photographed a Silvery Blue at nectar upside down on one in Pinnacles National Monument. February – April.

Larval host for Callippe Fritillary, Comstock Fritillary.

Difficult in cultivation; has done best in Zone 7.

Viola praemorsa. **Astoria Violet. Prairie Violet.** Violaceae. Nectar: Propertius Duskywing (Ann Potter). March – July.

Foodplant for Atlantis Fritillary (HOSTS); Coronis Fritillary and Great Basin Fritillary (James & Nunnallee).

Considered worthy of cultivation.

Viola purpurea. **Mountain Violet. Goosefoot Violet.** Violaceae. Nectar: Unsilvered Fritillary, Lupine Blue (Monroes). March – July.

A hostplant for Callippe Fritillary and Coronis Fritillary in eastern San Diego County. A Northwestern Fritillary (aka Atlantis Fritillary) oviposited near it in Siskiyou County (Emmel, Shields, Breedlove); Scott (1986) and HOSTS lists it among its foodplants. Scott lists it among Zerene Fritillary foodplants. HOSTS lists it as a foodplant for Unsilvered Fritillary, Hydasphe Fritillary and Great Basin Fritillary.

Considered difficult to cultivate.

Viola purpurea ssp. *quercetorum*. **Goosefoot Yellow Violet**. Violaceae. Nectar: Sara Orangetip, Unsilvered Fritillary. February – July.

A foodplant for Unsilvered Fritillary.

Viola sempervirens. **Evergreen Violet**. Violaceae. January – July.

Foodplant for Pacific Fritillary and Great Spangled Fritillary; in Cascadia used by Callippe Fritillary, Hydaspe Fritillary and Mormon Fritillary (James & Nunnallee).

Geometridae: *Perizoma grandis* (Copp, 1993).

In cultivation has performed best in Zones 4, 5, and 17. Groundcover.

Viola sheltonii. **Shelton's Violet**. Violaceae. March – July.

Foodplant for Hydaspe Fritillary (HOSTS).

Difficult to cultivate.

Vitis spp. **Grape**. Vitaceae.

Sphingidae: Achemon Sphinx (*Eumorpha achemon*).

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Noctuidae: *Parabagrotis formalis*. Variegated Cutworm (*Peridroma saucia*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*, California). Fruit-tree Leafroller (*Archips argyrospila*). Omnivorous Leafroller (*Platynota stultana*).

Vitis californica. **California Wild Grape**. Vitaceae.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*).

Best in Zones 6, 7-9, 14-24. Cultivars available.

Vulpia octoflora. **Tufted Fescue**. Poaceae. Poaceae.

Likely foodplant of Western Branded Skipper (Monroes).

Washingtonia filifera. **California Fan Palm**. Arecaceae.

Noctuidae: Palm Budworm (*Litoprosopus coachella*). The moth, also known as the Palm Flower Moth, is a light tan or pale grey species with eyespots on the inner edges of the hind wings. The larvae are food for Gila Woodpecker and Northern Mockingbird.

Grows well in Zones 8, 9, 11-13, 14-16, 18-21, 22, 23.

Whipplea modesta. **Yerba de Selva**. Hydrangeaceae. Nectar: Pacific Fritillary. March – July.

Groundcover that grows best in Zones 4-6, 7, 15-17.

Wislizenia refracta. **Jackass-clover. Spectacle-fruit**. Cleomaceae. Nectar: Checkered White, Sleepy Orange, Queen, Tiny Checkerspot (Liz Makings), Palmer's Metalmark, Mojave Sootywing. Popular in its turn. April – October.

Foodplant for Checkered White and Western White.

Wyethia spp. **Mule-ears**. Asteraceae. Heliantheae. Nectar: Queen Alexandra's Sulphur, Western Sulphur, Zerene Fritillary, Northern Checkerspot, Variable Checkerspot, Sooty Gossamer Wing, Propertius Duskywing, Yuba Skipper, Lindsey's Skipper. Clark's Day Sphinx – “visited by a variety of butterflies but not preferred” (Shapiro).

Wyethia angustifolia. **Narrowleaf Mule-ear**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail, Orange Sulphur, Callippe Fritillary (fq), Common Buckeye, Painted Lady, Northern Checkerspot, Variable Checkerspot (fq), Rockslide Checkerspot, Mylitta Crescent (fq), Field Crescent (fq), Common Ringlet, Mission Blue [segregate of Boisduval's Blue], Eastern Tailed Blue (fq), Persius Duskywing (fq), Umber Skipper, Lindsey's Skipper, Mardon Skipper, a diurnal moth. Flowers draw bumblebees and beetles. April – August.

Coleophoridae: *Coleophora wyethiae* (Powell & Opler).

Pyralidae: *Anatralata versicolor* (Powell & Opler, p. 171).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*). *Eucosma corculana* – Powell & Opler see adults on it at Richmond near the bay (p. 132); host unknown, it is likely. Omnivorous Leafroller (*Platynota stultana*).

Best in Zones 4-7, 14-18.

Wyethia glabra. **Smooth Mule-ear**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail, Variable Checkerspot. March – June.

Smooth Mule Ear among the many larval hosts of Painted Lady.

Wyethia helenioides. **Gray Mule's Ears. Woolly Mule Ears**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail, Anise Swallowtail, Large Marble, Common Buckeye (fq), Unsilvered Fritillary (one visit), Variable Checkerspot (Alice Cummings), California Ringlet, and Propertius Duskywing. Good butterfly nectar plant – Growing Native. March – May, August.

Thought difficult to grow; best in Zone 7.

Wyethia invenusta. **Coville's Mule Ears**. Asteraceae. Heliantheae. Attracts butterflies. June – August.

Wyethia mollis. **Woolly Mule's Ears**. Asteraceae. Heliantheae. Nectar: Clodius Parnassian (Aaron Schusteff photograph on BugGuide). Western Sooty Gossamer-wing [aka now Sooty Hairstreak] (fq) (Shapiro), Juba Skipper, White-lined Sphinx. May – July, September.

Tortricidae: *Sparganothis senecionana* (with ID of the plant uncertain, believed to be Woolly Mule's Ears).

Xanthisma gracile. **Annual Bristleweed**. Asteraceae. Astereae. Nectar: Bordered Patch. April-September.

Xanthisma spinulosum var. *gooddingii*. **Spiny Goldenweed**. Asteraceae. Astereae. Nectar: Dave Ferguson says 'Xanthisma spinulosum' in his New Mexico yard attracted all at one time Leda Ministreak, Gray Hairstreak, and Reakirt's Blue. There are seven varieties in the Southwest. February – May, September – October.

Hostplant for Neumogen's Sagebrush Checkerspot (1992 Season Summary).

Xanthium strumarium. **Cocklebur**. Asteraceae. Heliantheae. Ambrosiinae.

Hostplant for Bordered Patch and Painted Lady. Usually secondary for Bordered Patch, moving to it after stripping nearby Sunflower (*Helianthus annuus*, the preferred host) (Gorodenski).

Noctuidae: Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*). Fall Armyworm (*Spodoptera frugiperda*).

Tortricidae: Stem-galling Moth (*Epiblema strenuana*), bores into stems.

Xylococcus bicolor. **Mission Manzanita**. Ericaceae.

Tortricidae: *Decodes helix*.

Xylorhiza spp. Asteraceae. Astereae. Good butterfly nectar plants – *Growing Native*.

Xylorhiza cognata. **Mecca-aster**. Asteraceae. Astereae. January – July.

Noctuidae: *Schinia jaegeri*.

Xylorhiza orcuttii. **Orcutt's Woody Aster**. Asteraceae. Astereae. Nectar: Western Pygmy Blue, Acastus Checkerspot (Monroes). January – May.

Hostplant for Acastus Checkerspot (*Chlosyne acastus neumoegei*) (Monroes, Austins).

Noctuidae: *Schinia jaegeri*.

Xylorhiza tortifolia. **Mojave Aster**. Asteraceae. Astereae. Nectar: Orange Sulphur (Austins). Online photographs show Acmon Blue. Online photograph shows a largish moth asleep in them. March – June, October.

Foodplant for Neumogen's Sagebrush Checkerspot.

Noctuidae: Intermediate Cucullia (*Cucullia intermedia*). *Schinia ligeae*.

Yabea microcarpa was *Caucalis microcarpa*. **California Hedge Parsley**. Apiaceae. Scandiceae. April – June.

Prodoxidae: *Greya solenobiella*.

Yucca baccata. **Datil**. Agavaceae. May-June. Yucca Moths.

Larval host for Yucca Giant-Skipper (Heath).

Preferred larval host of Maud's Giant Skipper (Garth & Tilden).

Prodoxidae: *Prodoxus coloradensis*.

Tortricidae: *Nycthia yuccatana* (aka *Phalonia yuccatana*) eats seeds.

Best cultivated in Zones 7, 10, 18-21.

Yucca brevifolia. **Joshua Tree**. Agavaceae. April-May.

Larval host Yucca Giant-Skipper (Heath).

Prodoxidae: *Prodoxus sordidus*, a scape borer. *Prodoxus weethumpi*, a fruit borer. *Tegeticula antithetica*. *Tegeticula synthetica*.

Tortricidae: *Cochylini* sp.

Best cultivated in Zones 3, 10, 18-21.

Yucca schidigera. **Mojave Yucca**. Agavaceae. April-May.

Larval host Yucca Giant-Skipper (Heath).

Prodoxidae: *Prodoxus californicus*. *Prodoxus coloradensis*. *Tegeticula mojavella*.

Tortricidae: *Nycthia pimana* (aka *Phalonia pimana*).

Best cultivated in Zones 3, 10, 14, 18-23.

Zauschneria californica is now *Epilobium canum*. **California Fuchsia**.

Zauschneria septemtrionalis is now *Epilobium septemtrionale*. **Humboldt County Fuchsia**.

Zeltnera venusta was *Centaurium venustum*. **Canchalagua**. Gentianaceae. Nectar: Acmon Blue (Carol Etchebarren). May - August.

Pterophoridae: *Stenoptilia zophodactylus*, a cosmopolitan plume moth, specializes in Gentian family plants.

Best in Zones 7-11, 14-24. Beautiful annual.

Zigadenus fremontii is now *Toxicoscordion fremontii*. **Fremont's Star Lily.**

Zigadenus paniculatus is now *Toxicoscordion paniculatum*. **Foothill Deathcamas.**

Ziziphus obtusifolia var. *canescens*. **Gray Crucillo. Lotebush.** Rhamnaceae. April-June.

Notodontidae: *Cargida pyrrha* – a moth not yet recorded for California, but known in the Arizona range of the plant.

Best cultivated in Zones 10-12.

Appendix 1: Lepidoptera Values of Nonnative Naturalized Plants of California.

Sources for the naturalized plants records include Moldenke's thesis, Hilty's Flower-Visiting Insects of Illinois web site, *Field Guide to the Butterflies of the San Francisco Bay and Sacramento Valley Regions*, other field guides, the Xerces/Smithsonian butterfly gardening book, personal communications from Arthur Shapiro and other lepidopterists. Many larval host records come from HOSTS – a Database of the World's Lepidopteran Foodplants by the Natural History Museum in London; other nectar usage or hostplant records gleaned from scientific papers, web sites, blogs, discussion groups and photograph postings. Most of the common butterflies in urban, suburban and rural areas (and even many preserved areas) – where native vegetation mostly extirpated -- are heavily dependent on non-native naturalized plants as hostplants and nectar resources.

Abutilon theophrasti. **Velvetleaf.** Malvaceae. Nectar: Cloudless Sulphur, Cabbage White, Common Sootywing. July – September.

Hostplant for Common Checkered-Skipper.

Noctuidae: Tobacco Budworm (*Chloridea virescens*).

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Acroptilon repens. **Russian Knapweed**. Asteraceae. Cardueae. Scott notes flower visits by Becker's White, Mojave Sootywing, and Woodland Skipper. May – September.

Agrostis capillaris. **Colonial Bent**. Poaceae. Poae.

Hostplant for Woodland Skipper (Warren).

Agrostis gigantea. **Creeping Bentgrass**. **Redtop**. Poaceae. Poae.

Foodplant for Common Wood-Nymph (Illinois Wildflowers web site), the European Skipper (*Thymelicus lineola*) – a butterfly whose expanding range since its introduction in North America will likely eventually include California.

Noctuidae: Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Aster Cutworm (*Trichordestra lilacina*).

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*).

Ailanthus altissima. **Tree-of-heaven**. Simaroubaceae. Nectar: Painted Lady.

Allium neapolitanum. **Daffodil Garlic**. Alliaceae. Nectar: Cabbage White.

Alopecurus pratensis. **Meadow Foxtail**. Poaceae. Poae.

Among hosts for the European Skipper, an introduced butterfly likely to spread to California. In Finland, a hostplant for an *Ochlodes* skipper.

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*).

Amaranthus albus. Tumbleweed. Amaranthaceae.

Hostplant for Common Sootywing (fq).

Amaranthus hybridus. **Smooth Pigweed**. Amaranthaceae. June – November.

Hostplant for Common Sootywing.

Amaranthus retroflexus. **Redroot Pigweed**. Amaranthaceae.

Hostplant for Common Sootywing.

One feeding trial showed this to be one of the best hostplants for the Beet Armyworm (*Spodoptera exigua*).

Amaranthus spinosus. **Spiny Amaranth**. Amaranthaceae.

Hostplant for Common Sootywing.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Ambrosia artemisiifolia. **Common Ragweed**. Asteraceae. Heliantheae.

Larval host for Bordered Patch.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*). (Stegmaier, Carl E. 1971. "Lepidoptera, Diptera, and Hymenoptera Associated with *Ambrosia artemisiifolia* (Compositae) in Florida." *The Florida Entomologist* 54 (3): 259-72).

Saturniidae: Nevada Buckmoth (*Hemileuca nevadensis*).

Noctuidae: Variegated Cutworm (*Peridroma saucia*). Olive-shaded Bird Dropping Moth (*Ponomotia candefacta*), imported to the USSR as a biological control there for Common Ragweed.

Pterophoridae: *Adaina ambrosiae*.

Tortricidae: Ragweed Borer (*Epiblema strenuana*) (Stegmaier, 1971).

Ambrosia trifida. **Giant Ragweed**. Asteraceae. Heliantheae.

Listed as a larval host for Hoary Comma, Bordered Patch.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Forage Looper (*Caenurgina erechtea*). Armyworm (*Mythimna unipuncta*).

NOXIOUS WEED but generally not long persisting.

Ammophila arenaria. **European Beachgrass**. Poaceae. Poaeae.

Arctiidae: an unpreferred larval plant for the polyphagous Ranchman's Tiger Moth (*Arctia virginialis*).

Andropogon virginicus. **Broomsedge Bluestem**. Poaceae. Andropogoneae.

Noctuidae: Fall Armyworm (*Spodoptera frugiperda*).

Anoda cristata. **Violettas**. Malvaceae.

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Anthemis cotula. **Dog Fennel**. Asteraceae. Anthemideae. Nectar: Cabbage White, Clouded Sulphur, Juniper Hairstreak (B.J. Stacey), Melissa Blue (B.J. Stacey), Western Tailed Blue, Acmon Blue, Common Ringlet, Corn Earworm (*Helicoverpa zea*, Noctuidae). Secondary nectar plant, I suppose. April – August.

Anthoxanthum odoratum. **Sweet Vernal Grass**. Poaceae. Poaeae.

Larval host for West Slope Colorado Skipper at one of Arthur Shapiro's study sites.

Aptenia cordifolia. **Baby Sun-rose**. Aizoaceae. Some nectar value as for West Coast Lady, Eufala Skipper.

Araujia sericifera. **Bladder-flower**. Apocynaceae. The flowers may trap and kill butterflies and moths utilizing it for nectar; noctuids, especially, are victims, as may be the Orange Sulphur: Robert E. C. Stearns. "Araujia Albens as a Moth-Trap." *The American Naturalist* 21, no. 6 (1887): 501-07. <http://www.jstor.org/stable/2451567>.

Foodplant for Monarch – can be used as an alternative if one runs out of milkweed.

NOXIOUS WEED.

Arctium lappa. **Great Burdock**. Asteraceae. Cardueae. Nectar: Great Spangled Fritillary, Clouded Sulphur, Cabbage White, Silver-spotted Skipper, Tawny-edged Skipper. June – October.

Larval host for Painted Lady, American Lady.

Arctiidae: Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Celery Moth (*Anagrapha falcifera*). Zebra Caterpillar (*Melanchra picta*). Olive-shaded Bird Dropping Moth (*Ponomotia candefacta*). Cow Parsnip Borer (*Papaipema harrisii*).

Arctium minus. **Common Burdock**. Asteraceae. Cardueae. Nectar: Clouded Sulphur, Cabbage White (fq), Checkered White, Margined White. Viceroy [Michigan], American Lady [Michigan], Atlantis Fritillary [Michigan], Great Spangled Fritillary [fq – Michigan], Milbert's Tortoiseshell, Coronis Fritillary, Northwestern Fritillary (fq), Nokomis Fritillary, Variegated Fritillary, Common Wood-Nymph, Satyr Comma, Gray Hairstreak, Tailed Copper, Common Sootywing, Common Checkered-Skipper, Tawny-edged Skipper, Woodland Skipper (fq), and Yuma Skipper. July – October.

Arctotis stoechadifolia is now *A. venusta*. **Blue-eyed African Daisy**. Asteraceae. Arctotideae.

Serves as a Painted Lady foodplant in other countries.

Armoracia rusticana. **Horseradish**. Brassicaceae. Nectar: Cabbage White, likely others for which it is a hostplant.

Foodplant for Margined White, Cabbage White. Utilized by Cabbage White especially at Shapiro's Sierra Valley site.

Geometridae: Red Twin-spot (*Xanthorhoe ferrugata*).

Noctuidae: Army Cutworm (*Euxoa auxiliaris*).

Artemisia vulgaris. **Common Wormwood**. Asteraceae. Anthemideae.

Tortricidae: *Epiblema benignatum* (BugGuide).

Astragalus cicer. **Chickpea Milkvech**. Fabaceae. Galegeae. May – August.

Todd Stout finds it a suitable substitute host plant for Queen Alexandra's Sulphur (including *edwardsi*, the common Californian segregate) and Clouded Sulphur (including *eriphyle*, the common Californian segregate).

Naturalized cover crop introduced from Europe.

Atriplex rosea. **Redscale**. Chenopodiaceae.

Foodplant for Western Pygmy Blue and Common Sootywing. Most important hostplant for Western Pygmy Blue in the Sacramento Valley (Shapiro).

Atriplex semibaccata. **Australian Saltbush**. Chenopodiaceae.

John Steiner found it the favorite larval host for Western Pygmy Blue in the San Francisco Bay area. Shapiro notes larvae especially favor feeding on female flowers of the plant.

Geometridae: *Perizoma custodiata*.

Gelechiidae: *Chionodes sistrella*.

Avena fatua. **Wild Oat**. Poaceae. Poaceae.

Listed as a foodplant for the Common Wood-Nymph.

Avena sativa. **Cultivated Oat**. Poaceae. Poaceae.

Hostplant for Common Roadside-Skipper (Butterflies of Canada web site).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale Western Cutworm (*Agrotis orthogonia*). Venerable Dart (*Agrotis venerabilis*). Yellow-headed Cutworm (*Apamea amputatrix*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Aseptis binotata*). Girdler aka Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). Red-backed Cutworm (*Euxoa ochrogaster*). Corn Earworm (*Helicoverpa zea*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Gelechiidae: Angoumois Grain Moth (*Sitotroga cerealella*).

Pyralidae: Beet Webworm (*Loxostege stricticalis*). Indian Meal Moth (*Plodia interpunctella*).

Bacopa rotundifolia. **Disk Waterhyssop**. Plantaginaceae. May – August.

Pyralidae: *Elophila occidentalis*.

Barbarea verna. **Early Winter Cress**. Brassicaceae. Nectar: Good for Margined White. March – July.

Larval host for Gray-veined White (Margined White), Sara Orangetip and Cabbage White.

Plutellidae: Dame's Rocket Moth (*Plutella porectella*).

Barbarea vulgaris. **Yellow Rocket. Common Winter Cress.** Brassicaceae. Nectar: Cabbage White (fq), Checkered White, and likely for all for which it is a hostplant. Clouded Sulphur, Orange Sulphur, Painted Lady, American Lady, Pearl Crescent, Brown Elfin, Gray Hairstreak, eastern Spring Azure, and Eastern Tailed Blue. April- July.

Hostplant for Sara Orangetip, Large Marble, Margined White, Cabbage White, Western White, Checkered White.

Bassia hyssopifolia. **Fivehook Bassia.** Chenopodiaceae. June – July.

Haeger finds Western Pygmy Blue often flying around it, a prospective hostplant.

Bellis perennis. **English Daisy.** Asteraceae. Astereae. Nectar: Cabbage White (fq), Margined White, Orange Sulphur, Mylitta Crescent, eastern Spring Azure. Pyle considers it a secondary nectar plant. December – September.

Berteroa incana. **Hoary Alyssum.** Brassicaceae. Nectar: Cabbage White, Checkered White, Pine White, Clouded Sulphur, Orange Sulphur, Painted Lady, Red Admiral, Zerene Fritillary, Field Crescent, Small Wood-Nymph (fq), Gray Hairstreak, Behr's Hairstreak, Hedgerow Hairstreak, Ruddy Copper, Greenish Blue, Melissa Blue, Reakirt's Blue, Persius Duskywing, Sonora Skipper, Western Branded Skipper, Woodland Skipper. May - September.

NOXIOUS WEED List B.

Beta vulgaris. **Beet.** Chenopodiaceae.

Larval host for Painted Lady.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Arctiidae: Saltmarsh Moth (*Estigmene acrea*). Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Ipsilon Dart (*Agrotis ipsilon*). Rascal Dart (*Agrotis malefida*)., Pale Western Cutworm (*Agrotis orthogonia*). Celery Moth (*Anagrapha falcifera*). Green Cutworm (*Anicla infecta*). Glassy Cutworm (*Apamea devastator*). Alfalfa Semilooper (*Autographa californica*). Purslane Moth (*Euscirrhopterus gloveri*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa laetificans*. Dark-sided Cutworm (*Euxoa messoria*). *Euxoa munis*. Red-backed Cutworm (*Euxoa ochrogaster*). Striped Cutworm (*Euxoa tessellata*). Early Cutworm (*Euxoa tristicula*). Subterranean Dart (*Feltia subterranea*). Nutmeg (*Anarta trifolii*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). European Yellow Underwing (*Noctua pronuba*). Flame-shouldered Dart (*Ochropleura implecta*). Variegated Cutworm (*Peridroma saucia*). Miranda (*Proxenus miranda*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Gelechiidae: Goosefoot Groundling Moth (*Euscrobipalpa atriplicella*).

Pyralidae: Garden Webworm (*Achyra rantalis*). Sugar-beet Crown Borer (*Ancylosis undulatella*, aka *Hulstia u.*). American Sunflower Moth (*Homoeosoma electella*). Alfalfa Webworm (*Loxostege cereralis*). *Loxostege commixtalis*. Beet Webworm (*Loxostege stricticalis*). Hawaiian Beet Webworm (*Spoladea recurvalis*). False Greenhouse Leaf-tier (*Udea profundalis*). Greenhouse Leaf-tier (*Udea rubigalis*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*). Dusky Leafroller (*Orthotaenia undulana*).

Crop “pests” get a lot of study!

Bidens pilosa. **Hairy Beggarticks**. Asteraceae. Coreopsidae. Nectar: Sleepy Orange, Cloudless Sulphur, Dainty Sulphur, Lyside Sulphur, Large Orange Sulphur, Little Yellow, Mimosa Yellow, Monarch, Queen, American Lady, Common Buckeye, Tropical Buckeye, Gulf Fritillary, Mexican Fritillary, Variegated Fritillary, Zebra Longwing, Brazilian Skipper, Fiery Skipper, Hammock Skipper (Fernandez-Hernandez).

Foodplant for Dainty Sulphur. The Natural History of Orange County web site notes it preferred.

Boehmeria nivea. **Chinese Grass** or **False Nettle**. Urticaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Noctuidae: Bean Leaf-skeletonizer (*Autoplusia egea*).

Borago officinalis. **Borage**. Boraginaceae. Nectar: Cabbage White, Pine White, Monarch, Mylitta Crescent, Painted Lady (fq). June – August.

Larval host of Painted Lady.

Bothriochloa ischaemum var. *songarica*. **K-R Bluestem**. Poaceae. Andropogoneae. Raymond Neck observed many butterflies apparently getting something from inflorescences of this grass and of **Dallis Grass** (*Paspalum dilatatum*, Paspaleae). In a single transect he observed 51 Common Buckeyes, 8 Queens and 2 Painted Ladies. “Butterflies had their probosces extended towards and around the base of achenes of the inflorescences. Achenes ... were post-anthesis, but some substance was apparently being removed from the shiny surface of the achenes.” Other butterfly species were present, visiting the usual flowers, while the butterflies visiting the grasses were not. “At this point one does not know whether these butterflies were obtaining a nutritive substance or were merely being stimulated by surface phytochemicals.”

Brachypodium sylvaticum. **Slender False Brome**. Poaceae. Brachypodieae.

A hostplant for Arctic Skipper in Europe. Among foodplants of European Skipper, an introduced butterfly likely to spread to California.

A new invasive weedy grass in California, spreading fast.

Brassica spp. **Mustards**. Brassicaceae.

Shapiro finds the non-native mustards “infrequently” utilized as hostplant by Sara Orangetip, usually along roads. The introduced Cabbage White probably uses most of them.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Brassica campestris. **Field Mustard**. Brassicaceae. Nectar: Sandhill Skipper, Cabbage White (fq), Large Marble.

Hostplant for Large Marble: Shapiro, Arthur M. "The Pierid Red-Egg Syndrome." *The American Naturalist* 117, no. 3 (1981): 276-94. <http://www.jstor.org/stable/2460527>.

Brassica juncea. **Brown Mustard**. Brassicaceae. May – September.

Larval host for Cabbage White.

Noctuidae: In other countries serves the Black Cutworm (*Agrotis ipsilon*) and Cabbage Looper (*Trichoplusia ni*).

Brassica kaber is now *Sinapsis arvensis*. **Charlock Mustard**.

Brassica napus. **Rapeseed**. Brassicaceae. Nectar: Clouded Sulphur. May – September.

Rapeseed is among larval hosts for Cabbage White, Boisduval’s Marble, Large Marble, Sara Orangetip.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Noctuidae: Dark-sided Cutworm (*Euxoa messoria*). Nutmeg (*Anarta trifolii*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*).

Brassica nigra. **Black Mustard**. Brassicaceae. Nectar: Anise Swallowtail, Dainty Sulphur, Orange Sulphur, Cabbage White (fq), Large Marble (fq), Sara Orangetip, Common Buckeye (fq), Coronis Fritillary, Variegated Fritillary, California Ringlet (fq), Dryope Hairstreak, Great Copper, Purplish Copper, Acmon Blue, San Emigdio Blue, Silvery Blue, Gorgon Copper, Common Checkered-Skipper, Fiery Skipper, Harbison’s Dun Skipper (rarely) and Sandhill Skipper. April – September.

Larval host for Sara Orangetip, Large Marble (fq), Gray-veined White (Margined White), Cabbage White, Becker’s White, Western White, Checkered White. Suitable lab host for Pearly Marble (including *lotta*, a Californian segregate) and for Spring White (Todd Stout). Suitable lab host for Spring White (*nigravenosa* segregate) (Todd Stout).

Arctiidae: Painted Tiger Moth (*Arachnis picta*).

Noctuidae: Ipsilon Dart (*Agrotis ipsilon*). Pale Western Cutworm (*Agrotis orthogonia*). *Copablepharon viridisparva*. Army Cutworm (*Euxoa auxiliaris*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Cabbage Looper (*Trichoplusia ni*).

Brassica rapa. **Field Mustard**. **Common Mustard**. **Rape**. Brassicaceae. Nectar: Cabbage White, Mylitta Crescent, Ladies, Eastern Tailed Blue, Acmon Blue (blues, likely others), various Hesperidae. January – May.

Foodplant for Painted Lady, Sara Orangetip, Large Marble, Margined White, Cabbage White, and Checkered White.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Fragile Gray (*Iridopsis fragilaria*).

Noctuidae: Old Man Dart (*Agrotis vetusta*). Alfalfa Semilooper (*Autographa californica*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). Nutmeg (*Anarta trifolii*). Tobacco Budworm (*Chloridea virescens*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Sphingidae: White-lined Sphinx (*Hyles lineata*). Carolina Sphinx (*Manduca sexta*).

Brassica tournefortii. **Turnip Mustard**. Brassicaceae. Nectar: Spring Azure (Liz Makings). January – June.

Larval host for Checkered White.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Corn Earworm (*Helicoverpa zea*). Tobacco Budworm (*Chloridea virescens*). Beet Armyworm (*Spodoptera exigua*). Cabbage Looper (*Trichoplusia ni*).

Bromus inermis. **Smooth Brome**. Poaceae. Bromeae.

Hostplant for Common Roadside-Skipper, in Colorado, at least.

Todd Stout finds it “outstanding” for rearing many skippers and satyrids, including Common Roadside-Skipper, Eufala Skipper, Juba Skipper, Sandhill Skipper, Tawny-edged Skipper, Woodland Skipper, Ringless Ringlet (*Coenonympha ampelos elko*, found in northern California) and Common Wood-Nymph, at least for segregates in his region.

Bromus rubens. **Red Brome**. Poaceae. Bromeae.

Listed as a foodplant for the Juba Skipper.

Bromus tectorum. **Cheat Grass**. Poaceae. Bromeae.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*).

Buddleja davidii. **Butterfly Bush**. Scrophulariaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail, Giant Swallowtail, Pipevine Swallowtail. Cabbage White, Pine White, Clouded Sulphur, Orange Sulphur, Harford’s Sulphur, Southern Dogface., Monarch, Painted Lady, West Coast Lady (fq), American Lady, Red Admiral (fq), Common Buckeye, Bordered Patch, Milbert’s Tortoiseshell, Satyr Comma, Callippe Fritillary, Coronis Fritillary, Unsilvered Fritillary, Gulf Fritillary, Variegated Fritillary, Variable Checkerspot (fq). Mournful Duskywing, Common Sootywing, Silver-spotted Skipper, Common Roadside-Skipper, Sachem, Sandhill Skipper, Umber Skipper, Fiery Skipper,

Orange Skipperling. Western Snowberry Clearwing, White-lined Sphinx, Yellow-collared Scape Moth. May - September.

Caterpillars of Variable Checkerspot and Common Buckeye may eat Butterfly Bush.

Depressariidae: Buddleia Budworm (*Pyramidobela angelarum*) (Powell & Opler, p. 71).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Cakile edentula. **American Sea Rocket**. Brassicaceae. Nectar: Margined White, Large Marble, West Coast Lady. May – November.

Larval host for Checkered White and Cabbage White.

Cakile maritima. **European Sea Rocket**. Brassicaceae. Nectar: Painted Lady, Purplish Copper, Sandhill Skipper, Wandering Skipper. May – November.

Larval host for the Cabbage White.

Arctiidae: a favorite host for the Ranchman's Tiger Moth (*Arctia virginalis*).

Noctuidae: Foodplant for the Cabbage Looper (*Trichoplusia ni*), at least in the British Isles.

Capsella bursa-pastoris. **Shepherd's Purse**. Brassicaceae. Nectar: Checkered White, Pearl Crescent, Common Checkered-Skipper, Common Sootywing. Usage slight. January – October.

Listed as a larval host for Sara Orangetip, Checkered White, and Cabbage White.

Noctuidae: Army Cutworm (*Euxoa auxiliaris*). Variegated Cutworm (*Peridroma saucia*).

Caragana arborescens. **Siberian Peashrub**. Fabaceae.

Hostplant for Clouded Sulphur.

Cardaria draba now *Lepidium draba*. **White Top**.

Cardaria pubescens now *Lepidium appelianum*. **Hairy White Top**.

Cardiospermum corindum. **Balloonvine**. Sapindaceae.

Several stray Silver-banded Hairstreak adults associated with cultivated specimen in John F. Emmel's yard in Hemet, Riverside County.

Cardiospermum halicacabum. **Love in a Puff**. Sapindaceae.

Hostplant for Silver-banded Hairstreak.

Carduus acanthoides. **Plumeless Thistle**. Asteraceae. Cardueae. July – November.

Among larval hosts for Painted Lady.

NOXIOUS WEED.

Carduus nutans. **Musk Thistle**. Asteraceae. Cardueae. Nectar: Indra Swallowtail, Old World Swallowtail, Pipevine Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Western Tiger Swallowtail. Southern Dogface, Sleepy Orange, Cloudless Sulphur, Orange Sulphur (fq), Queen Alexandra's Sulphur, Cabbage White, Pine White. Monarch (fq), Queen, Weidemeyer's Admiral, Painted Lady (fq), West Coast Lady, American Lady, Common Buckeye, Callippe Fritillary (fq), Coronis Fritillary (fq), Great Spangled Fritillary, Nokomis Fritillary (fq), Northwestern Fritillary (fq), Mormon Fritillary, Gulf Fritillary, Variegated Fritillary, Small Wood-Nymph, Common Wood-Nymph (fq), Pearl Crescent. Gray Hairstreak, Juniper Hairstreak, Sylvan Hairstreak. Mournful Duskywing (Hints), Common Checkered-Skipper, Silver-spotted Skipper, Long-tailed Skipper, Northern Cloudywing, Dun Skipper, Eufala Skipper, Fiery Skipper, Pahaska Skipper, Sachem, Sandhill Skipper, Tawny-edged Skipper (fq), Uncas Skipper (fq), Woodland Skipper (fq). June- July.

Painted Lady foodplant.

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Carduus pycnocephalus. **Italian Thistle**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail, Two-tailed Swallowtail, Anise Swallowtail. Cabbage White, Large Marble, Margined White (Hints), Desert Orangetip, Sara Orangetip, Clouded Sulphur, Orange Sulphur, Northern Checkerspot, Variable Checkerspot, Painted Lady (fq), Calippe Fritillary (Doug Wirtz), Myrtle's Silverspot, Monarch, Unsilvered Fritillary (fq), California Ringlet, Hedgerow Hairstreak, Purplish Copper, Boisduval's Blue, Silvery Blue, Mournful Duskywing, Propertius Duskywing, Northern White-Skipper, Common Checkered-Skipper, Two-banded Checkered-Skipper, Harbison's Dun Skipper, Rural Skipper (Hints), Sachem, Lindsey's Skipper, Umber Skipper, Yuma Skipper. Important Mission Blue [segregate of Boisduval's Blue] nectar plant in San Francisco. March – July.

Foodplant for Mylitta Crescent and Painted Lady (fq).

Carduus tenuiflorus. **Italian Thistle**. Asteraceae. Cardueae. Nectar plant for Cabbage White (fq), Orange Sulphur. April – June.

Carpobrotus chilensis. **Hottentot Fig**. Aizoaceae. Flowers most of the year.

Arctiidae: Commonly eaten by caterpillars of the polyphagous Ranchman's Tiger Moth (*Arctia virginalis*).

Carpobrotus edulis. **Ice Plant**. Aizoaceae. Nectar: Monarch.

Cenchrus ciliaris. **Buffelgrass**. Poaceae. Paniceae.

Larval host for Eufala Skipper.

Cenchrus incertus. **Coast Sandbur**. Poaceae. Paniceae.

Noctuidae: Green Cutworm (*Anicla infecta*). Fall Armyworm (*Spodoptera frugiperda*).

Centaurea spp. **Knapweed**. Asteraceae. Cardueae. Woodland Skipper, Western Branded Skipper are flower visitors.

Centaurea benedicta was *Cnicus benedictus*. **Blessed Thistle**. Cardueae. Asteraceae. April – June.

Painted Lady foodplant.

Centaurea calcitrapa. **Purple Star Thistle**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail (fq), Pine White, Gray Hairstreak, Woodland Skipper (Alice Cummings) and Umber Skipper. April – November.

Foodplant for Tropical Buckeye in Neotropical areas.

NOXIOUS WEED.

Centaurea cyanus. **Bachelor's Button**. Asteraceae. Cardueae. Nectar: Cabbage White, Orange Sulphur, Marine Blue, Fiery Skipper, Field Skipper (Sachem), Silver-spotted Skipper. April – September.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*, Canada).

Centaurea diffusa. **Diffuse Knapweed**. Asteraceae. Cardueae. Nectar: Orange Sulphur (fq), Clouded Sulphur (fq), Cabbage White (fq), Checkered White, Pine White. Red Admiral, Painted Lady (fq), Hoary Comma, Common Wood-Nymph, Small Wood-Nymph (fq), Field Crescent, Callippe Fritillary, Coronis Fritillary, Northwestern Fritillary (fq), Variegated Fritillary. Gray Hairstreak, Sylvan Hairstreak, Ruddy Copper, Melissa Blue, Reakirt's Blue (Anne Reeves), Western Tailed Blue. Common Checkered-Skipper, Sandhill Skipper (fq) (Garland, 1977), Woodland Skipper (fq). May – October.

Rarely, hostplant for Mylitta Crescent.

Centaurea jacea subsp. *nigra* was *Centaurea nigra*. **Lesser Knapweed**. Asteraceae. Cardueae. Nectar: European Skipper, Nutmeg (*Anarta trifolii*, Noctuidae). August – November.

Listed as a Painted Lady foodplant.

Centaurea maculosa is now *Centaurea stoebe* var. *micranthos*. **Spotted Knapweed**.

Centaurea melitensis. **Maltese Star Thistle. Tocalote**. Asteraceae. Cardueae. Nectar: Anise Swallowtail, Cabbage White (fq), Orange Sulphur. April – July.

Centaurea nigra is now *Centaurea jacea* subsp. *nigra*. **Lesser Knapweed**.

Centaurea repens is now *Acroptilon repens*. **Russian Knapweed**.

Centaurea solstitialis. **Yellow Star Thistle**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail (fq), Anise Swallowtail. Cabbage White (fq), Checkered White (fq), Orange Sulphur (fq), Clouded Sulphur, Harford's Sulphur, California Dogface. Field Crescent, Mylitta Crescent, Common Buckeye, Painted Lady, Callippe Fritillary, Coronis Fritillary (Hints), Variegated Fritillary, Common Wood-Nymph (Shapiro), Great Basin Wood-Nymph (Roger Zachary). Mormon Metalmark. Great Copper, Gorgon Copper. Northern White-Skipper, Common Checkered-Skipper, Funereal Duskywing, Mournful Duskywing, Persius Duskywing, Dodge's Skipper, Columbian Skipper, Eufala Skipper (fq), Tilden's Skipper, Fiery Skipper, Juba Skipper, Rural Skipper, and Woodland Skipper. Shapiro: "Excellent nectar source but a terrible weed. Preferred by the Pipevine Swallowtail."

Interesting paper shows its spines somewhat deter Lepidoptera from using it as a nectar source: (Agrawal, Anurag A., Jennifer A. Rudgers, Louis W. Botsford, David Cutler, Jessica B. Gorin, Carolyn J. Lundquist, Brian W. Spitzer, and Alisa L. Swann. 2000. "Benefits and Constraints on Plant Defense against Herbivores: Spines Influence the Legitimate and Illegitimate Flower Visitors of Yellow Star Thistle, *Centaurea solstitialis* L. (Asteraceae)." *The Southwestern Naturalist* 45 (1): 1-5. doi:10.2307/3672545.) May – October.

Yellow Star Thistle is a foodplant for Mylitta Crescent, Painted Lady.

Noctuidae: Western Yellowstriped Armyworm (*Spodoptera praefica*). Stephen's Gem or Bilobed Looper (*Megalographa biloba*) – an attractive noctuid that is sometimes a pest on lettuce.

NOXIOUS WEED.

Centaurea stoebe var. *micranthos* was *Centaurea maculosa*. **Spotted Knapweed**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail, Pale Swallowtail, Orange Sulphur, Clouded Sulphur, Cabbage White, Pine White, Painted Lady, Great Spangled Fritillary, Zerene Fritillary, Pacific Fritillary, Variegated Fritillary, Green Comma, Common Wood-Nymph and American Snout, Purplish Copper, Melissa Blue, Marine Blue, Behr's Hairstreak, California Hairstreak, Common Checkered-Skipper, Sandhill Skipper, Woodland Skipper and the Red-shouldered Ctenucha. Large Looper (*Autographa ampla*, Noctuidae), Hooked Silver Y (*Syngrapha alias*, Noctuidae). No doubt others, a good nectar source. July – September.

NOXIOUS WEED.

Centranthus ruber. **Red Valerian**. Valerianaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail(fq), Desert Black Swallowtail, Cabbage White, Monarch, Red Admiral, Painted Lady (fq), West Coast Lady, American Lady, Common Buckeye (fq), Gulf Fritillary (fq), California Tortoiseshell, Milbert's Tortoiseshell, Bramble Green Hairstreak, Juniper Hairstreak, American Copper, Great Copper, Funereal Duskywing, Common Checkered-Skipper, Silver-spotted Skipper, Woodland Skipper (fq), Umber Skipper, Fiery Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae), Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), Whitelined Sphinx (*Hyles lineata*, Sphingidae), Large Yellow Underwing (*Noctua pronuba*, Noctuidae). On Xerces Society "Master Plant List" for butterfly gardens. Some think better for moths than butterflies. April – July.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) – photograph by Alice Abela.

Cerastium glomeratum. **Sticky Mouse-ear Chickweed**. Caryophyllaceae. Nectar: Silvery Blue.

Chamomilla suaveolens (now known as *Matricaria discoidea*). **Pineapple Weed**. Asteraceae. Anthemideae. Mylitta Crescent (<https://www.inaturalist.org/observations/12061457>). Monroes: a nectar source for the Melissa Blue in eastern San Diego County. February - August.

Chenopodium album. **Lamb's Quarters**. Chenopodiaceae.

Foodplant for Painted Lady, Western Pygmy Blue, Common Sootywing, and Common Checkered-Skipper.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Arctiidae: Garden Tiger Moth (*Arctia caja*). Ornate Tiger Moth (*Apantesis ornata*). Fall Webworm (*Hyphantria cunea*). Wandering Tiger Moth (*Spilosoma vagans*). Yellow Woollybear (*Spilosoma virginica*).

Gelechiidae: Goosefoot Groundling Moth (*Euscrobipalpa atriplicella*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Alfalfa Semilooper (*Autographa californica*). Nutmeg (*Anarta trifolii*). Soybean Looper (*Chrysodeixis includens*), Corn Earworm (*Helicoverpa zea*). Common Hyppa (*Hyppa xylinoides*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Beet Armyworm (*Spodoptera exigua*), Fall Armyworm (*Spodoptera frugiperda*), Yellowstriped Armyworm (*Spodoptera ornithogalli*), Western Yellowstriped Armyworm (*Spodoptera praefica*), Cabbage Looper (*Trichoplusia ni*).

Pterophoridae: Morning Glory Plume Moth (*Emmelina monodactyla*).

Pyalidae: Beet Webworm (*Loxostege strictalis*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Chenopodium ambrosioides. **Mexican Tea**. Chenopodiaceae.

Foodplant for Common Sootywing.

Noctuidae: Gray Looper (*Rachiplusia ou*).

Chenopodium foliosum. **Leafy Goosefoot**. Chenopodiaceae.

Foodplant for Common Sootywing.

Chenopodium murale. **White Pigweed**. Chenopodiaceae.

Hostplant for Western Pygmy Blue and Common Sootywing.

Gelechiidae: Goosefoot Groundling (*Euscrobipalpa atriplicella*).

Chenopodium rubrum. **Red Pigweed**. Chenopodiaceae. August-October.

Hostplant for Common Sootywing (Warren).

Chloris gayana. **Rhodes Grass**. Poaceae. Chlorideae.

Recorded as a foodplant for the Eufala Skipper in Brazil.

Noctuidae: Fall Armyworm (*Spodoptera frugiperda*).

Chorispora tenella. **Crossflower**. Brassicaceae. Nectar: Becker's White, Common Checkered-Skipper (Idaho). April – July.

Foodplant for Western White.

Cichorium endiva. **Endive**. Asteraceae. Cichorieae. Scott records a nectar visit by Common Checkered-Skipper.

Arctiidae: Mexican Tiger Moth (*Notarctia proxima*).

Noctuidae: Clandestine Dart (*Spaelotis clandestina*).

Cichorium intybus. **Chicory**. Asteraceae. Cichorieae. Nectar: Clouded Sulphur, Orange Sulphur, Cabbage White (fq), Common Buckeye, Woodland Skipper. Shapiro rarely sees flower visits. April – October.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Lesser Wainscot (*Mythimna oxygala*). Clandestine Dart (*Spaelotis clandestina*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Cirsium arvense. **Canada Thistle**. Asteraceae. Cardueae. Nectar: Anise Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Old World Swallowtail. Large Marble, Cabbage White (fq), Checkered White, Becker's White, Pine White, Queen Alexandra's Sulphur, Orange Sulphur, Clouded Sulphur. Monarch, Queen, Viceroy, Red Admiral, West Coast Lady, Painted Lady, American Lady, Common Buckeye (fq), Mourning Cloak, Milbert's Tortoiseshell, Green Comma, Hoary Comma, Satyr Comma, Small Wood-Nymph, Common Wood-Nymph (fq), Field Crescent, Pearl Crescent, Atlantis Fritillary [fq – Michigan], Callippe Fritillary, Coronis Fritillary, Great Spangled Fritillary [fq in Michigan], Mormon Fritillary, Northwestern Fritillary, Variegated Fritillary, Viceroy, Hackberry Emperor. American Snout. Gray Hairstreak, Behr's Hairstreak, California Hairstreak, Coral Hairstreak, Hedgerow Hairstreak, Juniper Hairstreak, Sylvan Hairstreak, American Copper, Blue Copper (fq), Purplish Copper, Ruddy Copper, Acmon Blue, Eastern Tailed Blue, Marine Blue, Melissa Blue, Reakirt's Blue, Western Pygmy Blue. Silver-spotted Skipper, Common Checkered-Skipper, Afranius Duskywing, Carson Wandering Skipper, Common Branded Skipper, Dun Skipper, Sageman, Tawny-edged Skipper, European Skipper (fq), Pahaska Skipper, Sandhill Skipper, Sonora Skipper, Uncas Skipper, Woodland Skipper, Yuma Skipper. Red-shouldered Ctenucha. Himmelman's Plume Moth. Shapiro: "Visited by almost everything, immensely popular. A very bad weed; in some jurisdictions illegal to have on your property." June – September.

Foodplant for Painted Lady and sometimes American Lady. Mylitta Crescent. Herlan's Crescent (from eggs oviposited in the lab on Bull thistle) was reared on it by James A. Scott.

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*). Light Brown Apple Moth (*Epiphyas postvittana*).

Noxious Weed List B (California Department of Food and Agriculture).

Cirsium canescens. **Prairie Thistle**. Asteraceae. Cardueae. Nectar: Anise Swallowtail, Pale Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Rocky Mountain Parnassian. Monarch, Mylitta Crescent, Callippe Fritillary, Coronis Fritillary, Nokomis Fritillary, Northwestern Fritillary, Variable Checkerspot. Acmon Blue. Pahaska Skipper, Umber Skipper, Uncas Skipper. May – August.

Pyralidae: *Homoeosoma impressalis* (Wikipedia).

Cirsium ochrocentrum A. Gray. **Yellow Spined Thistle**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail, Baird's Old World Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail.

Checkered White, Cabbage White, Clouded Sulphur, Orange Sulphur, Southern Dogface, Cloudless Sulphur, Sleepy Orange, Mexican Yellow, Dainty Sulphur. Monarch, American Snout, Red Admiral, West Coast Lady, Painted Lady, American Lady, Common Buckeye, Tropical Buckeye, Callippe Fritillary, Satyr Comma, Mylitta Crescent, Bordered Patch, Tiny Checkerspot. Gray Hairstreak, Lupine Blue. Pahaska Skipper, Uncas Skipper, skippers. April – July.

NOXIOUS WEED LIST A (California Department of Food and Agriculture).

Cirsium undulatum. **Wavyleaf Thistle**. Asteraceae. Cardueae. Nectar: Pale Swallowtail, Two-tailed Swallowtail (Michael Shepard, Tony Frates), Becker's White (Michael Shepard), Checkered White, Painted Lady, Callippe Fritillary, Coronis Fritillary, Great Spangled Fritillary, Hoary Comma, Common Wood-Nymph, Uncas Skipper. Bumblebees. May – October.

Hostplant for Painted Lady and Mylitta Crescent (Bentler).

NOXIOUS WEED List A (California Department of Food and Agriculture). Native according to Jepson Manual, apparently a mistake; listed as non-native on CalFlora.

Cirsium vulgare. **Bull Thistle**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail (fq), Anise Swallowtail, Black Swallowtail, Old World Swallowtail. Orange Sulphur, Clouded Sulphur, Alexandra Sulphur, Sleepy Orange, Sara Orangetip, Checkered White, Cabbage White (fq), Pine White (fq), Western Sulphur. Monarch (fq), Painted Lady, American Lady (Hints, Horner), Coronis Fritillary, Great Spangled Fritillary, Gulf Fritillary (fq), Nokomis Fritillary, Northwestern Fritillary, Unsilvered Fritillary, Zerene Fritillary (fq), Myrtle's Silverspot (fq) and Behren's Silverspot (both segregates of Zerene Fritillary, Pearl Crescent, Common Wood-Nymph, Hackberry Emperor. Gray Hairstreak (Hints), Hedgerow Hairstreak, Marine Blue. Silver-spotted Skipper, Common Checkered-Skipper, Harbison's Dun Skipper, Pahaska Skipper, Tawny-edged Skipper (fq), Sandhill Skipper, Uncas Skipper, Woodland Skipper, Yuma Skipper, Western Branded Skipper (fq), Dodge's Skipper [a segregate of the Western Branded Skipper], Carson Wandering Skipper, Lindsey's Skipper, Sachus (fq), Umber Skipper. Yellow-collared Scape Moth. Corn Earworm. Shapiro: "An important nectar source in selectively logged forests. A favorite of the Pine White, Western Branded Skipper and Zerene Fritillary, among others." May – October.

Bull Thistle is an important larval host for Mylitta Crescent and Painted Lady. Also recorded as a foodplant for California Crescent.

Arctiidae: Painted Tiger Moth (*Arachnis picta*) – used successfully, at least to rear it.

Noctuidae: Variegated Cutworm (*Peridroma saucia*).

Cal-IPC classifies it as a moderately invasive weed species. Bull Thistle is not on the California noxious weed list.

Cnicus benedictus is now *Centaurea benedicta*. **Blessed Thistle**.

Colutea arborescens. **Bladder Senna**. Fabaceae. Galegeae.

Pyralidae: Limabean Pod Borer (*Etiella zinckenella*).

Conium maculatum. **Poison Hemlock**. Apiaceae. Smyrnieae. Slight value as a butterfly nectar plant; Scott noted flower visits by: Black Swallowtail, Weidemeyer's Admiral, Northwestern Fritillary, Western Pine Elfin, Behr's Hairstreak, Juniper Hairstreak, Blue Copper, and Arrowhead Blue. Hints photographed an Echo Azure at nectar on it. April – July.

Poison Hemlock serves as a foodplant for the Anise Swallowtail, especially early in the year (Arthur Shapiro).

Oecophoridae: Hemlock Moth (*Agonopterix alstroemeriana*) – accidentally introduced from the Old World, it serves as a biological control.

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Conringia orientalis. **Hare's Ear Mustard**. Brassicaceae.

Noctuidae: *Euxoa brevipennis*. *Euxoa catenula*. *Euxoa nostra*. Dingy Cutworm (*Feltia jaculifera*).

Convolvulus arvensis. **Field Bindweed**. Convolvulaceae. Nectar: Sandhill Skipper (Moldenke, Austins). Shapiro finds it visited by a variety of butterflies including Anise Swallowtail, Cabbage White, various skippers ... but not by the Sandhill Skipper. Others report: Checkered White, Clodius Parnassian, Orange Sulphur, Clouded Sulphur, Queen Alexandra's Sulphur, Monarch, Bordered Patch, Painted Lady, Purplish Copper, Afranius Duskywing, Common Sootywing (fq), Common Checkered-Skipper, Eufala Skipper, and European Skipper. Scott rates it "unpopular". March – October.

Lyonetiidae: Sweet Potato Leafminer. Morning-glory Leafminer. (*Bedellia somnulentella*).

Noctuidae: Ipsolon Dart or Black Cutworm (*Agrotis ipsilon*).

Pterophoridae: Morning-glory Plume Moth (*Emmelina monodactyla*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). American Plum Borer (*Euzophera semifuneralis*).

Coronilla varia (aka *Securigera varia*). **Purple Crownvetch**. Fabaceae. Loteae. Scott notes generally not very popular as a nectar plant, not providing much nectar, used most by Orange Sulphur (15 visits noted). Others: Cabbage White, Red Admiral, Common Checkered-Skipper, Northern Cloudywing, European Skipper, Ipsolon Dart (*Agrotis ipsilon*). May – July.

Hostplant for Orange Sulphur.

Noctuidae: Stephen's Gem (*Megalographa biloba*). Cabbage Looper (*Trichoplusia ni*) (Leroy C. Koehn for these two).

Also gets various "micromoths and leaf miners" (Leroy C. Koehn).

Coronopus didymus is becoming *Lepidium didymum*. **Wartcress**. Brassicaceae.

Noctuidae: According to HOSTS, a larval host for Ipsolon Dart (*Agrotis ipsilon*) in Pantropical areas.

Crataegus monogyna. **Common Hawthorn**. Rosaceae. Maleae. Nectar: Western Tiger Swallowtail and Lorquin's Admiral (Paul Severns), Silvery Blue (Bruce Newhouse). May – August.

Crepis capillaris. **Smooth Hawksbeard**. Asteraceae. Cichorieae. Nectar: Variable Checkerspot (Alice Cummings), West Coast Lady, Common Checkered-Skipper. May – November.

Crepis vesicaria ssp. *taraxacifolia*. **Weedy Hawksbeard**. Asteraceae. Cichorieae. Nectar: Cabbage White (fq), Orange Sulphur, Northern Checkerspot (Alice Cummings), California Ringlet (Alice Cummings), Sandhill Skipper. White-lined Sphinx likely (Nancy Asquith photo). February – October.

Cyclospermum leptophyllum. **Marsh Parsley**. Apiaceae. Pyramidopterae.

Hostplant for Anise Swallowtail (Richard James).

Cynara cardunculus. **Cardoon**. Asteraceae. Cardueae. Nectar plant for Pipevine Swallowtail, Western Tiger Swallowtail, Monarch and Umber Skipper. April – July.

Foodplant for Painted Lady.

NOXIOUS WEED.

Cynara scolymus is now *Cynara cardunculus* subsp. *cardunculus*. **Artichoke**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail (fq). Likely others.

Foodplant for Painted Lady.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: Figwort Stem Borer (*Papaipema sauzalitae*). Variegated Cutworm (*Peridroma saucia*). V-lined Quaker (*Zosteropoda hirtipes*).

Cynodon dactylon. **Bermudagrass**. Poaceae. Chlorideae.

Supports many grass skipper caterpillars: Common Roadside-Skipper, Fiery Skipper, Sachem, Woodland Skipper, Julia's Skipper, Eufala Skipper, Orange Skipperling, Umber Skipper, Sandhill Skipper, Brown Longtail.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Tobacco Budworm (*Chloridea virescens*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Saturniidae: Hualapai Buckmoth (*Hemileuca hualapai*).

Bermudagrass is on the C List of California Noxious Weeds.

Cytisus scoparius. **Scotch Broom**. Fabaceae. Genisteae. April – July.

Arctiidae: Garden Tiger Moth (*Arctia caja*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Small Engrailed (*Ectropis crepuscularia*).

Lyonetiidae: Scotch Broom Twig Miner (*Leucoptera spartifoliella*).

Oecophoridae: Gorse Tip Moth (*Agonopterix nervosa*).

Pyralidae: Genista Broom Moth (*Uresiphita reversalis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Light Brown Apple Moth (*Epiphyas postvittana*).

Noxious Weed List C.

Cytisus striatus. **Portuguese Broom**. Fabaceae. Genisteae. May – August.

Pyralidae: Genista Broom Moth (*Uresiphita reversalis*).

Dactylis glomerata. **Orchardgrass**. Poaceae. Poae.

Fourth instar Umber Skipper accepted it and were successfully reared (Barbehenn, 1994). Hostplant for European Skipper – not yet present in California but likely may expand its range into the State. The favorite foodplant.

Arctiidae: Red-shouldered Ctenucha (*Ctenucha rubroscapus*).

Noctuidae: Hop Vine Borer (*Hydraecia immanis*). Dark-lined Wainscot (*Leucania commoides*). Meadow Wainscot (*Leucania farcta*). Phragmites Wainscot (*Leucania phragmitidicola*). Scirpus Wainscot (*Leucania scirpicola*). Lesser Wainscot (*Mythimna oxygala*). Armyworm (*Mythimna unipuncta*).

Dactyloctenium aegyptium. **Crowfoot Grass**. Poaceae. Chlorideae.

Noctuidae: Fall Armyworm (*Spodoptera frugiperda*).

Datura ferox. **Chinese Thornapple**. Solanaceae. April – June.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Datura inoxia formerly Datura meteloides. **Pricklyburr**. Solanaceae. Nectar: Carolina Sphinx.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Datura stramonium. **Jimson Weed**. Solanaceae. Nectar: Pink-spotted Hawkmoth, White-lined Sphinx, Five-spotted Hawkmoth; Corn Earworm. June – August.

Noctuidae: Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Pterophoridae: Morning Glory Plume Moth (*Emmelina monodactyla*).

Sphingidae: Pink-spotted Hawkmoth (*Agrius cingulata*). Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Carolina Sphinx (*Manduca sexta*).

Daucus carota. **Wild Carrot**. Apiaceae. Scandiceae. Nectar: Cabbage White, Orange Sulphur (fq) (Ruby 2417 Flickr), Monarch, Mylitta Crescent, Common Buckeye, Red Admiral, Chalcedon Checkerspot (Horner), Milbert's Tortoiseshell, American Snout, Common Wood-Nymph, Great Copper [4.8% of nectar observations in Severns, et. al. 2006], Sachem, Woodland Skipper. May – September.

Larval host for the Anise Swallowtail, Old World Swallowtail, Black Swallowtail.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Gray (*Anavitrinella pampinaria*).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Celery Moth (*Anagrapha falcifera*). Alfalfa Semilooper (*Autographa californica*). Striped Cutworm (*Euxoa tessellata*). Subterranean Dart (*Feltia subterranea*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Large Yellow Underwing (*Noctua pronuba*). Variegated Cutworm (*Peridroma saucia*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Setaceous Hebrew Character (*Xestia c-nigrum*). Reported outside the continental United States, populations of Black Cutworm (*Agrotis ipsilon*) and Beet Armyworm (*Spodoptera exigua*) (HOSTS).

Pyralidae: Beet Webworm (*Loxostege stricticalis*). False Greenhouse Leaf-tier (*Udea profundalis*).

Yponomeutidae: Diamondback Moth (*Plutella xylostella*), populations outside of continental United States (HOSTS).

Delairea odorata, formerly *Senecio mikanioides*. **Cape Ivy**. **German Ivy**. Asteraceae. Senecioneae.

Noctuidae: Hostplant for the polyphagous Cabbage Looper (*Trichoplusia ni*).

Highly invasive in riparian areas, and, contrary to previous assessments, it does reproduce by seed.

Descurainia sophia. **Flix Weed**. Brassicaceae. Scott noted a flower visit by Pahaska Skipper.

Foodplant for Becker's White, Western White, Checkered White and Cabbage White. Also Spring White (Shapiro). Todd Stout finds it one of the least useful as a lab host.

Dianthus armeria. **Deptford Pink**. Caryophyllaceae. Nectar: Northern Cloudywing, European Skipper. Spring – summer.

Digitaria ciliaris. **Southern Crabgrass**. Poaceae. Paniceae.

Foodplant for Fiery Skipper, at least in Puerto Rico (HOSTS).

Digitaria ischaemum. **Smooth Crabgrass**. Poaceae. Paniceae.

Noctuidae: Corn Earworm. Fall Armyworm. Black-bordered Lemon (*Marimatha nigrofimbria*).

Digitaria sanguinalis. **Hairy Crabgrass**. Poaceae. Paniceae.

Foodplant for Sagem, Fiery Skipper (reported from West Indies). Umber Skipper oviposited and developed acceptably on it in the laboratory (Barbehenn, 1994).

Noctuidae: Green Cutworm (*Anicla infecta*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Dipsacus sp. **Teasel**. Dipsacaceae. Nectar: Cabbage White, Orange Sulphur, Common Buckeye, Great Copper (Scott), Yuma Skipper (Warren), White-lined Sphinx.

Dipsacus fullonum. **Fuller's Teasel**. Wild Teasel. Dipsacaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Anise Swallowtail, Old World Swallowtail. Cabbage White, Checkered White, Becker's White, Queen Alexandra's Sulphur. Monarch, Viceroy, Painted Lady (fq), American Painted Lady, Red Admiral, Common Wood-Nymph, Great Basin Wood-Nymph, California Tortoiseshell, Callippe Fritillary, Coronis Fritillary, Northwestern Fritillary, Nokomis Fritillary. Coral Hairstreak, Gray Hairstreak, American Copper, Great Copper, Melissa Blue. Common Sootywing, Common Checkered-Skipper, Common Branded Skipper, Silver-spotted Skipper, Woodland Skipper. April - August.

Gray Hairstreak lays eggs on it.

Shapiro: "Invasive. Can be a bad weed."

Dipsacus sativus. **Indian Teasel**. Fuller's Teasel. Dipsacaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Cabbage White, a sulphur, a small blue – all observed simultaneously at nectar on a patch of this species at Benecia State Recreation Area on 11 June 2012 by Bert Johnson. Specifically he noted several Anise Swallowtails and three Pipevine Swallowtails at nectar on the patch. Monarch, Common Buckeye, American Lady. May - July.

Dyssodia papposa. **Fetid Marigold**. Asteraceae. Tageteae.

Foodplant for Dainty Sulphur.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Zebra Caterpillar (*Melanchra picta*).

Echinochloa colona. **Jungle Rice**. Poaceae. Paniceae.

Foodplant for Eufala Skipper (Hernandez-Fernandez, 2007).

Echinochloa crus-galli. **Watergrass**. Poaceae. Paniceae.

Foodplant for Eufala Skipper.

Echium candicans. **Pride of Madeira**. Boraginaceae. Nectar: Anise Swallowtail, Western Tiger Swallowtail, Cabbage White, Monarch (fq), Painted Lady, West Coast Lady, Common Checkered-Skipper, White-lined Sphinx. February – October.

Ehrharta erecta. **Panic Veldt Grass**. Poaceae. Ehrharteae.

Hostplant for Umber Skipper (Barbehenn, 1994). Oviposition and larvae commonly observed in the field and animals grew well on it in the lab.

Elachistidae: *Elachista marachella* (Powell & Opler, p.73).

Eleagnus angustifolius. **Russian Olive**. Elaeagnaceae. Nectar: Painted Lady (Betsy McCully). Red Admiral (Betsy McCully). Ipsilon Dart, Armyworm.

A preferred Monarch roost plant on hot days in Wasatch Valley Meadows, Utah; also noted as a preferred Monarch roost in eastern Washington.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Noctuidae: The Redwing (*Sideridis rosea*).

Eleusine indica. **Goosegrass**. Poaceae. Chlorideae.

Oviposition observed by Fiery Skipper (Fernandez-Hernandez, 2007). Foodplant for Sachem.

Elymus canadensis. **Canada Wildrye**. Poaceae. Hordeae.

Noctuidae: *Benjaminiola colorada* (HOSTS).

Elymus repens was *Elytrigia repens*. **Quackgrass**. Poaceae. Hordeae.

A foodplant for European Skipper, an introduced butterfly likely to show up in California at some point. James and Nunnallee successfully reared Juba Skipper on it.

Arctiidae: Banded Woollybear (*Pyrrharctia isabella*).

Noctuidae: Girdler (*Dargida procinctus*). Hop Vine Borer (*Hydraecia immanis*). *Leucania insueta* (Noctuidae). Phragmites Wainscot (*Leucania phragmitidicola*). Armyworm (*Mythimna unipuncta*).

Erigeron annuus. **Annual Fleabane**. Asteraceae. Astereae. Nectar: Melissa Blue. April – July.

Tortricidae: *Xenotemna pallorana*.

Erigeron strigosus. **Daisy Fleabane**. Asteraceae. Astereae. Nectar: Melissa Blue. April – August.

Erodium sp.

Erodium cicutarium. **Red-stem Filaree**. Geraniaceae. Nectar: Anise Swallowtail, Large Marble, Desert Orangetip, Sara Orangetip, Checkered White, Common Buckeye, Mylitta Crescent, Mourning Cloak,

Echo Azure, Silvery Blue, Sonoran Blue, Propertius Duskywing, and Sleepy Duskywing, Common Checkered-Skipper, Kern Primrose Sphinx (*Euproserpinus euterpe*). Paul Johnson has photographed the Checkered White and Sara Orangetip at its flowers, also commonly visited by a *Euproserpinus* hawkmoth in Pinnacles. Popular with Mourning Cloak in West Texas! Important early nectar source for the Island Marble in the San Juan Islands, Washington; Susan Vernon says it is a favorite of the Echo Azure there. Works early or otherwise where there is not much or anything else available. February – September.

Recorded on HOSTS as among foodplants for Edith's Checkerspot and the Dainty Sulphur – I suppose rather secondary hostplant choices for each, or finishing late instars, if not a mistake.

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*). *Protorthodes texana*. Western Yellowstriped Armyworm (*Spodoptera praefica*). Cabbage Looper (*Trichoplusia ni*).

Sphingidae: Kern Primrose Sphinx (*Euproserpinus euterpe*) lays eggs on this non-native species, but it is toxic to the caterpillars – apparently a reason for the rarity of the moth!

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Eruca vesicaria subsp. *sativa*. **Garden Rocket**. Brassicaceae. Nectar: Southern Dogface. May – September.

Foodplant for the Cabbage White.

Noctuidae: Beet Armyworm (*Spodoptera exigua*, India).

Eucalyptus camaldulensis. **Red Gum**. Myrtaceae. Nectar: Monarch, sometimes a winter roosting tree. April – July.

Eucalyptus globulus. **Blue Gum**. Myrtaceae. Nectar: Pipevine Swallowtail and for Monarch, which roosts in large trees. October – January.

Dioptidae: Reported as a larval host for the California Oakworm (*Phryganidia californica*).

Euphorbia esula. **Leafy Spurge**. Euphorbiaceae. Nectar: Western Pine Elfin (Scott).

Sphingidae: The Spurge Hawkmoth (*Hyles euphorbiae*), an attractive European species imported as a bio-control for this NOXIOUS WEED.

Fagopyrum esculentum. **Buckwheat**. Polygonaceae. Nectar: Margined White, Common Wood-Nymph. Cabbage White in an Australian study; a superior nectar plant for one Lycaenid native to New Zealand; in an English study, no butterflies noted visiting flowers; gets mostly bees and flies.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Noctuidae: Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Zebra Caterpillar (*Melanchra picta*). Clandestine Dart (*Spaelotis clandestina*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Festuca arundinacea. **Tall Fescue**. Poaceae. Poae.
Pyralidae: Bluegrass Webworm (*Parapediasia teterrellus*).

Festuca myuros. **Rattail Sixweeks Grass**. Poaceae. Poae.

Umber Skipper, placed on it in the 4th instar were successfully reared (Barbehenn, 1994). Listed for Lindsey's Skipper on Butterflies and Moths of North America web site.

Festuca perennis (formerly Lolium multiflorum). **Italian Ryegrass**. Poaceae. Poae.

Barbehenn (1994) reports finding late instar Umber Skipper larvae feeding on it and rearing them successfully on two occasions in 1985. In one case in the laboratory females readily oviposited on it and the larvae successfully reared to adulthood. However, in a subsequent year larvae that fed on one-month old specimens of the grass "commonly rejected it or were unable to grow."

Ficus carica. **Fig**. Moraceae. Over-ripe fruits attract fruit-feeding butterflies.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Black Witch (*Ascalapha odorata*).

Pyralidae: Navel Orangeworm (*Amyelois transitella*). Tropical Warehouse Moth (*Cadra cautella*). Locust Bean Moth (*Ectomyelois ceratoniae*). Beehive Honey Moth (*Vitula serratilinea*).

Tortricidae: Codling Moth (*Cydia pomonella*).

Filago pyramidata var. pyramidata. **Herba Impia**. Asteraceae. Inuleae.

Foodplant for Painted Lady.

Foeniculum vulgare. **Fennel**. Apiaceae. Apieae. Nectar: Anise Swallowtail, Monarch, Queen, Lorquin's Admiral, Juniper Hairstreak, Great Copper. May – September.

Major hostplant for Anise Swallowtail. Reportedly a hostplant host for Desert Black Swallowtail, Old World Swallowtail [Baird's Swallowtail].

Noctuidae: Gray Looper (*Rachiplusia ou*).

Pyralidae: Beet Webworm (*Loxostege stricticalis*).

Galinsoga quadriradiata. **Shaggy Soldier**. Asteraceae. Millerieae.

HOSTS reports it is a hostplant for Green-veined White (*Pieris napi*). Seems doubtful to me. Sometimes plants upon which oviposition is noted are counted as hostplants, which is not always the case! Sometimes Lepidoptera oviposit on other plants near a hostplant, or, seemingly, make a mistake and oviposit on unsuitable hosts.

Genista canariensis. **Canary Island Broom**. Fabaceae. Genisteae.

Pyralidae: Eaten by the caterpillars of a native legume-feeding moth, whose common name has become the Genista Broom Moth (*Uresiphita reversalis*, Crambidae).

Genista linifolia. **Mediterranean Broom**. Fabaceae. Genisteae.

Pyralidae: Hostplant for a native legume-feeder, Genista Broom Moth (*Uresiphita reversalis*, Crambidae).

Genista monspessulana (formerly *Cytisus monspessulanus*). **French Broom**. Fabaceae. Genisteae.

Pyralidae: Hostplant for a native legume-feeder, Genista Broom Moth (*Uresiphita reversalis*, Crambidae) – an estimated 10% of the population was defoliated by it in Marin County in 1994 (Season Summary)! Defoliating all stages of growth, all year, on San Bruno Mountain (1984 Season Summary).

Genista stenopetala. **Leafy Broom**. Fabaceae. Genisteae.

Pyralidae: Hostplant for a native legume-feeder, Genista Broom Moth (*Uresiphita reversalis*, Crambidae).

Geranium dissectum. **Cutleaf Geranium**. Geraniaceae. Nectar: Sara Orangetip, Silvery Blue (Kevin Hints).
Hints).

Noctuidae: Listed as a larval host for Tobacco Budworm (*Chloridea virescens*).

Geranium molle. **Dovefoot Geranium**. Geraniaceae. Nectar: Sara Orangetip. Echo Azure and other butterflies in the San Juan Islands, Washington. February – August.

Geranium robertianum. **Herb Robert. Stinky Bob**. Geraniaceae. Nectar: Cabbage White (Tofts), Margined White. April – September.

Tofts, Richard J. 2004. "*Geranium robertianum* L." *Journal of Ecology* 92 (3): 537-55.

Glebionis coronaria formerly *Chrysanthemum coronarium*. **Crown Daisy**. Nectar: Wandering Skipper. March – July.

Glechoma hederacea. **Ground Ivy**. Lamiaceae. Nectar: Clouded Sulphur (fq), Cabbage White, American Lady, Arctic Skipper, Common Roadside-Skipper (fq). March – June.

Geometridae: Dark-barred Twin-spot Carpet (*Xanthorhoe ferrugata*).

Noctuidae: Purple Arches (*Polia purpurissata*).

Gnaphalium luteo-album is now *Pseudognaphalium luteoalbum*. **Weedy Cudweed or Jersey Cudweed**.

Grindelia squarrosa var. *serrulata*. **Curlycup Gumweed**. Asteraceae. Astereae. Nectar: Checkered White, Clouded Sulphur, Common Buckeye, Mylitta Crescent, Callippe Fritillary, Melissa Blue, Common Checkered-Skipper, Common Branded Skipper. July – September.

Noctuidae: the day-flying Darker-spotted Straw Moth (*Heliothis phloxiphaga*). *Schinia mortua*, also a day flier.

Halogeton glomeratus. **Saltlover**. Chenopodiaceae.

Foodplant for Western Pygmy Blue.

Hedera helix. **English Ivy**. Araliaceae. Paul Cherubini posted a video:

http://www.youtube.com/watch?v=qC_6FRtog-Q showing a heavy concentration of Monarch butterflies at nectar on large sunlit flowering masses of English Ivy at Cayucos, California on 11 October 2011. English Ivy an important Monarch nectar source at other sites as well. A Mike Morales Flickr photograph shows Lorquin's Admiral at nectar. California Tortoiseshell. The Herald (*Scoliopteryx libatrix*, Noctuidae) seeks its nectar, at least in England, as do the Cabbage White, Large White (*Pieris brassicae*), Red Admiral, Comma (*Polygona c-album*), and Holly Blue (*Celastrina argiolus*). August – November.

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*). Omnivorous Looper (*Sabulodes aegrotata*) – a favorite host in California (Powell & Opler).

Pyralidae: False Greenhouse Leaf-tier (*Udea profundalis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Hedypnois cretica. **Cretan Weed**. Asteraceae. Cichorieae. Nectar: White Checkered-Skipper.

Helianthus ciliaris. **Bluweed**. Asteraceae. Heliantheae. Dainty Sulphur, Checkered White, Pearl Crescent, Reakirt's Blue, Western Pygmy Blue, Common Sootywing (fq), Common Checkered-Skipper. (USGS Pollinator Library) June-November.

Larval host for Bordered Patch (Wikipedia).

Helianthus maximilianii. **Maximilian Sunflower**. Asteraceae. Heliantheae. Nectar: Monarch, Queen, Painted Lady.

Larval host for Bordered Patch.

Helminthotheca echioides (Picris echioides). **Bristly Ox-tongue**. Asteraceae. Cichorieae. Nectar: Western Tiger Swallowtail, Anise Swallowtail, Pale Swallowtail, Cabbage White (favorite source), Checkered White, Orange Sulphur, Harford's Sulphur, California Dogface, Monarch, Queen (Eric Jacob), Painted Lady, West Coast Lady, American Lady, Common Buckeye, Great Copper, Mournful Duskywing, Common Checkered-Skipper, Fiery Skipper (Hints). Shapiro: "Very popular in winter." It flowers all year, especially in riparian situations.

Hesperis matronalis. **Dame's Rocket**. See entry in cultivated plants section.

Heteropogon contortus. **Tanglehead**. Poaceae. Andropogoneae. Mary Klinkel reports noticing Empress Leila (*Asterocampa leilia*) "with many other species of butterflies" apparently getting something sticky to the fingers from the flower heads (probing with their tongues) of this grass. Likely, an adult resource for some Californian butterflies! On other grass species, Neck (1980) noted especially Common Buckeye and the Queen exhibiting similar behavior. March – November.

Hibiscus trionum. **Flower-of-an-Hour**. Malvaceae. Nectar: Clouded Sulphur, Cabbage White. April – November.

Hieracium aurantiacum. **Orange Hawkweed**. Asteraceae. Cichorieae. Nectar: Clouded Sulphur [Michigan], Orange Sulphur [Michigan], Monarch, Pearl Crescent [Michigan], American Copper, Greenish Blue [in Michigan], Persius Duskywing, European Skipper, Tawny-edged Skipper [Michigan], Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae).

Noctuidae: Gray-hooded Owlet (*Cucullia florea*).

Hirschfeldia incana. **Shortpod Mustard**. Brassicaceae. Nectar: Cabbage White (fq), Checkered White (David Horner), Sara Orangetip, Harford's Sulphur (David Horner), Orange Sulphur (fq), California Ringlet, Common Buckeye, Mylitta Crescent, Callippe Fritillary, Gray Hairstreak, Tailless Sylvan Hairstreak (David Rawlinson), Sylvan Hairstreak (Shapiro), Hermes Copper, Purplish Copper, Tailed Copper, Acmon Blue (David Horner), Marine Blue (fq), San Emigdio Blue (David S. Horner), Silvery Blue, Mormon Metalmark, Mournful Duskywing, Common Checkered-Skipper, Sandhill Skipper, Rural Skipper. Shapiro: "Important general nectar source." April – October.

Shapiro: "Major larval host of Cabbage White, Checkered White." Also Sara Orangetip and Large Marble. Shapiro notes it as the preferred host of Checkered White: Shapiro, Arthur M. 1981. "The Pierid Red-Egg Syndrome." *The American Naturalist* 117 (3): 276-94. <http://www.jstor.org/stable/2460527>.

Arctiidae: Painted Tiger Moth (*Arachnis picta*). Mexican Tiger Moth (*Notarctia proxima*). Yellow Woollybear (*Spilosoma virginica*).

Holcus mollis. **Creeping Velvetgrass**. Poaceae. Poaceae.

Foodplant for European Skipper in the British Isles. It is an introduced butterfly likely to spread to California.

Hordeum murinum ssp. leporinum. **Hare Barley**. Farmer's Foxtail. Poaceae. Hordeae.

Barbehenn (1994) reports finding a late instar larva of Umber Skipper on it on one occasion in the field, but later attempts to rear it on it failed and even 4th instar larvae commonly rejected it in the laboratory.

Hordeum vulgare. **Barley**. Poaceae. Hordeae.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Aseptis binotata*). Alfalfa Semilooper (*Autographa californica*). Army Cutworm (*Euxoa auxiliaris*). Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa ridingsiana*. Stephen's Gem (*Megalographa biloba*). Armyworm (*Mythimna unipuncta*), Fall Armyworm (*Spodoptera frugiperda*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyalidae: Indian Meal Moth (*Plodia interpunctella*).

Hypericum perforatum. **Klamathweed**. Hypericaceae. Nectar: Dun Skipper. May – August.

Noctuidae: *Nedra stewarti*. *Nedra tropicalis*. V-lined Quaker (*Zosteropoda hirtipes*).

Tortricidae: *Acleris aenigmata*. *Sparganothis senecionana*. *Xenotemna pallorana*.

NOXIOUS WEED: C List of Californian Noxious Weeds.

Hypochaeris radicata. **Rough Cat's-ear**. Asteraceae. Cichorieae. Nectar: Anise Swallowtail, Clodius Parnassian (fq), Orange Sulphur (fq), Large Marble, Pine White. West Coast Lady (fq), Painted Lady, Red Admiral, Hydaspe Fritillary, Zerene Fritillary, Common Ringlet. Great Copper, Mission Blue [segregate of Boisduval's Blue] in San Francisco. Propertius Duskywing, Sachem (Hints – "cat's ear"), Umber Skipper, Woodland Skipper, Sonora Skipper. Many butterfly species in Washington (Pyle). Langton's Forester (*Alypia langtoni*, Noctuidae), Western Snowberry Clearwing (*Hemaris thetis*). May not get much usage in competition with more preferred nectar sources. April – July.
Noctuidae: V-lined Quaker (*Zosteropoda hirtipes*).

Iris pseudacorus. **Yellow Flag Iris**. Iridaceae. In England, "moth plant". Likely so serves here, too. April – June.

Isatis tinctoria. **Dyer's Woad**. Brassicaceae. Shapiro: "Very attractive to many butterflies, but a bad weed, illegal in some jurisdictions." April – July.

Larval host for Becker's White and Checkered White and Spring White (*flavincta* segregate) and Western White and Southwestern Orangetip (*thoosa* segregate of Sara Orangetip) (Todd Stout), and for Large Marble and Pearly Marble (HOSTS). Todd Stout notes it as a suitable lab host for Spring White (a generalist feeder species, he notes) and Desert Marble (the *lotta* segregate of Pearly Marble).

Kickxia elatine. **Sharpleaf Cancerwort**. Plantaginaceae.

Larval host for Common Buckeye.

Kickxia spuria. **Fluellin**. Plantaginaceae.

Larval host for the Common Buckeye (fq).

Kochia scoparia. **Burningbush**. Chenopodiaceae.

Larval host for the Western Pygmy Blue.

Lactuca sp. **Lettuce**. Asteraceae. Cichorieae.

Noctuidae: Brown Arches (*Lacinipolia stricta*), a polyphagus species.

Lactuca biennis. **Tall Blue Lettuce**. Asteraceae. Cichorieae.

Noctuidae: Intermediate Cucullia (*Cucullia intermedia*).

Lactuca canadensis. **Canada Lettuce**. Asteraceae. Cichorieae.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Intermediate Cucullia (*Cucullia intermedia*).
Cabbage Looper (*Trichoplusia ni*).

Lactuca saligna. **Willowleaf Lettuce**. Asteraceae. Cichorieae. Nectar: Cabbage White (fq). July – November.

Lactuca serriola. **Prickly Lettuce**. Asteraceae. Cichorieae. Nectar: Cabbage White (fq), Common Sootywing. May – October.

Prickly Lettuce among consistent hostplants for Painted Lady in Inyo County during the 1991 migration year.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Variegated Cutworm (*Peridroma saucia*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Lamarkia aurea. **Goldentop**. Poaceae. Poaeae.

Larval host for Umber Skipper.

Lamium amplexicaule. **Common Henbit**. Lamiaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Sleepy Orange, Sara Orangetip, Orange Sulphur, Sothern Dogface, Gray Hairstreak, West Coast Lady. April – September.

Caterpillar plant for the polyphagus Gray Hairstreak.

Lamium purpureum. **Purple Deadnettle**. Lamiaceae. Nectar: Sara Orangetip (Aziza Cooper). April – September.

Lathyrus cicera. **Red Vetchling**. Fabaceae. Fabeae. Nectar: Blue Copper. April – June.

Lathyrus latifolius. **Perennial Sweet Pea**. Fabaceae. Fabeae. Nectar: Unidentified small orange skipper, Silvery Blue, Propertius Duskywing (Pyle), Umber Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae). April – May.

Marine Blue oviposits on it, likely hostplant.

Lavatera arborea. **Tree Mallow**. Malvaceae.

Gelechiidae: Cotton Stem Moth (*Platyedra subcinerea*).

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Lepidium appelianum was *Cardaria pubescens*. **Hairy White Top**. Brassicaceae. Nectar: Sagebrush Sooty Hairstreak.

Shapiro records it as a hostplant for Checkered White and Western White [under the synonym *Cardaria pubescens*]: Arthur M. 1992. “Twenty Years of Fluctuating Parapatry and the Question of Competitive Exclusion in the Butterflies *Pontia Occidentalis* and *P. Protodice* (Lepidoptera: Pieridae).” *Journal of the New York Entomological Society* 100 (2): 311–319.

Lepidium campestre. **Field Peppergrass**. Brassicaceae. Nectar: Shapiro: “Excellent for hairstreaks, coppers. Oldfield weed.” Nelson’s Hairstreak, Lustrous Copper. Scott records some usage by Cabbage

White, Checkered White, American Lady, and Silvery Blue – in his experience “seldom visited”. May – July.

Larval host for Western White and Cabbage White (HOSTS).

Lepidium draba was *Cardaria draba*. **White Top**. Brassicaceae. Nectar: Sheridan’s Hairstreak, Purplish Copper (fq). April – August.

Larval host for Western White (Shapiro, Todd Stout). Todd Stout finds it serves Cabbage White, Checkered White, Spring White and Large Marble (*coloradensis*), at least in his area. Todd Stout finds it a suitable lab host for Spring White (*elivata* and *flavitincta* segregates).

NOXIOUS WEED LIST B.

Lepidium latifolium. **Broad-leaved Peppergrass. Dittander**. Brassicaceae. Nectar: Painted Lady, Small Wood-Nymph, Gray Hairstreak, Great Purple Hairstreak (fq), Ruddy Copper, Great Copper (fq), Purplish Copper, Melissa Blue. June – September.

A foodplant for Checkered White (HOSTS) – of secondary or minor importance, I suppose. “Major host of *Pieris rapae*, Cabbage White.” Says Shapiro, but he warns “EXCEEDINGLY NOXIOUS, INVASIVE WEED. SHOULD NEVER BE PLANTED.”

Lepidium perfoliatum. **Shield Peppergrass**. Brassicaceae. March-June.

Larval host for Becker’s White. Larval host for Checkered White and Western White (Shapiro, 1992).

Leucanthemum vulgare aka *Chrysanthemum leucanthemum*. **Ox-eye Daisy**. Asteraceae. Anthemideae. Nectar: Clodius Parnassian, Rocky Mountain Parnassian, Clouded Sulphur, Cabbage White, Margined White, Pine White, Painted Lady [Michigan], Edith’s Checkerspot (Washington), Hydaspe Fritillary, Field Crescent (fq), Mylitta Crescent, Common Ringlet, Purplish Copper, Greenish Blue, Propertius Duskywing, Silver-spotted Skipper, Common Checkered-Skipper, Dun Skipper, Sonora Skipper, Western Branded Skipper, Oceanspray Fairy Moth (*Adela septentrionella*, Incurvariidae) (fq). Usually not a preferred nectar source, used in the absence of preferred species. June – August.

Ligustrum vulgare. **Common Privet**. Oleaceae. Nectar: Clouded Sulphur, American Lady, Red Admiral, Silver-spotted Skipper, and Yellow-collared Scape Moth.

Limonium perezii. **Sea Lavender**. See entry in cultivated plants section.

Limonium sinuatum. **Wavy-leaf Sea Lavender**. Plumbaginaceae. Nectar: Pipevine Swallowtail (fq). Bert Johnson finds them so engaged as to allow close approach, favoring it above other flowers. Also draws many other species of butterflies. Flowers all year.

Limonium ramosissimum. Algerian Sea Lavender. Plumbaginaceae. Nectar: Anise Swallowtail, Common Buckeye, Painted Lady, West Coast Lady, Gray Hairstreak, grass skippers (Verne Nelson for these records).

Linaria dalmatica. **Dalmatian Toadflax**. Plantaginaceae.

Sesiidae: In at least one case this noxious introduced weed, growing in a large mass in Trinity County, was found to be “heavily infested” with *Penstemonia clarkei*.

Linaria purpurea. **Purple Toadflax**. Plantaginaceae. A garden escape. Nectar: Western Tiger Swallowtail, Gray Hairstreak, Funereal Duskywing, Mournful Duskywing, Common Checkered-Skipper, Umber Skipper (Barbara Robeson for most of these).
Hostplant for Common Buckeye (Charlotte Torgovitsky).

Linaria vulgaris. **Butter-and-Eggs**. Plantaginaceae. Nectar: Painted Lady, Clouded Sulphur, Cabbage White, Tawny-edged Skipper. These noted in Robertson's monumental Midwestern study as sucking nectar as non-pollinators. These flowers not formed to facilitate butterfly utilization or pollination. Butterflies are often minor among visitors of a given flower, serving as "nectar thieves". June – August.

Hostplant for Common Buckeye.

Linum bienne. **Pale Flax**. Linaceae. Nectar: Mission Blue [a segregate of Boisduval's Blue]. March – June.

Linum usitatissimum. **Common Flax**. Linaceae.

In Brazil and Neotropical areas, eaten by Variegated Fritillary caterpillars.

Geometridae: Spring Cankerworm (*Paleacrita vernata*).

Noctuidae: Early Cutworm (*Euxoa tristicula*). Nutmeg (*Anarta trifolii*). Bertha Armyworm (*Mamestra configurata*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Beet Webworm (*Loxostege strictalis*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Lobularia maritima. **Sweet Alyssum**. Brassicaceae. Nectar: Mylitta Crescent.

Hostplant for Cabbage White and Checkered White.

Lolium sp. **Ryegrass**. Poaceae. Poaeae.

Noctuidae: *Leucania insueta*.

Lonicera japonica. **Japanese Honeysuckle**. Caprifoliaceae. Nectar: Giant Swallowtail, Northern Cloudywing, Silver-spotted Skipper (fq). Visited by nocturnal moths such as Five-spotted Hawkmoth, Carolina Sphinx, Great Ash Sphinx, Wild Cherry Sphinx, and Achemon Sphinx. May – July.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*, California).

Lonicera tatarica. **Tartarian Honeysuckle**. Caprifoliaceae. Nectar: Monarch, Painted Lady, Snowberry Clearwing. June – July.

Lotus corniculatus. **Bird's Foot Trefoil**. Fabaceae. Loteae. Nectar: Cabbage White [secondary in UK], Painted Lady [secondary in UK], Acmon Blue, Common Checkered-Skipper (fq), Sachem (Doug Wirtz)

photo, Jepson Prairie), Woodland Skipper, Sonora Skipper, European Skipper, Ipsilon Dart. Shapiro: "Excellent nectar source for many species." June – September.

Shapiro: "now being used as a larval host by some populations of Eastern Tailed Blue, Gray Hairstreak and Orange Sulphur." James & Nunnallee add Greenish Blue.

Gelechiidae: *Chionodes lugubrella*, an abundant well-marked introduction (Powell & Opler, who omitted the "r" in the epithet in their treatment).

Tortricidae: Mosaic Sparganothis (*Sparganothis xanthoides*).

Lotus uliginosus aka Lotus pedunculatus. **Marsh Lotus. Greater Bird's-foot Trefoil.** Fabaceae. Loteae. Similar to Bird's-foot Trefoil, rhizomatous with hollow stems, more flowers, found in wetter places. June – September.

Suspected Silvery Blue hostplant (Wechsler, NorWestLeps #3935).

Lunaria annua. **Annual Honesty. Moonwort.** Brassicaceae. Nectar: European Green-veined White (*Pieris napi*), closely related to the Margined White, and for the English Orange-tip (*Anthocharis cardamines*). April – June.

Foodplant for Cabbage White.

Lythrum salicaria. **Purple Loosestrife.** Lythraceae. Nectar: Two-tailed Swallowtail, Cabbage White (fq), Mustard White, Clouded Sulphur, Orange Sulphur, Monarch (fq), Queen, American Lady, Painted Lady, Common Buckeye, Pearl Crescent, Common Wood-Nymph, Gray Hairstreak, Common Sootywing, Sagem, Silver-spotted Skipper, Dun Skipper, Tawny-edged Skipper, Woodland Skipper (several from Scott), Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, et.al. 1991) and long-tongued moths. May – October.

Shapiro says of this beautiful NOXIOUS WEED; one should never plant in California, due to its extreme weediness not suitable as a butterfly garden flower.

Maclura pomifera. **Osage Orange.** Moraceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Variegated Cutworm (*Peridroma saucia*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*) [Illinois Wildflowers web site].

Malcomia africana. **African Mustard.** Brassicaceae.

Larval host for Checkered White.

Malva neglecta aka *Malva rotundifolia*. **Common Mallow**. Malvaceae. Nectar: Cabbage White, Checkered White.

Shapiro finds flowers of weedy *Malva* spp. (this and those following) rarely used by butterflies but the plants are important larval hosts of West Coast Lady, Painted Lady, Gray Hairstreak, Common/White Checkered-Skipper. Suitable lab host for Arizona Powdered-Skipper and Northern White-Skipper (Todd Stout).

Arctiidae: Nevada Tiger Moth (*Apantesis nevadensis*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale Western Cutworm (*Agrotis orthogonia*). Alfalfa Semilooper (*Autographa californica*). Corn Earworm (*Helicoverpa zea*). Beet Armyworm (*Spodoptera exigua*).

Pyralidae: Rufous-banded Crambid (*Mimoschinia rufofascialis*).

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Malva nicaeensis. **Bull Mallow**. Malvaceae. Nectar: Anise Swallowtail, Cabbage White (fq), Common Checkered-Skipper.

Foodplant for West Coast Lady, Painted Lady, Gray Hairstreak, Northern White-Skipper, Common Checkered-Skipper.

Malva parviflora. **Cheeseweed**. Malvaceae. Nectar for the Common Checkered-Skipper.

Hostplant for West Coast Lady, Painted Lady, Gray Hairstreak, Northern White-Skipper, White Checkered-Skipper, Common Checkered-Skipper, Small Checkered-Skipper.

Arctiidae: Painted Tiger Moth (*Arachnis picta*).

Tischeriidae: *Astrotischeria omissa*.

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Malva sylvestris. **High Mallow**. Malvaceae. Nectar: Cabbage White.

Foodplant for West Coast Lady, Painted Lady, Common Checkered-Skipper, Northern White-Skipper (Pelham, NorWestLeps #4958).

Gelechiidae: Cotton Stem Moth (*Platyedra subcinerea*).

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Marrubium vulgare. **Horehound**. Lamiaceae. Nectar: Becker's White, Cabbage White (fq), Checkered White (fq). Painted Lady, West Coast Lady, Coronis Fritillary, Mylitta Crescent, Gabb's Checkerspot, Weidemeyer's Admiral, Satyr Comma, and Monarch. Fatal Metalmark. Western Brown Elfin, Behr's Hairstreak, California Hairstreak (fq), Gold-hunter's Hairstreak (fq), Gray Hairstreak, Hedgerow Hairstreak, Juniper Hairstreak, Mountain Mahogany Hairstreak, Gorgon Copper, Great Copper (fq),

Purplish Copper, Acmon Blue. Northern White-Skipper, Afranius Duskywing, Dun Skipper, Western Branded Skipper. Shapiro: “Outstanding for hairstreaks and coppers”. In Sacramento Valley “indispensable” nectar for Great Copper and California Hairstreak. March – November. *Matthiola incana*. **Tenweeks Stock**. Brassicaceae.

Foodplant for Cabbage White.

Matthiola longipetala. **Night-scented Stock** or **Evening Stock**. Brassicaceae. Intoxicatingly fragrant at night, attracts moths.
Medicago. Fabaceae. Trifolieae.

Noctuidae: *Pronoctua pyrophiloides*. Alfalfa Looper (*Tathorhynchus exsiccata*).

Medicago lupulina. **Black Medic**. Fabaceae. Trifolieae. Flowers generally not attractive, but Scott noted (generally once or few) flower visits by Painted Lady, Eastern Tailed Blue, Melissa Blue and Reakirt’s Blue. Behr’s Hairstreak.

Hostplant for Orange Sulphur and Eastern Tailed Blue.

Gelechiidae: *Mirificarma eburnella*.

Tortricidae: Allen’s Tortrix (*Aphelia alleniana*).

Medicago polymorpha. **California Burclover**. Fabaceae. Trifolieae. Nectar: Acmon Blue.

Larval host for Orange Sulphur, Common Sulphur, Funereal Duskywing.

Gelechiidae: *Mirificarma eburnella*.

Medicago sativa. **Alfalfa**. Fabaceae. Trifolieae. Nectar: Anise Swallowtail, Baird’s Old World Swallowtail (fq), Desert Black Swallowtail, Giant Swallowtail, Two-tailed Swallowtail. Becker’s White, Checkered White (fq), Western White, Cabbage White (fq), Dainty Sulphur, Queen Alexandra’s Sulphur, Yellow Sulphur, Clouded Sulphur (fq), Cloudless Sulphur (fq), Orange Sulphur (fq), Sleepy Orange, Southern Dogface. Monarch (fq), Queen, Callippe Fritillary, Coronis Fritillary, Leto Fritillary, Mormon Fritillary, Nevada Silverspot, Zerene Fritillary (fq), and Variegated Fritillary (fq), Milbert’s Tortoiseshell, American Painted Lady, Painted Lady (fq), West Coast Lady (fq), Red Admiral, Weidemeyer’s Admiral, Common Buckeye, Field Crescent, Pearl Crescent, Bordered Patch, Common Wood-Nymph (fq), Great Basin Wood-Nymph, Small Wood-Nymph. American Snout. Behr’s Hairstreak, California Hairstreak, Gray Hairstreak (fq), Desert Tailed Copper, Blue Copper, Purplish Copper, Ruddy Copper, Western Pygmy Blue, Marine Blue (fq), Melissa Blue (fq), Ceraunus Blue, Eastern Tailed Blue, Reakirt’s Blue (fq), Silvery Blue. Northern White-Skipper, Silver-spotted Skipper (fq), Afranius Duskywing (fq), Funereal Duskywing, Mournful Duskywing (fq), Common Checkered-Skipper (fq), Common Sootywing (fq), Mojave Sootywing, MacNeill’s Sootywing, Saltbush Sootywing, Orange Skipperling, Common Roadside-Skipper, Dun Skipper, European Skipper, Fiery Skipper, Sachem (fq), Western Branded Skipper, Sandhill Skipper, Eufala Skipper, Juba Skipper, Pahaska Skipper (Johnson & Nixon, 1967), Tawny-edged Skipper (fq), Uncas Skipper, Woodland Skipper (fq), Yuma Skipper, European Skipper, Hammock Skipper. Ipsilon Dart (*Agrotis ipsilon*, Noctuidae), Corn Earworm (*Helicoverpa zea*, Noctuidae), tiger moths, millers, grass moths noted by Pyle in *Chasing Monarchs*. April – October.

Caterpillar food for Orange Sulphur (fq), Clouded Sulphur, Queen Alexandra's Sulphur, Western Sulphur, California Dogface (reared on it in the lab), Southern Dogface, Painted Lady, Gray Hairstreak, Silvery Blue, Marine Blue, Melissa Blue, Ceraunus Blue, Reakirt's Blue, Funereal Duskywing, Northern Cloudywing, even California Dogface (Hostplants). A major hostplant for Funereal Duskywing in central California (Shapiro). Eufala Skipper noted ovipositing on it in 1972 Season Summary in Kings County.

Arctiidae. Painted Tiger Moth (*Arachnis picta*). Blake's Tiger Moth (*Grammia blakei*).

Gelechiidae: *Mirificarma eburnella*. Pink Bollworm (*Pectinophora gossypiella*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*, records from abroad). Pale Western Cutworm (*Agrotis orthogonia*). Venerable Dart (*Agrotis venerabilis*). Old Man Dart (*Agrotis vetusta*). Mouse Moth (*Amphipyra tragopoginis*). Celery Moth (*Anagrapha falcifera*). Glassy Cutworm (*Apamea devastator*). Alfalfa Semilooper (*Autographa californica*). Clover Looper (*Caenurgina crassiuscula*). Forage Looper (*Caenurgina erechtea*). Tobacco Budworm (*Chloridea virescens*). Soybean Looper (*Chrysodeixis includens*). Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). Divergent Dart (*Euxoa divergens*). *Euxoa inconcinna*. *Euxoa infausta*. *Euxoa laetificans*. Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa ridingsiana*. Early Cutworm (*Euxoa tristicula*). Subterranean Dart (*Feltia subterranea*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Hope Vine Borer (*Hydraecia immanis*). Brown Arches (*Lacinipolia stricta*). *Lacinipolia vicina*. Bertha Armyworm (*Mamestra configurata*). Stephen's Gem (*Megalographa biloba*). Hitched Arches (*Melanchra adjuncta*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Alfalfa Looper (*Tathorhynchus exsiccata*). Cabbage Looper (*Trichoplusia ni*). Aster Cutworm (*Trichordestra lilacina*). American Swordgrass Moth (*Xylena nupera*).

Pyalidae. Garden Webworm (*Achyra rantalis*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Alfalfa Webworm (*Loxostege cereralis*). Alfalfa Webworm (*Loxostege conmixtalis*). Beet Webworm (*Loxostege stricticalis*). Lucerne Moth (*Nomophila nearctica*). Meal Moth (*Pyralis farinalis*).

Tortricidae. Allen's Tortrix (*Aphelia alleniana*). Fruit-tree Leafroller (*Archips argyrospila*). Omnivorous Leafroller (*Platynota stultana*). *Xenotemna pallorana*.

Melilotus albus aka *M. alba*. **White Sweetclover**. Fabaceae. Trifolieae. Nectar: Desert Black Swallowtail. Checkered White, Cabbage White, Western White, Orange Sulphur, Clouded Sulphur, Sleepy Orange, Cloudless Sulphur. Monarch, Queen, Red Admiral, American Painted Lady, Painted Lady, West Coast Lady, Common Buckeye, Mylitta Crescent, Variegated Fritillary, Satyr Comma, Common Wood-Nymph, Great Basin Wood-Nymph, Small Wood-Nymph, Ridings's Satyr. American Snout. Fatal Metalmark. Behr's Hairstreak (fq), California Hairstreak, Coral Hairstreak, Gray Hairstreak, Juniper Hairstreak, Mountain Mahogany Hairstreak, Sylvan Hairstreak, Thicket Hairstreak, Leda Ministreak, American Copper [fq in Michigan], Blue Copper, Ruddy Copper, Tailed Copper (fq), Eastern Tailed Blue, Western Pygmy Blue, Marine Blue (fq), Ceraunus Blue (fq), Reakirt's Blue, Boisduval's Blue, Acmon Blue, Melissa Blue (fq), Silvery Blue, Echo Azure. Northern White-Skipper, Silver-spotted Skipper, Common Sootywing (fq) (Johnson & Nixon, 1967), Afranius Duskywing, Dun Skipper, Pahaska Skipper, Tawny-edged Skipper. Corn Earworm. Shapiro calls it a "good all-around nectar plant, especially for Satyriums (hairstreaks) in montane settings." May – September.

Larval host for Orange Sulphur, Western Sulphur (James & Nunnallee) and Reakirt's Blue (Dallas Butterflies web site).

Psychidae: Snailcase Bagworm (*Apterona helicoidella*).

Pyralidae: Lucerne Moth (*Nomophila nearctica*).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*). Omnivorous Leafroller (*Platynota stultana*). *Xenotemna pallorana*.

Melilotus indicus aka M. indica. **Annual Yellow Sweetclover**. Fabaceae. Trifolieae.

Hostplant for Eastern Tailed Blue and Reakirt's Blue.

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*, recorded abroad). Cabbage Looper (*Trichoplusia ni*).

Melilotus officinalis. **Yellow Sweetclover**. Fabaceae. Trifolieae. Nectar: Checkered White, Clouded Sulphur, Orange Sulphur. Common Buckeye, Pearl Crescent, Small Wood-Nymph. Gray Hairstreak, 'Siva' Juniper Hairstreak (fq), Sylvan Hairstreak, Great Copper, Purplish Copper, Ruddy Copper, Spring Azure, Boisduval's Blue, Melissa Blue, Reakirt's Blue, Silvery Blue. Common Checkered-Skipper, Pahaska Skipper, Sonora Skipper, Yuma Skipper. Eight-spotted Forester (*Alypia octomaculata*, Noctuidae). May – August.

Hostplant for Orange Sulphur, Clouded Sulphur, Western Sulphur [James & Nunnallee found a refusal to oviposit on it], Gray Hairstreak, Acmon Blue, Ceraunus Blue (Todd Stout), Eastern Tailed Blue, Reakirt's Blue, Silvery Blue, Spring Azure.

Arctiidae. Salt Marsh Moth (*Estigmene acrea*). California Tiger Moth (*Leptarctia californiae*).

Geometridae. Peppered Moth (*Biston betularia*). Wavy-lined Emerald (*Synchlora aerata*).

Gracillariidae. *Parectopa occulta*.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Venerable Dart (*Agrotis venerabilis*). Alfalfa Semilooper (*Autographa californica*). *Euxoa brevipennis*. *Euxoa catenula*. *Euxoa costata*. Clear Dart (*Euxoa declarata*). *Euxoa infausta*. *Euxoa laetificans*. Corn Earworm (*Helicoverpa zea*). Bertha Armyworm (*Mamestra configurata*). Variegated Cutworm (*Peridroma saucia*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Psychidae. Snailcase Bagworm (*Apterona helicoidella*).

Pyralidae. Lucerne Moth (*Nomophila nearctica*).

Tortricidae. *Xenotemna pallorana*.

Mentha arvensis. **Field Mint**. Lamiaceae. Nectar: Cabbage White, Common Wood-Nymph, Small Wood-Nymph (fq), Gray Hairstreak, Purplish Copper, Boisduval's Blue, Woodland Skipper (Scott). March – May.

Mentha x piperita. **Peppermint**. Lamiaceae. Nectar: Cabbage White, Southern Dogface, Common Buckeye, Mylitta Crescent, Variegated Fritillary, Eastern Tailed Blue, Common Sootywing, Sachem, Dun Skipper, Rural Skipper aka Farmer (Alice Cummings). July – October.

Geometridae: Horned Spanworm (*Nematocampa resistaria*).

Noctuidae: Ipsilon Dart (*Agrotis ipsilon*). Copper Underwing (*Amphipyra pyramidoides*). Alfalfa Semilooper (*Autographa californica*). Bean Leafskeltonizer (*Autoplusia egena*). Olive Green Cutworm (*Dargida procinctus*). Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa olivia*. *Euxoa recula*. Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Brown Arches (*Lacinipolia stricta*). Bertha Armyworm (*Mamestra configurata*). Variegated Cutworm (*Peridroma saucia*). Cabbage Looper (*Trichoplusia ni*). American Swordgrass Moth (*Xylena nupera*).

Pyralidae: California Pyrausta Moth (*Pyrausta californicalis*). Orange Mint Moth (*Pyrausta orphisalis*). False Greenhouse Leaf-tier (*Udea profundalis*).

Mentha pulegium. **Pennyroyal**. Lamiaceae. Nectar: Orange Sulphur, Cabbage White, Common Ringlet, Common Wood-Nymph (fq), Field Crescent (<https://www.inaturalist.org/observations/14373574>), Mylitta Crescent, Common Buckeye, Gray Hairstreak (fq), Great Copper, Acmon Blue (Hints, Alice Cummings), Eastern Tailed Blue, Common Checkered-Skipper, Sandhill Skipper, Woodland Skipper (Kevin Hints, Alan Wight). July – October.

Mentha spicata. **Spearmint**. Lamiaceae. Nectar: Western Tiger Swallowtail, Anise Swallowtail, Cabbage White (fq), Orange Sulphur, Common Buckeye, Red Admiral, Painted Lady, Mylitta Crescent, Coronis Fritillary (Nancy Asquith), Pacific Fritillary, Bordered Patch, Gray Hairstreak, Acmon Blue, Purplish Copper, Mournful Duskywing, Common Checkered-Skipper, Sandhill Skipper, Field Skipper (Sachem), Silver-spotted Skipper, Snapdragon Plume Moth (*Amblyptilia pica*, Pterophoridae). July – October.

Spearmint is a caterpillar foodplant for the Painted Lady and Gray Hairstreak.

Bob Barber and Marc Kummel photographed Gray Hairstreak caterpillars on spearmint flowers; Kummel also photographed oviposition.

Geometridae: Wavy-lined Emerald (*Synchlora aerata*).

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Bean Leafskeltonizer (*Autoplusia egena*).

Pyralidae: California Pyrausta Moth (*Pyrausta californicalis*).

Mesembryanthemum crystallinum. **Crystalline Iceplant**. Aizoaceae. Nectar: Cabbage White, Western Pygmy-Blue (<https://www.inaturalist.org/observations/13800056>). March – October.

Mesembryanthemum nodiflorum. **Slender-leaved Iceplant**. Aizoaceae. Nectar: Western Pygmy Blue (Roger Nyemaster, B.J. Stacey), Common Checkered-Skipper (Aaron Schusteff), White-lined Sphinx. April – November.

Mirabilis linearis. **Narrowleaf Four O'clock**. Nyctaginaceae. July – October.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Mirabilis nyctaginea. **Heartleaf Four O'clock**. Nyctaginaceae. Sphinx moths are likely flower visitors.

Gelechiidae: *Nealyda bifidella*.

Heliodinidae: *Aetole tripunctella*. *Embola ionis*. *Lithariapteryx abroniaeella*. *Neoheliodines cliffordi*. *Neoheliodines nyctaginella*.

Zygaenidae: *Tripocris smithsoniana*.

Modiola caroliniana. **Wheel Mallow**. Malvaceae.

Larval host for Common Checkered-Skipper.

Mollugo verticillata. **Green Carpetweed**. Molluginaceae.

Listed as a foodplant for the Dainty Sulphur (HOSTS).

Morus alba. **White Mulberry**. Moraceae.

Pyalidae: Raisin Moth (*Cadra figulilella*). American Plum Borer (*Euzophera semifuneralis*).

Myosotis discolor. **Changing Forget-me-not**. Boraginaceae. Nectar: Eastern Tailed Blue.

Myosotis latifolia. **Broad-leaved Forget-me-not**. Boraginaceae. Nectar: Margined White, Alfalfa Looper (Verne Nelson). A Ron Wolf photograph shows a Dark-ribbed Wave (*Leptostales rubromarginaria*, Geometridae) on a flower (Windy Hill Open Space Preserve) likely at nectar.

Myosotis verna. **Spring Scorpion Grass**. Boraginaceae. Nectar: Checkered White.

Nepeta cataria. **Catnip**. Lamiaceae. See account in Cultivated Plants section.

Nicotiana glauca. **Tree Tobacco**. Solanaceae. Nectar: Tobacco Hornworm. Great for hummingbirds. April – August.

Said to be a larval host for Painted Lady.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Arctiidae: Vestal Tiger Moth (*Spilosoma vestalis*). Mexican Tiger Moth (*Notarctia proxima*).

Geometridae: Fragile Gray (*Iridopsis fragilaria*).

Noctuidae: Beet Armyworm (*Spodoptera exigua*).

Nicotiana sylvestris. **South American Tobacco**. Solanaceae. Nectar: Carolina Sphinx.

Sphingidae: Hostplant for Carolina Sphinx (aka Tobacco Hornworm) in Brazil.

Oenothera biennis. **Common Evening Primrose**. Onagraceae. Nectar source for the Silver-spotted Skipper, Carolina Sphinx, Five-spotted Hawkmoth, White-lined Sphinx, Achemon Sphinx, Primrose Moth (*Schinia florida*, Noctuidae). Also Rustic Sphinx (fq) [Graham, Sean P. 2010. "Visitors to Southeastern Hawkmoth Flowers." *Southeastern Naturalist* 9 (3): 413-26.

<http://www.jstor.org/stable/40985595>.] June – September.

Sphingidae: Bedstraw Hawkmoth (*Hyles gallii*). White-lined Sphinx (*Hyles lineata*) –preferred above all its other hosts in David Richman’s garden (New Mexico).

Geometridae: Double-banded Carpet (*Spargania magnoliata*).

Noctuidae: *Eudryas brevipennis*. Primrose Moth (*Schinia florida*).

Sesiidae: Fireweed Clearwing (*Albuna pyramidalis*).

Onobrychis viciifolia. **Sanfoin**. Fabaceae. Hedysareae. Nectar: Cabbage White, European Skipperling [secondary for both, UK Butterflies].

Noctuidae: Army Cutworm (*Euxoa auxiliaris*).

Pyralidae: Beet Webworm (*Loxostege stricticalis*).

Onopordum acanthium. **Scotch Thistle**. Asteraceae. Cardueae. Scott rates it as “popular” with butterflies, notes visits by Painted Lady. May – August.

Todd Stout finds it a suitable lab host for Mylitta Crescent.

Oncosiphon piluliferum. **Stinknet. Globe Chamomile**. Asteraceae. Anthemideae. Nectar: Checkered White (Stan Gorodenski, Liz Makings), Dainty Sulphur (Liz Makings), Painted Lady (Anne Reeves), Western Pygmy-Blue (Anne Reeves, Stan Gorodenski, Liz Makings), Ceraunus Blue (Anne Reeves). March – July.

Oryza sativa. **Rice**. Poaceae. Oryzeae.

Foodplant for Eufala Skipper, Nyctelius Skipper.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Corn Earworm (*Helicoverpa zea*). Armyworm (*Mythimna unipuncta*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pyralidae: Mexican Rice Borer (*Eoreuma loftini*). Indian Meal Moth (*Plodia interpunctella*).

Oxalis corniculata. **Creeping Wood Sorrel**. Oxalidaceae. Nectar: Cabbage White, Checkered White, Pearl Crescent (fq), Gray Hairstreak, Common Sootywing (fq), Fiery Skipper, Field Skipper (Sachem). Flowers most of the year.

Oxalis pes-caprae. **Bermuda Buttercup**. Oxalidaceae. Photographs of some butterflies seen at nectar: Anise Swallowtail, Sara Orangetip (B.J. Stacey), Large Marble, Margined White (Nancy Asquith, Kevin

Hints), Mylitta Crescent (Avis Boutel), Painted Lady (David H. Bartholomew), Coastal Green Hairstreak, and Umber Skipper (Gena Bertall). January – May.

Panicum miliaceum. **Broom Corn Millet**. Poaceae. Paniceae.

Crambidae: Mexican Rice Borer (*Eoreuma loftini*).

Noctuidae: Armyworm. Fall Armyworm (*Spodoptera frugiperda*).

Parietaria judaica. **Spreading Pellitory**. Urticaceae.

Hostplant for Red Admiral (fq) and West Coast Lady.

Parkinsonia aculeata. **Mexican Palo Verde**. Fabaceae. Caesalpinieae.

Noctuidae: Royal Poinciana Moth (*Melipotis acontinoides*).

Parthenium hysterophorus. **Santa Maria Feverfew**. Asteraceae. Heliantheae. Ambrosiinae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Paspalum dilatatum. **Dallisgrass**. Poaceae. Paspaleae. Apparent adult resource for Common Buckeye, Queen, Painted Lady – see note at *Bothriochloa ischaemum*; observed as an apparent nutritive source for adult butterflies.

Hostplant for Sachem, Eufala Skipper. Barbehenn reports Umber Skipper larvae collected on it in the field and successfully reared on it in several laboratory experiments.

Pastinacea sativa. **Wild Parsnip**. Apiaceae. Tordylieae. Nectar: Monarch, American Snout, Tawny-edged Skipper. Shapiro: “Like most Apiaceae, flowers visited by diverse Lycaenids.” July – August.

Hostplant for Anise Swallowtail, Black Swallowtail, Old World Swallowtail.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Pug (*Eupithecia miserulata*).

Noctuidae: Striped Cutworm (*Euxoa tessellata*). Armyworm (*Mythimna unipuncta*).

Pennisetum ciliare was *Cenchrus ciliaris*. **Buffel Grass**. Poaceae. Paniceae.

Hostplant for Eufala Skipper.

Pennisetum clandestinum. **Kikuyu Grass**. Poaceae. Paniceae.

Barbehenn (1994) finds Umber Skipper commonly oviposits on it in the field and it supports good larval growth in the laboratory.

Persicaria hydropiper (*Polygonum hydropiper*). **Common Smartweed. Waterpepper.** Polygonaceae. May- September.

HOSTS reports it as a foodplant for the Pipevine Swallowtail, which seems quite improbable.

Geometridae: Bent-line Carpet (*Costaconvexa centrostrigaria*). Gem (*Orthonama obstipata*).

Noctuidae: Henry's Marsh (*Acronicta insularis*). Zebra Caterpillar (*Melanchra picta*).

Persicaria maculosa (*Polygonum persicaria*). **Lady's Thumb.** Polygonaceae. Nectar: Sachem June – November.

Foodplant for the Purplish Copper.

Arctiidae: Banded Woollybear (*Pyrrharctia isabella*).

Geometridae: Gem (*Orthonama obstipata*).

Persicaria pennsylvanica (*Polygonum pennsylvanicum*). **Pinkweed.** Polygonaceae. Nectar: Sleepy Orange, Clouded Sulphur, Dainty Sulphur, Cabbage White, Checkered White, Monarch, Red Admiral, Pearl Crescent, Texan Crescent, Variegated Fritillary (fq), Gray Hairstreak, Eastern Tailed Blue, Marine Blue, Ceraunus Blue, Reakirt's Blue, Common Checkered-Skipper, Dun Skipper, Fiery Skipper (fq), Sachem, Tawny-edged Skipper, Yuma Skipper, Yellow-collared Scape Moth, and Corn Earworm. May – December.

Larval host for Purplish Copper.

Noctuidae: Bordered Sallow (*Pyrrhia cilisca*). Corn Earworm (*Helicoverpa zea*).

Petrorhagia dubia. **Windmill Pink.** Caryophyllaceae. Nectar: Pipevine Swallowtail, Sara Orangetip. Spring – early Summer.

Phalaris aquatica. Bulbous Canary Grass. **Harding Grass.** Poaceae. Poae.

Reported as a hostplant for Lindsey's Skipper.

Phleum pratense. **Cultivated Timothy.** Poaceae. Poae.

Larval host for European Skipper and Common Roadside-Skipper.

Arctiidae: Wandering Tiger Moth (*Spilosoma vagans*).

Noctuidae: Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Apamea sordens*). Army Cutworm (*Euxoa auxiliaris*). Zebra Caterpillar (*Melanchra picta*). Broken-lined Brocade (*Mesapamea fractilinea*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Lempke's Gold Spot (*Plusia putnami*). Fall Armyworm (*Spodoptera frugiperda*). Aster Cutworm (*Trichordestra lilacina*).

Physalis peruviana. **Peruvian Groundcherry.** Solanaceae.

Gelechiidae: Potato Moth (*Phthorimaea operculella*) (HOSTS).

Physalis philadelphica. **Tomatillo**. Solanaceae.

Physalis pubescens. **Husk Tomato**. Solanaceae. August - September.

Noctuidae: Corn Earworm (*Helicoverpa zea*) (HOSTS).

Physalis viscosa. **Grape Groundcherry**. Solanaceae.

Gelechiidae: Potato Moth (*Phthorimaea operculella*) (HOSTS). *Scrobipalpa physaliella* (HOSTS).
Symmetrischema lavernella (HOSTS).

Noctuidae: Corn Earworm (*Helicoverpa zea*) (HOSTS). Tobacco Budworm (*Heliothis virescens*) (HOSTS).

Sphingidae: Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Carolina Sphinx (*Manduca sexta*).

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*).

NOXIOUS WEED: Californian B list.

Phytolacca americana. **Pokeweed**. Phytolaccaceae.

Geometridae: Somber Carpet (*Disclisiosprocta stellata*).

Noctuidae: Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Picris echioides is now *Helminthotheca echioides*. **Bristly Ox-tongue**.

Plantago coronopus. **Cut Leaf Plantain**. Plantaginaceae.

Larval host for Common Buckeye.

Plantago lanceolata. **English Plantain**. Plantaginaceae.

Larval host for Painted Lady, Common Buckeye, Variable Checkerspot, Edith's Checkerspot.
Common Buckeye usually lays one egg per plant: [Scott, James A. 1975. "Movement of *Precis Coenia*, a 'Pseudoterritorial' Submigrant (Lepidoptera: Nymphalidae)." *Journal of Animal Ecology* 44 (3): 843-50. doi:10.2307/3722].

Arctiidae: Brown Tiger Moth (*Spilosoma pteridis*).

Noctuidae: Olive Arches (*Lacinipolia olivacea*). Variegated Cutworm (*Peridroma saucia*). Brown Angle Shades (*Phlogophora periculosa*) (HOSTS). *Pseudorthodes irrorata*. Yellowstriped Armyworm (*Spodoptera ornithogalli*) (HOSTS).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*). Light Brown Apple Moth (*Epiphyas postvittana*).

Plantago major. **Common Plantain**. Plantaginaceae.

Larval host for Variable Checkerspot, Common Buckeye, Painted Lady.

Arctiidae: Ornate Tiger Moth (*Apantesis ornata*). Garden Tiger Moth (*Arctia caja*). *Parasemia plantaginis* (HOSTS). Ruby Tiger Moth (*Phragmatobia fuliginosa*, Finland) (HOSTS). Banded Woollybear (*Pyrrharctia isabella*). Brown Tiger Moth (*Spilosoma pteridis*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: Olive Arches (*Lacinipolia olivacea*). *Pseudorthodes irrorata*. European Yellow Underwing (*Noctua pronuba*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Plantago pusilla. **Dwarf Plantain**. Plantaginaceae.

Larval host for Edith's Checkerspot.

Plantago virginica. **Virginia Plantain**. Plantaginaceae.

Larval host for Common Buckeye.

Poa annua. **Annual Bluegrass**. Poaceae. Poaceae.

Noctuidae: Glassy Cutworm (*Apamea devastator*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Poa pratensis. **Kentucky Bluegrass**. Poaceae. Poaceae.

Acceptable larval food for many grass-eating species in laboratory rearing tests. Works as a foodplant for Common Ringlet, Least Satyr, the extinct Stenele Satyr, Common Wood-Nymph, Sachem, Juba Skipper, Fiery Skipper, Sandhill Skipper, Common Roadside-Skipper, Sonora Skipper and the Tawny-edged Skipper. Barbehenn (1994) found Umber Skipper larvae readily accepted it (in a test involving many grasses) but without following up to confirm complete development (seems likely, given the wide range of grasses it may succeed on!) Warren saw Sachem oviposit on it in a lawn. Tawny-edged Skipper uses it regularly in eastern Colorado. Sonora Skipper reported in close association with it in Colorado. Common Roadside-Skipper utilizes it in South Dakota.

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Green Cutworm (*Anicla infecta*). Glassy Cutworm (*Apamea devastator*). Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa infracta*. Dingy Cutworm (*Feltia jaculifera*). Phragmites Wainscot (*Leucania phragmitidicola*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*). North American Grass Webworm (*Nomophila nearctica*). Bluegrass Webworm (*Parapediasia teterrellus*). Large Sod Webworm (*Pediasia trisecta*).

Polygonum aviculare. **Dooryard Knotweed**. Polygonaceae. Nectar plant for Purplish Copper.

Foodplant for Acmon Blue, Purplish Copper.

Arctiidae: Ornate Tiger Moth (*Grammia ornata*).

Polygonum hydropiper is now *Persicaria hydropiper*. **Common Smartweed**. **Waterpepper**.

Polygonum hydropiperoides is now *Persicaria hydropiperoides*. **False Waterpepper**.

Polygonum pennsylvanicum is now *Persicaria pennsylvanicum*. **Pinkweed**.

Polygonum persicaria is now *Persicaria maculosa*. **Spotted Lady's Thumb**.

Populus alba. **White Poplar**. Salicaceae.

Larval host for the Viceroy and the Mourning Cloak.

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: October Thorn (*Tetracis jubararia*).

Gracillariidae: *Caloptilia stigmatella*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: White Satin Moth (*Leucoma salicis*). European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Lyonetiidae: Cottonwood Leafminer (*Leucoptera albella*).

Noctuidae: White Underwing (*Catocala relictata*).

Sesiidae: American Hornet Moth (*Sesia tibiale*).

Tortricidae: *Acleris hastiana*, Large Aspen Tortrix (*Choristoneura conflictana*). Spiraea Leaf-tier (*Evora hemidesma*). Three-lined Leafroller (*Pandemis limitata*, Canada).

Portulaca oleracea. **Purslane**. Portulacaceae. Nectar: Little Yellow, Tropical Buckeye, Gulf Fritillary, Fiery Skipper (Fernandez-Hernandez).

Tortricidae: Omnivorous Leafroller (*Platynota stultana*, California).

Potentilla norvegica. **Rough Cinquefoil**. Rosaceae. Potentilleae. Nectar: Eastern Tailed Blue.

Potentilla recta. **Sulfur Cinquefoil**. Rosaceae. Potentilleae. Nectar: Melissa Blue, Cabbage White.

Tortricidae: Allen's Tortrix (*Aphelia alleniana*).

Prosopis juliflora. **Mesquite**. Fabaceae. Mimoseae.

Association noted with Ceraunus Blue and Reakirt's Blue (1984 Season Summary) in Kern County.

Prosopis velutina. **Mesquite**. Fabaceae. Mimoseae. Nectar: Monarch (fq), Veined Ctenucha (Anne Reeves).

Palmer's Metalmark, Marine Blue, Leda Ministreak, Gray Hairstreak found associated with this likely hostplant.

Noctuidae: *Heteranassa fraterna* (Noctuidae) [Jennifer Bundy].

Saturniidae: Hubbard's Small Silkmoth (*Sphingicampa hubbardi*).

Tortricidae: *Cydia membrosa*. *Ofatulena duodecemstriata*.

Prunus cerasifera. **Cherry Plum**. Rosaceae. Amygdaleae.

Noctuidae: Funerary Dagger (*Acronicta funeralis*).

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

Prunus dulcis. **Almond**. Rosaceae. Amygdaleae. Nectar: Western Tiger Swallowtail. February – March.

Carposinidae: Prune Limb Borer (*Bondia comonana*).

Cossidae: Carpenterworm (*Prionoxystus robiniae*).

Gelechiidae: Peach Twig Borer (*Anarsia lineatella*). Lesser Bud Moth (*Recurvaria nanella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Western Tussock Moth (*Orgyia vetusta*).

Pyralidae: Navel Orange Worm (*Amyelois transitella*). Almond Moth (*Cadra cautella*). American Plum Borer (*Euzophera semifuneralis*). Stored Nut Moth (*Paralipsa gularis*). Indian Meal Moth (*Plodia interpunctella*).

Sesiidae: Peachtree Borer (*Synanthedon exitiosa*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Codling Moth (*Cydia pomonella*).

Pseudognaphalium luteoalbum. **Weedy Cudweed** or **Jersey Cudweed**. Asteraceae. Gnaphalieae.

An important foodplant for the American Lady.

Puccinellia distans. **Weeping Alkaligrass**. Poaceae.

Oviposition noted by Sandhill Skipper on it in Colorado (Scott).

Ranunculus repens. **Creeping Buttercup**. Ranunculaceae. Robert Pyle observed a Margined White at nectar for about 15 minutes on this species 28 May 2010 in SW Washington. Notable since he had not seen any butterflies at nectar on *Ranunculus* before. Recorded as a nectar source for Taylor's Checkerspot – a segregate of Edith's Checkerspot -- in British Columbia. Jeff Phippen photographed a Northern Checkerspot at nectar on it. Flowers all year.

Raphanus sativus. **Radish**. Brassicaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail, Cabbage White (fq), Pine White, Western White, Large Marble (fq), Sara Orangetip, Sleepy Orange, Clouded Sulphur, Orange Sulphur, Monarch, Painted Lady (fq), American Lady, West Coast Lady, Painted Lady, Red Admiral, Common Buckeye, Callippe Fritillary, Silver-spotted Skipper, Funereal Duskywing, Common Checkered-Skipper, Mournful Duskywing, Fiery Skipper, Umber Skipper, Orange Skipperling. Also the Carolina Sphinx. Bert Johnson thinks Painted Ladies prefer wild radish to other weedy mustard nectar sources. Shapiro: "Excellent all-around nectar source." May-July.

Hostplant Cabbage White and Large Marble (much less preferred to black mustard at Point Richmond, Scott, 1975), Sara Orangetip (Shapiro finds it used infrequently, usually along roads), Margined White, Checkered White, also listed as a larval host for Painted Lady.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Ipsilon Dart (*Agrotis ipsilon*). Glassy Cutworm (*Apamea devastator*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). Red-backed Cutworm (*Euxoa ochrogaster*). Striped Cutworm (*Euxoa tessellata*). Nutmeg (*Anarta trifolii*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Cabbage Looper (*Trichoplusia ni*).

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Shapiro notes that most "wild radish" populations in California generally consist of a stabilized hybrid swarm of this and *Raphanus raphanistrum*.

<http://www.sciencedaily.com/releases/2006/07/060713233418.htm>

Raphanus raphanistrum. **Jointed Charlock**. Brassicaceae. Cabbage White. Shapiro: "Excellent all-around nectar source. " Nectar values as for Radish, above. April - July.

Larval host for Gray-veined White (Margined White) and Cabbage White (HOSTS).

Rapistrum rugosum. **Wild Turnip. Bastard Cabbage**. Brassicaceae. Nectar: Checkered White.

Rhamnus alaternus. **Italian Buckthorn**. Rhamnaceae.

Caterpillar forage for a few species of moths in the Old World; no known values for California Lepidoptera.

Ricinus communis. **Castor Bean**. Euphorbiaceae.

On the list of Painted Lady foodplants in Hong Kong.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Black Cutworm. Corn Earworm (*Helicoverpa zea*). Beet Armyworm (*Spodoptera exigua*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Sphingidae: Ello Sphinx (*Erinnyis ello*).

Robinia pseudoacacia. **Black Locust**. Fabaceae. Robinieae. Nectar source for Two-tailed Swallowtail (Dee Rich), Monarch, Silver-spotted Skipper, White-lined Sphinx, Ipsilon Dart, Armyworm. May – June.

Hostplant for Clouded Sulphur, Silver-spotted Skipper and Dreamy Duskywing (HOSTS). The 1990 Season Summary reports Northern Cloudywing ova on it: “Idyllwild, San Jacinto Mtns, Riverside Co, 17 June (JFE)” so it seems likely to be a hostplant for it.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Cossidae: Locust Borer (*Prionoxystus robiniae*).

Gelechiidae: Dusky-backed Filatima (*Filatima pseudacaciella*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Peppered Moth (*Biston betularia*). Common Angle (*Macaria aemulataria*). Horned Spanworm (*Nematocampa resistaria*).

Gracillariidae: Poplar Caloptilia (*Caloptilia stigmatella*). *Phyllonorycter fitchella*.

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Bordered Sallow (*Pyrrhia umbra*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Limabean Pod Borer (*Etiella zinckenella*).

Saturniidae: Hubbard’s Small Silkmoth (*Sphingicampa hubbardi*).

Sesiidae: Locust Clearwing (*Paranthrene robiniae*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Light Brown Apple Moth (*Epiphyas postvittana*).

Rosa canina. **Dog Rose**. Rosaceae. Roseae.

Drepanidae: Tufted Thyatirid Moth (*Pseudothyatira cymatophoroides*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Rosa eglanteria. **Sweet Briar**. Rosaceae. Roseae.

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Rubus discolor is now *Rubus armeniacus*. **Himalayan Blackberry**. Rosaceae. Rubeae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Clodius Parnassian, Margined White, Monarch, Painted Lady, Lorquin's Admiral, Red Admiral, Variable Checkerspot, Callippe Fritillary, California Ringlet, Western Pine Elfin (<https://www.inaturalist.org/observations/10466668>), Mormon Metalmark, Silver-spotted Skipper, Umber Skipper. March – June.

Butterflies and moths come to the over-ripe and rotting fruit.

Geometridae: Western White-ribboned Carpet (*Mesoleuca gratulata* [Tatum]).

Noctuidae: *Adelphagrotis stellaris*. Figwort Stem Borer (*Papaipema sauzalitae* [Haggard & Haggard]).
Xestia plebeia.

Sesiidae: Blackberry Clearwing (*Pennisetia marginatum*).

Rubus laciniatus. **Cut-leaved Blackberry**. Rosaceae. Rubeae. Nectar: Western Tiger Swallowtail, Painted Lady, Silver-spotted Skipper. May – July.

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Sesiidae: Blackberry Clearwing (*Pennisetia marginata*)

Rudbeckia hirta. **Black-eyed Susan**. Asteraceae. Heliantheae. Nectar: Cabbage White, Orange Sulphur, Clouded Sulphur, Monarch, Viceroy, American Lady, Common Buckeye, Great Spangled Fritillary, Variegated Fritillary, Gray Hairstreak, Melissa Blue, Silver-spotted Skipper, Sachem, Dun Skipper, Yellow-collared Scape Moth. June – August.

Geometridae: Common Pug (*Eupithecia miserulata*). Wavy-lined Emerald (*Synchlora aerata*).

Rumex acetosella. **Sheep Sorrel**. Polygonaceae.

Hostplant for Purplish Copper, Edith's Copper, American Copper and Lustrous Copper. In some areas of the world reportedly serves as a foodplant for the Mourning Cloak (not reported for North America).

Gelechiidae: *Chionodes ochreostrigella*.

Tortricidae: Omnivorous Looper (*Cnephasia longana*, California). Light Brown Apple Moth (*Epiphyas postvittana*).

Rumex conglomeratus. **Clustered Dock**. Polygonaceae.

Foodplant for Purplish Copper and Great Copper.

Rumex crispus. **Curly Dock**. Polygonaceae.

Hostplant for Great Copper, Purplish Copper, Ruddy Copper, American Copper.

Arctiidae: Garden Tiger Moth (*Arctia caja*) in Europe, possibly here, too.

Gelechiidae: *Chionodes ochreostrigella*.

Geometridae: Common Gray (*Anavitrinella pampinaria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Noctuidae: Golden Looper (*Argyrogramma verruca*). Tobacco Budworm (*Chloridea virescens*). Dingy Cutworm (*Feltia jaculifera*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Bicolored Sallow (*Sunira bicolorago*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*). Omnivorous Leafroller (*Platynota stultana*, California).

Rumex obtusifolius. **Bitter Dock**. Polygonaceae.

Foodplant for Great Copper.

Nocutidae: *Resapamea passer* bores into its stems and roots (Powell & Opler, p. 295).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Rumex pulcher. **Fiddle Dock**. Polygonaceae.

Foodplant for Great Copper.

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Salix alba. **White Willow**. Salicaceae. May – June.

Geometridae: Fall Cankerworm (*Alsophila pometaria*).

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Salix babylonica. **Weeping Willow**. Salicaceae.

Gracillariidae: Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Sphingidae: *Smerinthus ophthalmica* larvae reported on it in 1997 Season Summary.

Salpichroa organifolia. **Lily-of-the-valley Vine**. Solanaceae. Nectar: West Coast Lady, Red Admiral (“much visited” – Shapiro).

Salsola australis. **Russian Thistle**. Chenopodiaceae.

Coleophoridae: Russian Thistle Stem Miner (*Coleophora parthenica*) – introduced as a biological control agent.

Salsola tragus. **Russian Thistle, Tumbleweed**. Chenopodiaceae. Nectar: Western Pygmy Blue. Heath & Klinkel found many lycaenids at nectar on a large plant in Arizona on 21 November 2012: Leda Ministreak, Marine Blue, Western Pygmy Blue, Ceraunus Blue, and Reakirt’s Blue. Heath did not remember seeing butterflies at Russian Thistle flowers before, apart from the Western Pygmy Blue, for which it is a hostplant. July – October.

Hostplant for Western Pygmy Blue.

Arctiidae: Yellow Woolly Bear (*Lophocampa maculata*).

Coleophoridae: Russian Thistle Casebearer (*Coleophora klimeschiella*) – introduced as a biological control agent. Russian Thistle Stem Miner (*Coleophora parthenica*) – introduced as a biological control agent.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale Western Cutworm (*Agrotis orthogonia*). *Euxoa catenula*. *Euxoa costata*. *Euxoa laetificans*. Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa pallipennis*. Early Cutworm (*Euxoa tristicula*). Nutmeg (*Anarta trifolii*). Bertha Armyworm (*Mamestra configurata*). Beet Armyworm (*Spodoptera exigua*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Tortricidae: Omnivorous Leafroller (*Platynota stultana*, California).

NOXIOUS WEED.

Saponaria officinalis. **Bouncingbet. Common Soapwort**. Caryophyllaceae. Nectar: Two-tailed Swallowtail. Cabbage White, Checkered White. Green Comma, Milbert’s Tortoiseshell, Mourning Cloak, Red Admiral. Melissa Blue. In Europe considered a hawkmoth flower and here gets Five-spotted Hawkmoth, Great Ash Sphinx, Ello Sphinx, White-lined Sphinx (Grant, 1985). Also Carolina Sphinx. June – September.

Scabiosa spp. **Pincushions**. Dipsacaceae. Shapiro: “Excellent” nectar sources.

Scabiosa atropurpurea. **Sweet Scabious**. Dipsacaceae. Nectar: Pale Swallowtail, Old World Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Painted Lady, Green Comma, Fiery Skipper, Field Skipper aka Sachem (fq), Silver-spotted Skipper (fq), doubtless others. Reputedly a superior nectar plant. March – November.

One of the larval hosts for the Gray Hairstreak (HOSTS).

Schizachyrium scoparium. **Little Bluestem**. Poaceae. Andropogoneae.

Foodplant for Miriam's Skipper, also known as the Sierra Skipper (*Hesperia miriamae*).

Scorzonera hispanica. **Spanish Salsify**. Asteraceae. Cichorieae. May – July.

Noctuidae: Nutmeg (*Anarta trifolii*).

Secale cereale. **Rye**. Poaceae. Hordeae.

Gelechiidae: Angoumois Grain Moth (*Sitotroga cerealella*).

Noctuidae: Henry's Marsh Moth (*Acronicta insularis*). Pale Western Cutworm (*Agrotis orthogonia*). Rusty Shoulder Knot (*Aseptis binotata*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa comosa*. Dark-sided Cutworm (*Euxoa messoria*). Dingy Cutworm (*Feltia jaculifera*). Corn Earworm (*Helicoverpa zea*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Tineidae: European Grain Moth (*Nemapogon granella*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Senecio jacobaea. **Tansy Ragwort**. Asteraceae. Senecioneae. Nectar: Clodius Parnassian. Pine White (fq). West Coast Lady (fq), Painted Lady (fq), Oregon Silverspot (fq), Great Spangled Fritillary, Unsilvered Fritillary, other Fritillaries, Oreas Comma (Shapiro). American Copper, Purplish Copper (fq). Woodland Skipper (fq), Western Branded Skipper, European Skipper, Yellow-collared Scape Moth (*Cisseps fulvicollis*, Arctiidae) (fq), Red-shouldered Ctenucha (*Ctenucha rubroscapus*, Arctiidae) (fq), Large Yellow Underwing (*Noctua pronuba*, Noctuidae), The Mouse (*Amphipyra tragopoginis*, Noctuidae), Setaceous Hebrew Character (*Xestia c-nigrum*, Noctuidae). June – September.

Arctiidae: Garden Tiger Moth (*Arctia cija*). Salt Marsh Moth (*Estigmene acrea*). Ranchman's Tiger Moth (*Arctia virginalis*). *Macromoths of Northwest Forests and Woodlands* notes that Cinnabar Moth (*Tyria jacobaeae*), a colorful tiger moth, was deliberately introduced from Europe to control this noxious weed. It flies by day in May and June.

Geometridae: *Eupithecia bivittata*. Common Pug (*Eupithecia miserulata*).

Noctuidae: *Autophusia olivacea*.

Pterophoridae: Williams' Plume Moth (*Platyptilia williamsii*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leafroller (*Platynota stultana*).

Shapiro: "A beautiful but NOXIOUS weed."

Senecio vulgaris. **Common Groundsel**. Asteraceae. Senecioneae. Nectar: Orange Sulphur (David H. Bartholomew in February), Gray Hairstreak (David H. Bartholomew in February), Western Pine Elf, in

Sonoran Blue (online photograph near Auburn). Usually do not see anything at nectar on it – likely most used very early, when there is little else. February – July.

Arctiidae: Cinnabar Moth (*Tyria jacobaeae*).

Noctuidae: Setaceous Hebrew Character (*Xestia c-nigrum*).

Senna obtusifolia. **Java Bean**. Fabaceae. Cassieae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Setaria faberi. **Japanese Bristlegrass**. Poaceae. Paniceae.

Noctuidae: Hop Vine Borer (*Hydraecia immanis*).

Setaria pumila formerly *Setaria glauca*. **Yellow Foxtail**. Poaceae. Paniceae.

Successful as a lab host for Great Basin Wood-Nymph and for Juba Skipper, Sonora Skipper and Western Branded Skipper (James & Nunnallee).

Setaria verticillata. **Hooked Bristlegrass**. Poaceae. Paniceae.

Foodplant for the Eufala Skipper.

Setaria viridis. **Green Bristlegrass**. Poaceae. Paniceae.

James & Nunnallee, got oviposition by captive Common Roadside-Skipper on it and successfully reared the caterpillars.

Sherardia arvensis. **Field Madder**. Rubiaceae. Nectar: Slight usage by Common Checkered-Skipper.

Sida rhombifolia. **Cuban Jute**. Malvaceae. Nectar: Zebra Longwing (fq). Long-tongued moths.

Cook, L. M., Eleanor W. Thomason, and Allen M. Young. 1976. "Population Structure, Dynamics and Dispersal of the Tropical Butterfly *Heliconius charitonius*." *Journal of Animal Ecology* 45 (3) (1976) 851-863.

Shapiro: "Larval host of Common/White Checkered-Skipper."

Noctuidae: Corn Earworm (*Helicoverpa zea*).

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Silene latifolia. **White Champion**. Caryophyllaceae. Nectar: considered a Hawkmoth flower in Eurasia (Grant, 1985).

Silene gallica. **Windmill Pink**. Caryophyllaceae. Nectar: Alfalfa Semilooper.

Silene vulgaris. **Bladder Campion**. Caryophyllaceae. Nectar: visited by many insects, but considered a moth flower; in a Swedish study, they started to visit about 10:00 p.m. and peaked about 11:00 p.m. Mostly Noctuids, not in great numbers: Pettersson, M. W. "Pollination by a Guild of Fluctuating Moth Populations: Option for Unspecialization in *Silene Vulgaris*." *Journal of Ecology* 79, no. 3 (1991): 591-604. doi:10.2307/2260655. Summer – Fall.

Tortricidae: Allen's Tortrix (*Aphelia alleniana*).

Silybum marianum. **Milk Thistle**. Asteraceae. Cardueae. Nectar: Anise Swallowtail, Pale Swallowtail, Two-tailed Swallowtail, Pipevine Swallowtail, Cabbage White (favorite source), Large Marble, Orange Sulphur, California Dogface, Monarch, Lorquin's Admiral, Variable Checkerspot, Callippe Fritillary, Unsilvered Fritillary, Mylitta Crescent, Painted Lady, American Lady (Hints), Mission Blue [segregate of Boisduval's Blue], Hedgerow Hairstreak, Sachem, Lindsey's Skipper, Umber Skipper, White-lined Sphinx. Shapiro: "Good overall nectar source." February – June.

Shapiro: "Larval host for Mylitta Crescent and Painted Lady." HOSTS lists Milk Thistle as a caterpillar plant for the American Lady as well.

Sinapsis alba. **White Mustard**. Brassicaceae. March – September.

Hostplant for Sara Orangetip, Margined White, and Cabbage White.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale Western Cutworm (*Agrotis orthogonia*). *Copablepharon viridisparva*. Army Cutworm (*Euxoa auxiliaris*). Variegated Cutworm (*Peridroma saucia*). Cabbage Looper (*Trichoplusia ni*).

Sinapsis arvensis (formerly *Brassica kaber*). **Charlock**. Brassicaceae. Nectar: Sara Orangetip, Common Buckeye, Tailed Copper, Spring Azure, Fiery Skipper, Lindsey's Skipper. March – October.

Hostplant for: Sara Orangetip, Large Marble, Cabbage White, Checkered White.

Noctuidae: Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pyralidae: North American Grass Webworm (*Nomophila nearctica*).

Sisymbrium altissimum. **Tumble-mustard**. Brassicaceae. Nectar: Cabbage White, Checkered White, Western White, Pearly Marble, Large Marble, Becker's White, Orange Sulphur, Queen Alexandra's Sulphur, Painted Lady, Small Wood-Nymph, Common Ringlet, Juniper Hairstreak, Marine Blue, Reakirt's Blue, Common Checkered-Skipper, Carson Wandering Skipper, Juba Skipper. Shapiro: "Decent nectar source." May – July.

Shapiro: "Larval host for Checkered White, Western White, and, especially, Becker's White." A larval host for Spring White (*nigravenosa* segregate, Todd Stout) and Desert Marble (*lotta* segregate of Pearly Marble) (David Nunnallee, Todd Stout). Also listed for Large Marble, Pearly Marble, and Cabbage White (HOSTS). Todd Stout finds it a suitable lab host for Spring White in general, a generalist feeder.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). *Euxoa brevipennis*.

Sisymbrium irio. **London Rocket**. Brassicaceae. Nectar: Spring Azure (Ned Harris), Reakirt's Blue. January – April.

Larval host for Checkered White and Cabbage White. Spring White (*nigravenosa* segregate) (Todd Stout). Also Becker's White and Pearly Marble [Desert Marble, the *lotta* segregate] (Todd Stout).

Sisymbrium loesellii. **Rocket**. Brassicaceae. May – November.

Foodplant for Becker's White.

Sisymbrium officinale. **Hedge Mustard**. Brassicaceae. Nectar: Cabbage White (fq). April – September.

Hostplant for Sara Orangetip, Large Marble, Pearly Marble, Gray Marble (Boisduval's Marble), Margined White, Becker's White, Western White, Checkered White, Spring White, and Cabbage White (HOSTS). Shapiro: "A preferred larval host of the Sara Orangetip." Shapiro notes var. *leiocarpum* as an occasional foodplant for Boisduval's Marble.

Solanum aviculare. **New Zealand Nightshade**. Solanaceae.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Solanum carolinense. **Carolina Horse Nettle**. Solanaceae. Nectar: Corn Earworm (*Helicoverpa zea*, Noctuidae).

Sphingidae: Carolina Sphinx (*Manduca sexta*).

NOXIOUS WEED LIST B.

Solanum dulcamara. **Climbing Nightshade**. Solanaceae.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Solanum elaeagnifolium. **White Horse-nettle**. Solanaceae. May – September.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*).

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Goeden, Richard D. 1971. "Insect Ecology of Silverleaf Nightshade." *Weed Science* 19 (1): 45-51. <http://www.jstor.org/stable/4041815> .

Solanum nigrum. **Black Nightshade**. Solanaceae.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Noctuidae: Tobacco Budworm (*Chloridea virescens*).

Solanum rostratum. **Buffalo Berry**. Solanaceae. Nectar: Corn Earworm.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Solanum sisymbriifolium. **Sticky Nightshade**. Solanaceae.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Solidago altissima subsp. *altissima*. **Canada Goldenrod. Late Goldenrod.** Asteraceae. Astereae. Nectar: Pale Swallowtail, Black Swallowtail. Cabbage White, Orange Sulphur, Clouded Sulphur. Monarch, Painted Lady, Red Admiral, Weidemeyer's Admiral, Pearl Crescent, Callippe Fritillary, Coronis Fritillary, Northwestern Fritillary, Mormon Fritillary, Green Comma, Hoary Comma, Hackberry Emperor, Small Wood-Nymph (fq), Common Wood-Nymph (fq). Gray Hairstreak, Great Purple Hairstreak (Karen Chiasson), Hedgerow Hairstreak (fq), Behr's Hairstreak, Coral Hairstreak (fq), 'Siva' Juniper Hairstreak, Tailed Copper, Purplish Copper, Blue Copper, Great Copper. Afranius Duskywing, Common Sootywing (Mike Turner), Common Branded Skipper, Dun Skipper, Woodland Skipper (fq), Sandhill Skipper (Scott). Moth flower visitors such as Yellow-collared Scape Moth (*Cisseps fulvicollis*, Arctiidae), Bent-line Dart (*Feltia jaculifera*, Noctuidae), Corn Earworm (*Helicoverpa zea*, Noctuidae) (fq), Armyworm (*Mythimna unipuncta*, Noctuidae). October – November.

Geometridae: Wavy-line Emerald (*Synchlora aerata*).

Noctuidae: Hitched Arches (*Melanchra adjuncta*).

Sonchus asper. **Spiny-leaved Sow Thistle.** Asteraceae. Cichorieae. Nectar: Cabbage White (Moldenke fq), Orange Sulphur. Shapiro finds it seldom visited. Me, too. Flowers all year.

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Sonchus oleraceus. **Common Sow Thistle.** Asteraceae. Cichorieae. Nectar: Cabbage White (Moldenke fq), Sleepy Orange (BFS). "Seldom visited" – Shapiro. Flowers all year.

Arctiidae: Cinnabar Moth (*Tyria jacobaeae*).

Noctuidae: Nutmeg (*Anarta trifolii*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Sorghum spp. **Sorghum.** Poaceae. Andropogoneae.

Crambidae: Mexican Rice Borer (*Eoreuma loftini*).

Noctuidae: Corn Earworm (*Helicoverpa zea*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*).

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Sorghum bicolor. **Sorghum.** Poaceae. Andropogoneae.

Foodplant for Eufala Skipper. Umber Skipper commonly oviposited on it in a flight cage and its larvae grew rapidly on it (Barbehenn, 1994).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Corn Earworm (*Helicoverpa zea*). Hop Vine Borer (*Hydraecia immanis*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Sorghum halepense. **Johnsongrass**. Poaceae. Andropogoneae.

Foodplant for the Eufala Skipper, Julia Skipper, Neamathla Skipper. Violet-banded Skipper, Brown Longtail. Suitable lab host plant for Common Roadside-Skipper and Orange Skipperling and Woodland Skipper (*napa segregata*) (Todd Stout).

Arctiidae: Brown Ctenucha (*Ctenucha brunnea*).

Crambidae: Mexican Rice Borer (*Eoreuma loftini*).

Noctuidae: Rascal Dart (*Agrotis malefida*). Fall Armyworm (*Spodoptera frugiperda*).

Spartium junceum. **Spanish Broom**. Fabaceae. Genisteae. April – June.

Pyralidae: Genista Broom Moth (*Uresiphita reversalis*), a native moth that takes well to non-native legumes!

Spergularia rubra. **Red Sandspurry**. Caryophyllaceae. Nectar: Gray Hairstreak, Western Pygmy Blue (fq), Woodland Skipper (fq).

Stellaria media. **Common Chickweed**. Caryophyllaceae. Nectar: Cabbage White, American Painted Lady, Common Ringlet. Shapiro: "Seldom visited!" Many specific records are "notable" – somebody wrote them down because they were unusual. Too much of the usual not yet written down!

Reported as a Dainty Sulphur hostplant in Missouri: Masters, John H. "Butterflies of Lynch Hollow, Camden County, Missouri." *Journal of the Kansas Entomological Society* 42, no. 2 (1969): 133-41. <http://www.jstor.org/stable/25083775>.

Geometridae: Sharp-angled Carpet (*Euphyia intermediata*). Red Carpet (*Xanthorhoe decoloraria*) reported for "Stellaria" (Powell & Opler, p. 227).

Noctuidae: *Agrochola pulchella*. Pale-sided Cutworm (*Agrotis malefida*).

Stenotaphrum secundatum. **St. Augustine Grass**. Poaceae. Paniceae.

Larval host for Sachem, Fiery Skipper, Julia's Skipper, Eufala Skipper, Umber Skipper.

Noctuidae: Fall Armyworm (*Spodoptera frugiperda*).

Tamarix chinensis formerly *Tamarix ramosissima*. **Tamarisk, Saltcedar**. Tamaricaceae. Nectar: Checkered White, Orange Sulphur, Cloudless Sulphur, Dainty Sulphur, Monarch, Queen, Viceroy, Painted Lady, West Coast Lady, Common Buckeye, Bordered Patch, Common Wood-Nymph (fq), Gray Hairstreak, Leda Ministreak, Great Purple Hairstreak, Thicket Hairstreak (Bryan Reynolds), Blue Copper, Western Pygmy Blue, Marine Blue, Ceraunus Blue, Silver-spotted Skipper, Common Checkered-Skipper, MacNeill's Sootywing, Fiery Skipper, Uncas Skipper. April – August.

A very invasive plant with a highly deleterious impact on native riparian and wetland plant communities.

Tanacetum vulgare. **Tansy**. Asteraceae. Anthemideae. Nectar: Clouded Sulphur, Milbert's Tortoiseshell, Gray Hairstreak, Sagem, Tawny-edged Skipper, Woodland Skipper. June – August.

Taraxacum spp. **Dandelion**. Asteraceae. Cichorieae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Taraxacum officinale. **Dandelion**. Asteraceae. Cichorieae. Nectar: Pipevine Swallowtail, Desert Black Swallowtail, Western Tiger Swallowtail, Anise Swallowtail (fq), Rocky Mountain Parnassian, Cabbage White (fq), Checkered White, Margined White, Pine White, Western White, Large Marble, Pearly Marble, Sara Orangetip (fq), Stella Orangetip, Orange Sulphur (fq), Clouded Sulphur (fq), Western Sulphur, Dainty Sulphur, Monarch, Common Buckeye, West Coast Lady, Painted Lady (fq), American Lady, Red Northern Checkerspot, Field Crescent, Pearl Crescent, Gulf Fritillary, Callippe Fritillary, Coronis Fritillary, Mormon Fritillary, Northwestern Fritillary, Zerene Fritillary, Variegated Fritillary (fq), Edith's Checkerspot, Mourning Cloak, Milbert's Tortoiseshell, Hoary Comma (fq), Oreas Comma, Green Comma (fq), Satyr Comma. Moss's Elfin, Western Pine Elfin, Johnson's Hairstreak [Shields 'dandelion'], Thicket Hairstreak, Gray Hairstreak, Greenish Blue, Lupine Blue, Western Tailed Blue. Mexican Cloudywing, Alpheus Sootywing, Common Checkered-Skipper (fq), Small Checkered-Skipper, Afranius Duskywing, Meridian Duskywing, Pacuvius Duskywing, Propertius Duskywing, Two-banded Checkered-Skipper (fq), Common Roadside-Skipper, Arctic Skipper, Eufala Skipper, Harpalus Skipper, Fiery Skipper, Juba Skipper, Mardon Skipper (fq), Sandhill Skipper, Sonora Skipper, Tawny-edged Skipper (fq), Uncas Skipper, White-lined Sphinx, Western Snowberry Clearwing. Shapiro: "Excellent all-around nectar source." Flowers all year.

Arctiidae: Painted Tiger Moth (*Arachnis picta*). Garden Tiger Moth (*Arctia caja*). Ornate Tiger Moth (*Grammia ornata*). Wandering Tiger Moth (*Spilosoma vagans*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Pug (*Eupithecia miserulata*). Confused Eusarca (*Eusarca confusaria*, on California moth list; easily confused with several other species, thus the name, according to its Wikipedia article). Wavy-lined Emerald (*Synchlora aerata*). Dark-barred Twin-spot Carpet (*Xanthorhoe ferrugata*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Old Man Dart (*Agrotis vetusta*). Celery Moth (*Anagrapha falcifera*). *Anhimella contrahens*. Snowy-veined Apamea (*Apamea niveivenosa*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa infausta*. *Euxoa intrita*. Nutmeg (*Anarta trifolii*). Northern Scurfy Quaker (*Homorthodes furfurata*). Common Hyppa (*Hyppa xylinoides*). Garden Arches (*Lacanobia radix*). Speckled Cutworm (*Lacanobia subjuncta*). *Lacinipolia comis*. Laudable Arches (*Lacinipolia laudibilis*). Olive Arches (*Lacinipolia olivacea*). *Lacinipolia pensilis*. Brown Arches (*Lacinipolia stricta*). *Lacinipolia umbrosa*. *Lacinipolia vicina*. Stephen's Gem (*Megalographa biloba*). Hitched Arches (*Melanchra adjuncta*). Zebra Caterpillar (*Melanchra picta*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*). *Xestia plebeia*.

Sphingidae: Five-spotted Hawkmoth (*Manduca quinquemaculatus*).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*).

Thlaspi arvense. **Fan Weed. Pennycress.** Brassicaceae.

Hostplant for Margined White, Checkered White, and Cabbage White.

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Army Cutworm (*Euxoa auxiliaris*).

Thelesperma megapotamicum. **Hopi Tea.** Asteraceae. Coreopsidae.

Larval host for Dainty Sulphur.

Tradescantia fluminensis. **Wandering Jew.** Commelinaceae.

Noctuidae: *Mouralia tinctoides* – an attractive moth, the only known hosts seem to be in this plant family.

Tragopogon dubius. **Yellow Salsify.** Asteraceae. Cichorieae. Nectar: Anise Swallowtail, Rocky Mountain Parnassian, Painted Lady (Scott). Does not seem popular with butterflies. May – September.

Tragopogon pratensis. **Meadow Salsify.** Asteraceae. Cichorieae. May-August.

Tortricidae: Allen's Tortrix (*Aphelia alleniana*). *Sparganothis tunicana* (California).

Tragopogon porrifolius. **Salsify.** Asteraceae. Cichorieae. Cabbage White (favorite source). "Infrequently visited" – Shapiro. March – November.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Rascal Dart (*Agrotis malefida*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Tatum finds the pappus of Salsify seeds a favorite food of the polyphagus Mouse (*Amphipyra tragopoginis*), a fact related to its specific epithet.

Tribulus terrestris. **Puncture Vine.** Zygophyllaceae. Nectar: Checkered White (B.J. Stacey), Dainty Sulphur (Scott), White Checkered-Skipper (Anne Reeves photograph). "Not popular."

Trifolium arvense. **Rabbitfoot Clover.** Fabaceae. Trifolieae. Nectar: Corn Earworm (*Helicoverpa zea*, Noctuidae).

Larval host for Gray Hairstreak.

Trifolium aureum. **Golden Clover.** Fabaceae. Trifolieae.

Larval host for Clouded Sulphur.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Trifolium dubium. **Least Hop Clover.** Fabaceae. Trifolieae. Slight nectar value for Field Crescent.

Trifolium fragiferum. **Strawberry Clover**. Fabaceae. Trifolieae. Nectar: Pearl Crescent, Gray Hairstreak, Eastern Tailed Blue, Melissa Blue, Reakirt's Blue (fq), Common Sootywing, Common Checkered-Skipper, Fiery Skipper and Sandhill Skipper. May – August.

Foodplant for Reakirt's Blue.

Coleophoridae: Metallic Coleophora (*Coleophora mayrella*).

Trifolium hirtum. **Rose Clover**. Fabaceae. Trifolieae. Nectar: Cabbage White, Common Buckeye, Painted Lady, Variable Checkerspot (David Rawlinson), California Ringlet (Dennis Rich), Silvery Blue (Ken Wilson), Mournful Duskywing, Propertius Duskywing, *Drasteria divergens* (Noctuidae), *Mirificarma eburnella* (Gelechiidae). April – May.

Gelechiidae: *Mirificarma eburnella*.

Trifolium hybridum. **Alsike Clover**. Fabaceae. Trifolieae. Nectar: Moldenke finds Orange Sulphur associated with its flowers. 'Siva' Juniper Hairstreak, Eastern Tailed Blue, Greenish Blue (fq), Propertius Duskywing, European Skipper, and Tawny-edged Skipper. May-October.

Foodplant for Clouded Sulphur, Eastern Tailed Blue, Greenish Blue.

Noctuidae: Alfalfa Semilooper (*Autographa californica*).

Tortricidae: Black-marked Ancyli (*Ancyli metamelana*). *Grapholita conversana*. *Sparganothis tunicana*.

Trifolium incarnatum. **Crimson Clover**. Fabaceae. Trifolieae. Nectar: Orange Sulphur, American Lady, Painted Lady, Common Buckeye, Eastern Tailed Blue, Corn Earworm. May – August.

Foodplant for Gray Hairstreak.

Trifolium pratense. **Red Clover**. Fabaceae. Trifolieae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Black Swallowtail (fq), Old World Swallowtail, Large Marble, Checkered White, Cabbage White, Clouded Sulphur (fq), Cloudless Sulphur, Orange Sulphur (fq), Sleepy Orange, Monarch (fq), Red Admiral (fq), Painted Lady (fq), American Lady (fq), West Coast Lady, Mourning Cloak, Common Buckeye, Field Crescent, Great Spangled Fritillary, Mormon Fritillary, Nokomis Fritillary, Northwestern Fritillary, Zerene Fritillary, Gulf Fritillary, Variegated Fritillary, Milbert's Tortoiseshell, and Common Wood-Nymph. Acmon Blue, Boisduval's Blue, Eastern Tailed Blue, Greenish Blue, Reakirt's Blue, Western Tailed Blue, and other Blues. Gray Hairstreak. Propertius Duskywing, Silver-spotted Skipper (fq), Checkered-Skipper, Common Sootywing, Northern Cloudywing, Common Roadside-Skipper, Dun Skipper, Fiery Skipper, Field Skipper aka SACHEM, Tawny-edged Skipper, Woodland Skipper, European Skipper, and the Snowberry Clearwing, White-lined Sphinx, Corn Earworm (*Helicoverpa zea*, Noctuidae), Ipsilon Dart, Armyworm, other moths. Scott rates it as "moderately popular". April – October.

Hostplant for Alexandra Sulphur, Clouded Sulphur, Orange Sulphur, Eastern Tailed Blue, Northern Cloudywing. Todd Stout finds it and other *Trifolium* species suitable lab hosts for California Dogface.

Noctuidae: Alder Dagger (*Acronicta dactylina*). Alfalfa Semilooper (*Autographa californica*). Corn Earworm (*Helicoverpa zea*). Common Hyppa (*Hyppa xylinoides*).

Tortricidae: Black-marked Ancylys (*Ancylys metamelana*). Allen's Tortrix (*Aphelia alleniana*). Oblique-banded Leafroller (*Choristoneura rosaceana*).

Trifolium repens. **White Clover**. Fabaceae. Trifolieae. Nectar: Black Swallowtail, Pipevine Swallowtail, Clodius Parnassian, Clouded Sulphur, Orange Sulphur, Dainty Sulphur, Little Yellow, Checkered White, Cabbage White, Monarch, Callippe Fritillary, Mormon Fritillary, Variegated Fritillary, Field Crescent, Pearl Crescent, Edith's Checkerspot, Painted Lady (fq), American Lady, Common Buckeye, American Snout, Spring Azure, Marine Blue, Reakirt's Blue (fq), Eastern Tailed Blue (fq), Greenish Blue, Gray Hairstreak, Juniper Hairstreak, Propertius Duskywing, Silver-spotted Skipper, Common Checkered-Skipper (fq), Common Sootywing, Mexican Cloudywing, Northern Cloudywing, Common Roadside-Skipper, Dun Skipper, Fiery Skipper, Sachem, Tawny-edged Skipper (fq), White Lined Sphinx, Celery Moth, Corn Earworm. Shapiro: "Good all-around nectar source." February – December.

Hostplant for Alexandra Sulphur, Clouded Sulphur, Orange Sulphur, Gray Hairstreak, Greenish Blue, Eastern Tailed Blue (Scott) and Reakirt's Blue (Scott), Northern Cloudywing.

Coleophoridae: Metallic Coleophora (*Coleophora mayrella*).

Gelechiidae: *Mirificarma eburnella*.

Noctuidae: Venerable Dart (*Agrotis venerabilis*). Alfalfa Semilooper (*Autographa californica*).

Pyralidae: Western Lawn Moth (*Tehama bonifatella*).

Tortricidae: Black-marked Ancylys (*Ancylys metamelana*).

Trifolium subterraneum. **Subterranean Clover**. Fabaceae. Trifolieae.

Kevin Hints photographed Eastern Tailed Blue ovipositing on it, 1 May 2015, Briones Regional Park, Contra Costa County, California.

<http://www.inaturalist.org/observations/1444801>

Triticum aestivum. **Wheat**. Poaceae. Hordeae.

Reported as a foodplant for Variegated Fritillary in Brazil.

Arctiidae: Blake's Tiger Moth (*Grammia blakei*).

Gelechiidae: Angoumois Grain Moth (*Sitotroga cerealella*).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Vancouver Dart (*Agrotis vancouverensis*). Yellow-headed Cutworm (*Apamea amputatrix*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Apamea sordens*). Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa catenula*. Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa pallipennis*. *Euxoa quadridentata*. Early Cutworm (*Euxoa tristicula*). Dingy Cutworm (*Feltia jaculifera*). Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Bertha Armyworm (*Mamestra configurata*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Almond Moth (*Cadra cautella*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Indian Meal Moth (*Plodia interpunctella*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Typha angustifolia. **Narrow-leaved Cattail**. Typhaceae.

Noctuidae: Oblong Sedge Borer (*Archanara oblonga*).

Ulex europaeus. **Gorse**. Fabaceae. Genisteae.

Oecophoridae: Gorse Tip Moth (*Agonopterix nervosa*).

Pyralidae: *Apomyelois bistriatella*.

Urtica urens. **Dwarf Nettle**. Urticaceae.

Richard James, Naturalist at the El Dorado Nature Center, Long Beach, finds it a hostplant for the Red Admiral, West Coast Lady and Painted Lady. A Bernard Field Station photograph shows a Red Admiral ovipositing on Dwarf Nettle.

Vaccinium macrocarpon. **Cranberry**. Ericaceae.

Geometridae: Common Gray (*Anavitrinella pampinaria*). Common Pug (*Eupithecia miserulata*). Sulphur Wave (*Hesperumia sulphuraria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Celery Moth (*Anagrapha falcifera*). Common Hyppa (*Hyppa xylinoides*). Zebra Caterpillar (*Melanchnra picta*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Setaceous Hebrew Character (*Xestia c-nigrum*). American Swordgrass Moth (*Xylena nupta*).

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*).

Saturniidae: Nevada Buckmoth (*Hemileuca nevadensis*).

Sphingidae: Wild Cherry Sphinx (*Sphinx drupiferarum*).

Tortricidae: *Grapholita conversana*. Dusky Leafroller (*Orthotaenia undulana*).

Valerianella locusta. **European Corn Salad**. Valerianaceae. Nectar: Western Tailed Blue (Gerry Queener photograph).

Verbascum sp. **Mullein**. Scrophulariaceae.

Noctuidae: *Protorthodes curtica*.

Verbascum thapsus. **Woolly Mullein**. Scrophulariaceae.

Noctuidae: *Abagrotis variata*. *Agrochloa purpurea*.

Verbena bonariense. **Brazilian Verbena**. Verbenaceae. Nectar: Pipevine Swallowtail (fq), Anise Swallowtail, Cabbage White, Orange Sulphur, Clouded Sulphur, California Dogface, Monarch, Painted Lady, American Lady, West Coast Lady, Common Buckeye, Red Admiral, Milbert's Tortoiseshell, Mourning Cloak (fq), Gulf Fritillary, Variegated Fritillary, Viceroy, Gray Hairstreak, Silver-spotted Skipper, Mournful Duskywing, Woodland Skipper, Fiery Skipper, Sachem, Dun Skipper, Tawny-edged Skipper and doubtless others. . Heavily visited for nectar by a great variety of butterflies and seems to "out draw" many other nectar plant species in gardens. June – October.

Commonly naturalized in Central Valley wetlands (Shapiro).

Verbesina encelioides. **Golden Crownbeard**. Asteraceae. Heliantheae. Nectar: Western Tiger Swallowtail, Checkered White, Orange Sulphur, Clouded Sulphur, Southern Dogface, Painted Lady, Monarch (fq), Pearl Crescent, Bordered Patch (fq), American Snout, Gray Hairstreak, Leda Ministreak, Common Checkered-Skipper, Eufala Skipper, Sachem, Sandhill Skipper, Uncas Skipper. "A primary nectar source for all butterflies" in Texas in its fall blooming season. May – January.

Hostplant for Fatal Metalmark in southern Arizona (Brian Banker).

Veronica anagallis-aquatica. **Water Speedwell**. Plantaginaceae. Nectar: Juniper Hairstreak, Acmon Blue. May – September.

Hostplant for Variable Checkerspot and Common Buckeye.

Veronica catenata. **Chain Speedwell**. Plantaginaceae. Nectar: Cabbage White, Juniper Hairstreak, Dun Skipper (Scott). July – September.

Foodplant for Common Buckeye.

Veronica persica. **Bird's Eye Speedwell**. Plantaginaceae.

Haggard finds Common Buckeye common near it, very likely a hostplant for it.

Vicia spp. **Vetches**. Fabaceae. Fabeae. "All annual varieties are good nectar sources ... heavily visited by many species, including all Swallowtail species in an area" (Shapiro). Others: California Dogface, Common Wood-Nymph, Pacuvius Duskywing, Northern Cloudywing, Eufala Skipper.

"Being widely adopted as larval hosts by Eastern Tailed Blue and Silvery Blue, and used in winter as larval hosts of Orange Sulphur" -- Shapiro.

Vicia angustifolia. **Narrowleaf Vetch**. Fabaceae. Fabeae. Nectar: Pipevine Swallowtail, Sleepy Orange, Cloudless Sulphur, Orange Sulphur, Western Sulphur (James & Nunnallee), American Lady, Common Buckeye, Pearl Crescent, Eastern Tailed Blue, Sleepy Duskywing, Silver-spotted Skipper, and Eufala Skipper (from a Georgia study).

Vicia benghalensis. **Purple Vetch**. Fabaceae. Fabeae. Shapiro finds its flowers attract swallowtails in the Sacramento Valley. I found Sara Orangetip and Variable Checkerspot on it (notes from 3 May 1987).
March – June.

Hostplant for Orange Sulphur (AMS), Eastern Tailed Blue (AMS), and Silvery Blue (AMS).

Vicia hirsuta. **Hairy Tare** or **Tiny Vetch**. Fabaceae. Fabeae. Nectar: Common Ringlet, Boisduval's Blue.
Nectar plant for Fender's Blue (Oregon). April – July.

Vicia sativa. **Common Vetch**. Fabaceae. Fabeae. Nectar: Western Tiger Swallowtail, Cabbage White, Cloudless Sulphur, Sulphurs, Boisduval's Blue, Eastern Tailed Blue, Silvery Blue, Propertius Duskywing (Ann Potter), Northern Cloudywing, Common Checkered-Skipper, Mardon Skipper (fq). March – June.

Hostplant for Orange Sulphur, Western Sulphur, Silvery Blue, Eastern Tailed Blue. Pyle finds some populations of Western Tailed Blue in Washington adapted to Common Vetch as a hostplant (NorWestLeps #5332).

Arctiidae: Garden Tiger Moth (*Arctia caja*).

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Olive Green Cutworm (*Dargida procinctus*).
Corn Earworm (*Helicoverpa zea*).

Pyralidae: Limabean Pod Borer (*Etiella zinckenella*).

Vicia sativa ssp. *nigra*. **Narrow-leaved Vetch**. Fabaceae. Fabeae. Nectar: Southern Dogface, Silvery Blue. March - June.

Hostplant for Western Sulphur.

Vicia villosa. **Hairy Vetch**. Fabaceae. Fabeae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail, Sara Orangetip, Orange Sulphur (fq), Painted Lady, American Lady (fq), Boisduval's Blue, Eastern Tailed Blue, Silvery Blue, Northern Cloudywing, Mournful Duskywing, Umber Skipper. Noted as a good butterfly plant by the Xerces Society. Travis Owens notes its popularity with bumblebees.
March – July.

Hostplant Orange Sulphur and Silvery Blue (Harvey & Webb, 1980). Also Eastern Tailed Blue (HOSTS).
A Duskywing oviposited on it (Kevin Hints, Briones Regional Park, Contra Costa County, CA 14 April 2015: <http://www.inaturalist.org/observations/1395198>)

Noctuidae: Corn Earworm (*Helicoverpa zea*).

Vicia villosa subsp. *varia*. **Winter Vetch**. Fabaceae. Fabeae. Nectar: Silvery Blue (Jeffrey Caldwell), Propertius Duskywing.

Vinca major. **Greater Periwinkle**. Apocynaceae. Nectar: Western Tiger Swallowtail, Sleepy Orange, Cloudless Sulphur, Cabbage White, Margined White, Silver-spotted Skipper, Umber Skipper, White-lined Sphinx. March – June (January).

Very invasive in riparian situations.

Appendix 2: Non-native Plants Cultivated in California (includes some of the naturalized non-native species)

Note: We have more complete hostplant information about the insect species eating economically important plants!

Abelia chinensis. **Chinese Abelia**. Caprifoliaceae. “It is the ultimate butterfly magnet and no pollinator garden should be without one.” (Mark Weathington, JC Raulston Arboretum). It is the most fragrant *Abelia* species and most attractive to butterflies; attracts tiger swallowtails. Red Admiral. The University of Arkansas Cooperative Extension and Florida Museum of Natural History also confirms its very high butterfly-attracting value. *Abelia grandiflora* is a hybrid with Chinese *Abelia* one of the parents. It flowers in late summer, after most other shrubs have finished flowering (Forestfarm). Works for butterflies in San Francisco (Poetic Shutterbug). A Piedmont Gardener says it gets plenty of bees and sphinx moths, too, and reliably attracts more butterflies than butterfly bush (*Buddleia davidii*). Even Dirr says it is a butterfly magnet. Late summer.

‘Ruby Anniversary’ is ‘an improved selection’ said to work for butterflies.

Abelia grandiflora (*A. chinensis* x *A. uniflora*). **Glossy Abelia**. Caprifoliaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Giant Swallowtail, Cabbage White, Sleepy Orange, Cloudless Sulphur, Monarch, Red Admiral, Painted Lady, West Coast Lady, American Lady, Common Buckeye, Pearl Crescent, Gulf Fritillary, Gray Hairstreak, Northern Cloudywing, Common Checkered-Skipper, Silver-spotted Skipper, Long-tailed Skipper (iNaturalist “naturenut” photograph), Eufala Skipper, Fiery Skipper. Perhaps because it is a common plant in flower for so long, many species recorded at its flowers, but the general level of usage is generally low.

No larval host value.

Abelmoschus esculentus. **Okra**. Malvaceae. Nectar: Cloudless Sulphur (Fernandez-Hernandez).

Larval host for the Gray Hairstreak.

Gelechiidae: Pink Bollworm (*Pectinophora gossypiella*).

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Soybean Looper (*Chrysodeixis includens*). Corn Earworm (*Helicoverpa zea*).

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Abies balsamea. **Balsam Fir**. Pinaceae.

Hostplant for Pine White.

Acacia angutissima is now *Acaciella angutissima*. **Fernball Acacia**. **Prairie Acacia**. Fabaceae. Acacieae. Nectar: Palmer’s Metalmark, Fatal Metalmark, Ceraunus Blue, Marine Blue, Texan Crescent, Orange Skipperling. Recommended as a butterfly nectar plant (Desert Survivors Nursery).

Hostplant for Mexican Yellow, Ceraunus Blue, and Reakirt’s Blue.

Acacia berlandieri. **Guajillo**. Fabaceae. Acacieae. Rated “excellent” as a nectar source in south Texas (Mike Quinn).

Acacia salicina. **Willow Wattle**. Fabaceae. Acacieae. Nectar: Monarch (fq), Queen (fq), Painted Lady (fq). This thornless Australian species flowers most of the year, heaviest in fall and winter. In a post to the Western Monarchs discussion group on 12 November 2013, Gail Morris describes specimens of this tree as “bed and breakfast” – roosting tree and nectar source -- especially for the Monarch and Queen in a campground on the Parker, Arizona side of the Colorado River. She found the Monarch favors the uppermost portion of large trees, the Queen the middle portion and Painted Lady the lower parts of their canopies. American Snout (fq) (Roberta Gibson, Bug of the Week blog).

Acer palmatum. **Japanese Maple**. Sapindaceae.

Noctuidae: Speckled Green Cutworm (*Orthosia hibisci*).

Acer pseudoplatanus. **Sycamore Maple**. Sapindaceae.

Sesiidae: Sycamore Borer (*Synanthedon resplendens*) – a wasp mimic, secondary host, if used at all in California.

Acer rubrum. **Red Maple**. Sapindaceae. Nectar plant for American Lady, Mourning Cloak, Spring Azure.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*, Canada). Yellow Woollybear (*Spilosoma virginica*, Canada).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray (*Anavitrinella pampinaria*, Canada). Peppered Moth (*Biston betularia*, Canada). Pale Beauty (*Campaea perlata*, Canada). Small Engrailed (*Ectropis crepuscularia*, Canada). Maple Spanworm (*Ennomos magnaria*, Canada). Linden Looper (*Erannis tiliaria*). Mournful Thorn (*Lambdina fiscellaria*). Common Angle (*Macaria aemulataria*, Canada). Spring Cankerworm (*Paleacrita vernata*, Canada). Alien Probosc (*Probole alienaria*). Friendly Probosc (*Probole amicarica*, Canada).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*, Canada). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*, Canada). Three-spotted Sallow (*Eupsilia tristigmata*, Canada), Nameless Pinion (*Lithophane innominata*). Wanton Pinion (*Lithophane petulca*, Canada). Brown Angle Shades (*Phlogophora periculosa*). Colorful Zale (*Zale minerea*).

Notodontidae: Yellow-headed Caterpillar (*Datana ministra*, Canada). Rough Prominent (*Nadata gibbosa*, Canada). Morning-glory Prominent (*Schizura ipomoeae*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*).

Acer saccharinum. **Silver Maple**. Sapindaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Maple Spanworm (*Ennomos magnaria*, Canada). Linden Looper (*Erannis tiliaria*, Canada). Mournful Thorn (*Lambdina fiscellaria*). Common Angle (*Macaria aemulataria*, Canada). Spring Cankerworm (*Paleacrita vernata*).

Lymantriidae: White Satin Moth (*Leucoma salicis*, Canada). European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Dark-sided Cutworm (*Euxoa messoria*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Bicolored Sallow (*Sunira bicolorago*).

Notodontidae: Morning-glory Prominent (*Schizura ipomoeae*, Canada).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Acer saccharum. **Sugar Maple**. Sapindaceae.

Sap source for the Mourning Cloak and Red Admiral.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Pale Beauty (*Campaea perlata*, Canada), Maple Spanworm (*Ennomos magnaria*). Linden Looper (*Erannis tiliaria*). Mournful Thorn (*Lambdina fiscellaria*, Canada). Horned Spanworm (*Nematocampa resistaria*). Bruce Spanworm (*Operophtera bruceata*) (fq). Spring Cankerworm (*Paleacrita vernata*, Canada). Friendly Probole (*Probole amicaria*, Canada).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*, Canada). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Alder Dagger (*Acronicta dactylina*). Copper Underwing (*Amphipyra pyramidoides*). Nameless Pinion (*Lithophane innominata*).

Notodontidae: Rough Prominent (*Nadata gibbosa*, Canada). Red-humped Caterpillar (*Schizura concinna*, Canada). Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*, Canada).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Achillea ‘**Cerise Queen**’. Asteraceae. Anthemideae. Nectar for Variable Checkerspot.

Achillea filipendula ‘Coronation Gold’. **Fernleaf Yarrow**. Asteraceae. Anthemideae. Said to be a butterfly favorite at U.C. Riverside Botanic Gardens. Scott records a visit of Reakirt’s Blue to ‘Gold Plate’.

Achillea ‘**Pink Grapefruit**’. Asteraceae. Anthemideae. Butterfly favorite at U.C. Riverside Arboretum.

Achillea '**Summerwine**'. Asteraceae. Anthemideae. Butterfly favorite at U.C. Riverside Arboretum.

Aesculus hippocastanum. **Horse Chestnut**. Sapindaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae).

Geometridae: Horned Spanworm (*Nematocampa resistaria*).

Aesculus pavia. **Red Buckeye**. Sapindaceae. Nectar: Pipevine Swallowtail (fq), Cloudless Sulphur Hummingbirds.

Agapanthus orientalis including 'Albus', 'Peter Pan' and 'Tinker Bell'. Amaryllidaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Cabbage White (on smaller ones), Red Admiral (on smaller ones).

Agastache aurantiaca 'Apricot Surprise'. Lamiaceae. Nectar: Western Tiger Swallowtail, Monarch.

Agastache '**Blue Fortune**'. Lamiaceae. Nectar: Monarch, Hesperidae (skippers), doubtless others, relatively attractive: Sivinski, J. 2014. "The attraction of Lepidoptera to flowering plants also attractive to parasitoids (Diptera, Hymenoptera)". *The Florida Entomologist*, 97 (4):1317-1327. Retrieved from <http://www.jstor.org/stable/24364093> .

'**Summer Breeze**', '**Black Adder**'. Lamiaceae.

Agastache cana 'Purple Pygmy'. Said to be a favorite of the Pipevine Swallowtail, Common Buckeye, and Red Admiral (Hummingbird Gardens Nursery).

Agastache '**Desert Sunrise**'. Lamiaceae. Valuable plant.

Agastache foeniculum. **Anise Hyssop**. Lamiaceae. Nectar: Pipevine Swallowtail, Checkered White, Orange Sulphur, Monarch, Common Buckeye (fq), Red Admiral, Painted Lady, American Lady, Milbert's Tortoiseshell, Gray Hairstreak, American Copper, Silver-spotted Skipper, Northern Cloudywing, Long-tailed Skipper, Yellow-collared Scape Moth, Snowberry Clearwing. Bumblebees.

Agastache rugosa. **Korean Mint**. Lamiaceae. Painted Lady. 'Highly attractive' to butterflies (Annie's Annuals).

Ageratina altissima (aka Eupatorium rugosum). **White Snakeroot**. Asteraceae. Eupatorieae. Nectar: Sleepy Orange, Viceroy, American Lady, Common Buckeye, Gulf Fritillary, Variegated Fritillary, Pearl Crescent, Great Purple Hairstreak, Gray Hairstreak, Silver-spotted Skipper, Common Checkered-Skipper, Dun Skipper, Eufala Skipper, Fiery Skipper, Common Roadside-Skipper, Sachem, Yellow-collared Scape Moth, Celery Moth (*Anagrapha falcifera*, Noctuidae).

Ageratina ligustrina. Asteraceae. Visited by butterflies at U.C. Berkeley Botanic Garden (Sal Levinson).

Ageratum corymbosum now known as Eupatorium sordidum. **Butterfly Mist**. Asteraceae. Eupatorieae. Strongly attracts male Queens. Also gets other butterflies such as Monarch (fq) and Southern Dogface. A butterfly favorite at U.C. Riverside Arboretum and on the Desert Butterfly Gardening booklet "most recommended" list. White-lined Sphinx.

Mounding perennial 1' high by 3' wide.

Ageratum houstonianum. **Floss Flower**. Asteraceae. Eupatorieae. Nectar: Southern Dogface, Queen, Monarch, American Lady, Common Buckeye, Mexican Fritillary, Milbert's Tortoiseshell, Red Admiral, Silver-spotted Skipper, Long-tailed Skipper.

The extra-large 'Blue Horizon' is a 'butterfly magnet' according Annie's Annuals. 'High Tide Blue' reputed to be very attractive to butterflies. The small dwarf types often completely ignored.

Agropyron cristatum. **Crested Wheat Grass**. Poaceae. Hordeae.

Umber Skipper placed on it in the 4th instar were successfully reared (Barbehenn, 1994).

Agrostemma githago. **Corn Cockle**. Caryophyllaceae. In England, a good nectar plant for butterflies.

Agrostis stolonifera. **Creeping Bent**. Poaceae. Poae.

Umber Skipper (Barbehenn, 1994) – successfully reared in a laboratory experiment from the 4th instar.

Ajania pacifica. **Pacific Chrysanthemum**. Asteraceae. Anthemideae. Attracted several species in November in Albuquerque, New Mexico (SoWestLep #8746). Common Buckeye (fq).

Ajuga reptans. **Carpet Bugle**. Lamiaceae. Nectar: Cabbage White, Gray-veined White (Margined White), Painted Lady, Arctic Skipper [secondary, UK Butterflies].

Albizia julibrissin. **Silk Tree**. Fabaceae. Ingeae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Two-tailed Swallowtail, Western Tiger Swallowtail, Cloudless Sulphur, Monarch, American Lady, Common Buckeye, Pearl Crescent, Great Purple Hairstreak, Ceraunus Blue, Marine Blue, Funereal Duskywing, Mournful Duskywing, Silver-spotted Skipper.

Foodplant for Reakirt's Blue.

Geometridae: Citrus Looper (*Iridopsis fragilaria*).

Tineidae: Banana Moth (*Opogona sacchari*).

Alcea rosea. **Common Hollyhock**. Malvaceae. Nectar: White-lined Sphinx (*Hyles lineata*).

Hostplant for West Coast Lady, Painted Lady, American Lady, Gray Hairstreak, Arizona Powdered-Skipper, Northern White-Skipper, Common Checkered-Skipper, and White Checkered-Skipper (DesertLeps #2767). Todd Stout notes one may rear Small Checkered-Skipper on it and finds it a suitable lab host for Northern White-Skipper, which last, he notes, is a generalist feeder that eats any mallow he offers it.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow Woollybear (*Spilosoma virginica*).

Bucculatricidae: Hollyhock Leaf Skeletonizer (*Bucculatrix quadrigemina*) --a leafminer.

Gelechiidae: Pink Bollworm (*Pectinophora gossypiella*). Cotton Stem Moth (*Platyedra subcinerea*).

Noctuidae: *Agrochloa purpurea*. Celery Moth (*Anagrapha falcifera*). Glassy Cutworm (*Apamea devastator*), Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*), Fall Armyworm (*Spodoptera frugiperda*). Exposed Bird Dropping Moth (*Tarache aprica*). Cabbage Looper (*Trichoplusia ni*).

Tischeriidae: *Astrotischeria omissa*).

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Allamanda cathartica. **Golden Trumpet**. Apocynaceae. Nectar: Cloudless Sulphur, Brazilian Skipper (Fernandez-Hernandez).

Allium ampeloprasum var. ampeloprasum. **Elephant Garlic**. Alliaceae. Nectar: Gray Hairstreak (Travis Owens).

Allium cepa. **Garden Onion**. Alliaceae. Scott noted seventeen visits to its flowers by Silvery Blue.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow Woollybear.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale-sided Cutworm (*Agrotis malefida*). Pale Western Cutworm (*Agrotis orthogonia*). Alfalfa Semilooper (*Autographa californica*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). *Euxoa punctigera*. Striped Cutworm (*Euxoa tessellata*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Armyworm (*Mythimna unipuncta*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Beet Webworm (*Loxostege stricticalis*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Allium cernuum. **Nodding Onion**. Alliaceae. Nectar: Rocky Mountain Parnassian. Cabbage White.

Allium giganteum. **Giant Allium**. Alliaceae. Painted Lady. Shapiro finds this and the following two species attractive to the smaller butterflies, noting they also draw thread-waisted wasps.

Allium 'Globemaster'. Alliaceae. Variegated Fritillary, Painted Lady.

Allium karataviense. **Turkestan Allium**. Alliaceae. Nectar: especially smaller butterflies (Shapiro).

Allium ostrowskianum aka Allium oreophilum. **Ostrowskianum Allium**. Alliaceae. Nectar: especially smaller butterflies (Shapiro).

Allium schoenoprasum. **Chives**. Alliaceae. Nectar: Giant Swallowtail, Western Tiger Swallowtail, Pale Swallowtail,

Two-tailed Tiger Swallowtail, Old World Swallowtail, Orange Sulphur, Cloudless Sulphur, Cabbage White, Viceroy, Monarch, Milbert's Tortoiseshell, American Lady, Painted Lady, Red Admiral, Common Buckeye, Common Wood-Nymph, Silver-spotted Skipper, Arctic Skipper, Field Skipper aka Schem.

Noctuidae: Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Allium species. **Onions**. Alliaceae. Nectar records from Cuba (Fernandez-Hernandez): Sleepy Orange, Cloudless Sulphur, Large Orange Sulphur, Monarch, Queen, Gulf Fritillary, Mexican Fritillary, Zebra Longwing, Eufala Skipper, Hammock Skipper, and Long-tailed Skipper.

Allium sphaerocephalon. **Drumsticks**. **Round-headed Garlic**. Alliaceae. Nectar: Monarch.

Allium tanguticum '**Summer Beauty**'. Said to be sterile and work well as a butterfly nectar plant; Monarch and Red Admiral among species attracted.

Allium tuberosum. **Chinese Chives**. **Garlic Chives**. Alliaceae. Nectar: Checkered White, Orange Sulphur, Monarch, Viceroy, Variegated Fritillary, Painted Lady, Red Admiral, Common Buckeye, Pearl Crescent, Gray Hairstreak, Juniper Hairstreak (fq), American Copper, Eastern Tailed Blue, Marine Blue, Silver-spotted Skipper, Fiery Skipper, Sachem.

Alogyne huegelii. **Blue Hibiscus**. Malvaceae.

1991 Season Summary reports oviposition by West Coast Lady on variety 'Santa Cruz' in a nursery in Ventura.

Aloysia gratissima. **Bee Bush**. Verbenaceae. Nectar: American Snout, Queen, Monarch, Gray Hairstreak (fq), Veined Ctenucha (*Ctenucha venosa*, Arctiidae) (Matt Buckingham). Considered an "excellent" nectar source in the Lower Rio Grande Valley, Texas.

Althaea officinalis. **Common Marshmallow**. Malvaceae.

Hostplant for Painted Lady, Common Checkered-Skipper.

Bucculatricidae: Hollyhock Leaf Skeletonizer (*Bucculatrix quadrigemina*) -- a leafminer.

Tortricidae: A preferred host of the Cotton Tipworm (*Crociosema plebejana*).

Althaea rosea. **Hollyhock**. See *Alcea rosea*.

Alyssum montanum. **Mountain Madwort**. Brassicaceae. Nectar: Propertius Duskywing (Travis Owens), Juba Skipper, skipper (Travis Owens).

Alyssum saxatile is now *Aurinaria saxatilis*. **Basket-of-Gold**.

Amaranthus caudatus. **Love-lies-bleeding**. Amaranthaceae.

Hostplant for Common Sootywing.

Amaryllis belladonna. **Belladonna Lily**. **Naked Lady**. Amaryllidaceae. Nectar: Silver-spotted Skipper. A moth flower: H. G. Baker. 1961. "The Adaptation of Flowering Plants to Nocturnal and Crepuscular Pollinators." *The Quarterly Review of Biology* 36 (1): 64-73. <http://www.jstor.org/stable/2816899>. Wikipedia says it is visited by noctuid moths at night, carpenter bees by day.

Ammi majus. **Bishop's Lace**. Apiaceae. Apieae. Nectar: Anise Swallowtail, Red Admiral, Gray Hairstreak.

Ammobium alatum. **Winged Everlasting**. Asteraceae. Gnaphalieae.

Ampelopsis brevipedunculata. **Porcelain Berry**. Vitaceae.

Sphingidae: Achemon Sphinx (*Eumorpha achemon*).

Amsonia ciliata. **Bluestar**. Apocynaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Common Buckeye, Northern Cloudywing.

Amsonia hubrichtii. **Arkansas Amsonia**. Apocynaceae. Nectar: American Lady. Reputedly, an excellent butterfly nectar plant; attracts hummingbirds, also.

Amsonia tabernaemontana. **Blue Star**. Apocynaceae. Monarch, Red Admiral. Said to be a "butterfly magnet".

Anacyclus depressus 'Silberkissen'. **Mount Atlas Daisy**. Asteraceae. Anthemideae.

Anchusa azurea. **Alkanet**. Boraginaceae. Nectar: Cabbage White, Painted Lady. Scott rates as "moderately popular" as a butterfly nectar source in Denver, Colorado. Travis Owens finds hummingbirds like it.

Anethum graveolens. **Dill**. Apiaceae. Apieae.

Hostplant for Anise Swallowtail, Black Swallowtail. One of the best for getting the Anise Swallowtail (Barbara Deutsch, personal communication). Once I purchased some small pots in a nursery with caterpillars on them!

Geometridae: Citrus Looper or Fragile Gray (*Iridopsis fragilaria*, formerly *Anacamptodes fragilaria*).

Angelica stricta 'Purpurea'. Apiaceae. Selineae. "Much loved by butterflies" – Annie's Annuals.

Anisacanthus quadrifidus. **Desert Honeysuckle**. Acanthaceae. Nectar: Tailed Orange (Christopher Christie), Cloudless Sulphur, Large Orange Sulphur (Christopher Christie). Butterfly favorite at U.C. Riverside Arboretum.

Anisodonteia "Very Cranberry". **Cape Mallow**. Malvaceae.

Antigonon leptopus 'Baja Red'. **Coral Vine**. Polygonaceae. Nectar: Giant Swallowtail, Monarch, Gulf Fritillary, Gray Hairstreak, Western Pygmy Blue, Mallow Scrub-Hairstreak, and many bees. Butterfly favorite at U.C. Riverside Arboretum.

No known larval host values.

Native to Baja California. Zones 12, 23, 18-24.

Anthemis tinctoria. **Golden Marguerite**. Asteraceae. Anthemideae. Nectar: Variable Checkerspot, likely others.

Anthyllis vulneria. **Kidney Vetch**. Fabaceae. Loteae. In England, splendid nectar plant for moths and butterflies, especially Small Blue butterfly and Six-belted Clearwing, a day-flying sesiid moth.

Antirrhinum majus. **Snapdragon**. Plantaginaceae.

Hostplant for Common Buckeye; quite suitable as a lab host for it (Todd Stout).

Apium graveolens. **Celery**. Apiaceae. Apieae.

Hostplant for Anise Swallowtail, Old World Swallowtail, Black Swallowtail, and (?) Brazilian Skipper.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) University of Florida.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Celery Moth (*Anagrapha falcifera*). Army Cutworm (*Euxoa auxiliaris*). Striped Cutworm (*Euxoa tessellata*). Dingy Cutworm (*Feltia jaculifera*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Hitched Arches (*Melanchra adjuncta*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Alfalfa Webworm (*Loxostege cereralis*). False Greenhouse Leaf-tier (*Udea profundalis*). Celery Leaf-tier (*Udea rubigalis*).

Tortricidae: *Choristoneura obsoletana*, Oblique-banded Leafroller (*Choristoneura rosaceana*). Light Brown Apple Moth (*Epiphyas postvittana*). *Olethreutes bipartitana*. Omnivorous Leafroller (*Platynota stultana*).

Yponomeutidae: Diamondback Moth (*Plutella xylostella*) is also possible; reported from Brazil.

Aptenia cordifolia. Aizoaceae. Scott noted a flower visit by Common Checkered-Skipper.

Aquilegia caerulea. **Rocky Mountain Columbine**. Ranunculaceae. Nectar: White-lined Sphinx, a pollinator.

Aquilegia chrysantha. **Golden Columbine**. Ranunculaceae. Nectar: Achemon Sphinx (*Eumorpha achemon*) the primary pollinator to visit its flowers in the Chiricahua Mountains of southern Arizona; also Great Ash Sphinx (*Sphinx chersis*) and another sphinx moth (Miller, 1985). A “sphingophilous” flower (Grant, 1992)!

Arabis caucasica. **Wall Rockcress**. Brassicaceae. Nectar plant.

Arachis hypogaea. **Peanut**. Fabaceae. Aeschynomeneae.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Dart-sided Cutworm (*Euxoa messoria*). Subterranean Dart (*Feltia subterranea*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Pyralidae: Tropical Warehouse Moth (*Cadra cautella*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Beet Webworm (*Loxostege stricticalis*). Stored Nut Moth (*Paralipsa gularis*). Indian Meal Moth (*Plodia interpunctella*). Meal Moth (*Pyralis farinalis*).

Yponomeutidae: and the Diamondback Moth (*Plutella xylostella*).

Aralia spinosa. **Hercules' club**. Araliaceae. In its native east an excellent nectar plant – attracting Eastern Tiger Swallowtail (fq), Monarch, Viceroy, Pearl Crescent, Great Purple Hairstreak, Silver-spotted Skipper and others.

A larval host in its native range for the Spring Azure, but may not work for its Californian relatives.

Arbutus unedo. **Strawberry Tree**. Ericaceae. Nectar for Monarch, Red Admiral, and Umber Skipper.

Arctotis adpressa. **African Daisy**. Asteraceae. Arctotideae.

Aristolochia baetica. **Andalusian Duchman's Pipe**. Aristolochiaceae.

Larval host for Pipevine Swallowtail (Andy Liu).

Aristolochia elegans. **Calico Flower**. Aristolochiaceae.

Larval host for Polydamas Swallowtail.

Aristolochia manshuriensis. **Chinese Aristolochia, Guan Mu Tong**. Aristolochiaceae.

Said to be more attractive to the Pipevine Swallowtail than our native Californian pipevine species (Sal Levinson).

Armeria 'Bright Rose'. **Sea Pink**. Plumbaginaceae. Butterfly favorite at U.C. Riverside Arboretum as with vars. 'Armada White', 'Joystick Lilac' and 'Nifty Thrifty'.

Aronia arbutifolia. **Red Chokeberry**. Rosaceae. Maleae. Nectar: Sleepy Orange, American Snout, American Lady, Common Buckeye. Apparently rather modestly attractive.

Artemisia stellariana. **Beach Wormwood**. Asteraceae. Anthemideae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Asclepias cancellata. **Wild Cotton**. Apocynaceae.

Larval host for the Monarch.

Asclepias curassavica. **Tropical Milkweed**. Apocynaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Pale Swallowtail, Cabbage White, Cloudless Sulphur, Orange Sulphur, Southern Dogface, Monarch, Queen, Pearl Crescent, Bordered Patch, Gulf Fritillary, Mexican Fritillary, Variegated

Fritillary, Zebra Longwing, Painted Lady, Mormon Metalmark, Palmer's Metalmark, Gray Hairstreak, Silver-banded Hairstreak, Long-tailed Skipper, Funereal Duskywing, Sachem, Umber Skipper.

Foodplant for Monarch and Queen. One of the most effective species as a foodplant for the Monarch. There are concerns about its not going dormant in the winter, harboring disease; recommended to cut it back hard late in the summer season to eliminate older growth that may be contaminated, stimulate fresh new growth.

Asclepias incarnata. **Swamp Milkweed**. Apocynaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Two-tailed Swallowtail, Western Tiger Swallowtail, Cabbage White, Clouded Sulphur, Orange Sulphur, Monarch, Queen, Viceroy, Common Buckeye, Great Spangled Fritillary, Pearl Crescent, Red Admiral, Painted Lady (fq), American Snout, Gray Hairstreak, Coral Hairstreak [Michigan], Melissa Blue, Eastern Tailed Blue, Common Sootywing, Silver-spotted Skipper, Sachem, Sandhill Skipper, Tawny-edged Skipper, Dun Skipper, Yellow-collared Scape Moth.

Swamp Milkweed is a foodplant for the Monarch and the Queen.

Arctiidae: Dogbane Tiger Moth.

Asclepias sullivanti. **Prairie Milkweed**. Apocynaceae. Nectar: Black Swallowtail, Clouded Sulphur, Great Spangled Fritillary, Red Admiral, Pearl Crescent, Eastern Tailed Blue, Gray Hairstreak, Coral Hairstreak, Silver-spotted Skipper. Northern Cloudywing, Dun Skipper, Tawny-edged Skipper, Yellow-collared Scape Moth, Snowberry Clearwing.

Prairie Milkweed is a foodplant for the Monarch.

Asclepias syriaca. **Common Milkweed**. Apocynaceae. Nectar plant for the Pipevine Swallowtail, Giant Swallowtail. Orange Sulphur, Clouded Sulphur, Cabbage White, Checkered White. Monarch (fq – noted as quite preferred by Tony Gomez), Viceroy, Milbert's Tortoiseshell, Mourning Cloak, Great Spangled Fritillary [fq in Michigan], Variegated Fritillary, American Lady, Painted Lady, Red Admiral, Lorquin's Admiral. Pearl Crescent. American Snout. Gray Hairstreak, Coral Hairstreak, Juniper Hairstreak, American Copper, Eastern Tailed Blue. Silver-spotted Skipper, Northern Cloudywing (fq), Common Sootywing, Sachem, Dun Skipper (fq), European Skipper, Fiery Skipper, Tawny-edged Skipper. Yellow-collared Scape Moth. Ipsilon Dart (*Agrotis ipsilon*, Noctuidae), Forage Looper (*Caenurgina erechtea*, Noctuidae), Corn Earworm (*Helicoverpa zea*, Noctuidae), Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (fq), Armyworm (*Mythimna unipuncta*, Noctuidae) (fq), Variegated Cutworm (*Peridroma saucia*, Noctuidae) (fq). 'Virginia Silk' is a fine variety offered by Annie's Annuals. A study found maximum sugar content about 10:00 p.m.; among native pollinators, Noctuidae accounted for 39 – 52% of pollination (Willson and Bertin, 1979). One of the best for attracting a wide diversity of bees (Logan Rowe, Daniel Gibson, Douglas Landis, Jason Gibbs, Rufus Isaacs; A Comparison of Drought-Tolerant Prairie Plants to Support Managed and Wild Bees in Conservation Programs, *Environmental Entomology*, Volume 47, Issue 5, 3 October 2018, Pages 1128–1142.)

Foodplant for the Monarch.

Arctiidae: Dogbane Tiger Moth (*Cycnia tenera*).

Asclepias tuberosa. **Butterfly Milkweed**. Apocynaceae. Nectar: Pipevine Swallowtail (fq), Giant Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Black Swallowtail, Polydamas Swallowtail, Becker's White, Cabbage White, Checkered White, Sleepy Orange, Clouded Sulphur,

Cloudless Sulphur, Dainty Sulphur, Large Orange Sulphur, Orange Sulphur, Southern Dogface, Mexican Yellow, Monarch, Queen, Gulf Fritillary, Atlantis Fritillary [Michigan], Great Spangled Fritillary, Northwestern Fritillary, Variegated Fritillary (fq), Zebra Longwing, Bordered Patch, Common Buckeye (fq), Dark Buckeye, Painted Lady, American Lady, Red Admiral, Mourning Cloak, Common Wood-Nymph, Mylitta Crescent, Pearl Crescent (fq). 'Siva' Juniper Hairstreak, Leda Ministreak, Gray Hairstreak, Coral Hairstreak (fq), Spring Azure, American Copper, Eastern Tailed Blue, Melissa Blue (fq), Acmon Blue, Marine Blue, Ceraunus Blue, Reakirt's Blue. Silver-spotted Skipper, White Checkered-Skipper, Funereal Duskywing, Mournful Duskywing, Common Sootywing, Long-tailed Skipper, Sachem, Orange Skipperling, Dun Skipper, Fiery Skipper. Yellow-collared Scape Moth, Eight-spotted Forester, moths. A strongly preferred nectar source for Coral Hairstreak (C.W. Cook); a strong draw for many butterflies!

Hostplant for Queen and Monarch. However, other milkweed species prove superior as caterpillar hosts. Butterfly Milkweed most notable and useful as a nectar plant!

Asparagus officinalis. **Asparagus**. Asparagaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Gray (*Anavitrinella pampinaria*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale-sided Cutworm (*Agrotis malefida*). Subterranean Dart (*Feltia subterranea*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Speckled Cutworm (*Lacanobia subjuncta*). Hitched Arches (*Melanchra adjuncta*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*). Aster Cutworm (*Trichordestra lilacina*).

Asperula orientalis. **Blue Woodruff**. Rubiaceae. Said to attract butterflies.

Fragrant flowers, self-sows, sun or light shade, good companion plant for roses or other shrubs.

Aster amellus. **Italian Aster**. Asteraceae. Astereae. Nectar: Monarch, Red Admiral, Fiery Skipper.

'King George' is a useful selection.

Aster cordifolius. **Blue Wood Aster**. Asteraceae. Astereae.

Aster divaricatus. **White Wood Aster**. Asteraceae. Astereae.

Aster dumosus is now *Symphotrichum dumosum* var. *dumosum*. **Rice Button Aster. Long-stemmed Aster**. Asteraceae. Astereae. Nectar: Sleepy Orange, Cloudless Sulphur, Orange Sulphur, Monarch, American Lady, Common Buckeye, Gulf Fritillary, Variegated Fritillary, Pearl Crescent, Gray Hairstreak, Ceraunus Blue, Eastern Tailed Blue, Common Checkered-Skipper, Long-tailed Skipper (fq), Dun Skipper, Eufala Skipper (fq), Fiery Skipper (fq), Sachem.

Aster ericoides is now *Symphotrichum ericoides*. **Heath Aster**. Asteraceae. Astereae.

Aster x frikartii. Asteraceae. Astereae. Nectar: Clouded Sulphur, Cloudless Sulphur, Checkered White, Monarch, Viceroy, Painted Lady, American Lady, Common Buckeye, Pearl Crescent, Eastern Tailed Blue, Common Checkered-Skipper.

Fine perennial also good for butterflies.

Aster laevis is now *Symphotrichum laeve* var. *laeve*. **Smooth Blue Aster.** Asteraceae. Astereae. Nectar: Cabbage White, Checkered White, Pine White, Clouded Sulphur, Cloudless Sulphur, Orange Sulphur, Southern Dogface. Monarch, Queen, Weidemeyer's Admiral, Red Admiral, Painted Lady, American Lady, Common Buckeye, Viceroy, Pearl Crescent, Small Wood-Nymph (fq), Green Comma, Hoary Comma. Coral Hairstreak, Gray Hairstreak, Hedgerow Hairstreak, Tailed Copper, Eastern Tailed Blue, Melissa Blue, Reakirt's Blue. Silver-spotted Skipper, Common Checkered-Skipper, Sachem, Tawny-edged Skipper. Celery Moth (*Anagrapha falcifera*, Noctuidae).

Foodplant for the Pearl Crescent.

Aster lateriflorus is now *Symphotrichum lateriflorum* var. *lateriflorum*. **Calico Aster. Panicked Aster.** Asteraceae. Astereae. Nectar: Sleepy Orange (fq), Cloudless Sulphur (fq), Orange Sulphur, Cabbage White. American Snout. Monarch, Viceroy, Painted Lady, American Lady (fq), Common Buckeye (fq), Red Admiral, Gulf Fritillary (fq), Variegated Fritillary, Field Crescent, Pearl Crescent (fq), Texan Crescent (fq). Ceraunus Blue, Eastern Tailed Blue (fq). Common Checkered-Skipper (fq), Long-tailed Skipper (fq), Dun Skipper, Eufala Skipper, Fiery Skipper (fq), Woodland Skipper (fq). Yellow-collared Scape Moth. Celery Moth.

Foodplant for the Pearl Crescent.

Aster novae-angliae is now *Symphotrichum novae-angliae*. **New England Aster.** Asteraceae. Astereae. Nectar: Anise Swallowtail. Cabbage White, Checkered White, Southern Dogface, Clouded Sulphur, Cloudless Sulphur, Orange Sulphur, Sleepy Orange. Monarch, Viceroy, Red Admiral, Painted Lady, American Lady, Common Buckeye, Pearl Crescent, Nokomis Fritillary. Gray Hairstreak, Tailed Copper, Spring Azure, Eastern Tailed Blue. Common Checkered-Skipper, Sachem, Fiery Skipper, Woodland Skipper. White-lined Sphinx. Yellow-collared Scape Moth. Corn Earworm.

'**September Ruby**' said to be a particularly good variety for butterflies. '**Skyscraper**', too.

Aster novi-belgii is now *Symphotrichum novi-belgii*. **Michaelmas Daisy.** Asteraceae. Astereae. Nectar plant for Clouded Sulphur, Cloudless Sulphur, Checkered White, Monarch, Viceroy, Painted Lady, American Lady, Red Admiral, Common Buckeye, Pearl Crescent, American Copper, Eastern Tailed Blue, Common Checkered-Skipper.

Louise Hallberg of Hallberg Butterfly Gardens reported these species visiting the lavender variety 'October Glory' in her garden in October 1990: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Orange Sulphur, Cabbage White, unknown White, Monarch, Mourning Cloak, West Coast Lady, American Lady, Common Buckeye, Mylitta Crescent, Purplish Copper, Mournful Duskywing, Common Checkered-Skipper, and Fiery Skipper.

Aster oblongifolius is now *Symphotrichum oblongifolium*. **Aromatic Aster.** Asteraceae. Astereae. Nectar: Sulphur, Painted Lady, Common Buckeye, Monarch (fq).

Aster pilosus is now *Symphotrichum pilosum* var. *pilosum*. **Hairy White Oldfield Aster. Frost Aster.** Asteraceae. Astereae. Nectar: Cabbage White, Checkered White (fq), Southern Dogface, Clouded

Sulphur (fq), Cloudless Sulphur, Dainty Sulphur, Orange Sulphur, Sleepy Orange (fq). American Snout. Monarch, Gulf Fritillary, Variegated Fritillary, Common Buckeye (fq), Painted Lady, American Lady, Red Admiral, Pearl Crescent, Texan Crescent. Eastern-Tailed Blue, Gray Hairstreak. Common Checkered-Skipper, Silver-spotted Skipper, Long-tailed Skipper, Eufala Skipper, Field Skipper aka Sachem (fq), Tawny-edged Skipper, Fiery Skipper (fq). Yellow-collared Scape Moth. Corn Earworm.

Aster pringlei ‘Monte Cassino’. Asteraceae. Astereae.

Aster sibiricus. Asteraceae. Astereae.

Aster tartaricus ‘Jindal’. Asteraceae. Astereae. Monarch, American Lady.

Astilbe. Saxifragaceae. Black Swallowtail, Cabbage White, Monarch, Painted Lady, Red Admiral, Fritillary, Comma.

Astragalus cicer. **Chickpea Milkvech**. Fabaceae. Galegeae. May – August.

Todd Stout finds it a suitable substitute host plant for Queen Alexandra’s Sulphur (including *edwardsi*, the common Californian segregate) and Clouded Sulphur (including *eriphyle*, the common Californian segregate).

A cover crop introduced from Europe, naturalizes.

Atriplex rosea. **Redscale**. Chenopodiaceae.

Athanasia acerosa. **Coulter Bush**. Asteraceae. Anthemideae.

Aubrieta deltoidea. **Common Aubrieta**. Brassicaceae. Nectar: In England, Cabbage White, and for European Green-veined White, a species closely related to the Margined White, and their Large White (*Pieris brassicae*) and Orange-tip (*Anthocharis cardamines*). Milbert’s Tortoiseshell. *Aubrieta* commended as a moth nectar plant as well.

Aurinia saxatilis. **Basket-of-Gold**. Brassicaceae. Link highly recommends Basket-of-Gold as a butterfly nectar plant. Especially attractive for the Cabbage White. Scott noted four visits by Painted Lady.

It serves as a hostplant for the Cabbage White, at least in Finland.

Avena sativa. **Cultivated Oat**. Poaceae. Poaeae.

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale Western Cutworm (*Agrotis orthogonia*). Venerable Dart (*Agrotis venerabilis*). Yellow-headed Cutworm (*Apamea amputatrix*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Aseptis binotata*). Girdler aka Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). Red-backed Cutworm (*Euxoa ochrogaster*). Corn Earworm (*Helicoverpa zea*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Gelechiidae: Angoumois Grain Moth (*Sitotroga cerealella*).

Pyralidae: Beet Webworm (*Loxostege strictalis*). Indian Meal Moth (*Plodia interpunctella*).

Baptisia alba. **White False Indigo**. Fabaceae. Sophoreae. Nectar: Orange Sulphur, Clouded Sulphur, Eastern Tailed Blue – at least in its native range.

Hostplant: Orange Sulphur, Clouded Sulphur, Eastern Tailed Blue – at least in its native range.

Baptisia australis. **Blue False Indigo**. Fabaceae. Sophoreae. Nectar: Orange Sulphur, Clouded Sulphur, Eastern Tailed Blue, Northern Cloudywing – at least in its native range.

Hostplant for Orange Sulphur, Clouded Sulphur, Eastern Tailed Blue, Northern Cloudywing – at least in its native range.

Bauhinia galpinii. **Red Bauhinia**. Fabaceae. Cercideae. Nectar for Monarch.

Berberis wilcoxii. **Wilcox Barberry**. Berberidaceae. Nectar: Pipevine Swallowtail, Texan Crescent, Mylitta Crescent (fq), Mourning Cloak, Red Admiral, Juniper Hairstreak, Echo Azure, Reakirt's Blue, Funereal Duskywing.

Berlandiera lyrata. **Chocolate Flower**. Asteraceae. Heliantheae. Nectar: Checkered White (Randy Floyd), Orange Sulphur, Texan Crescent (Anne Reeves), Variegated Fritillary (Ronnie Pitman), Tiny Checkerspot (Naturewide Images web site, also Robert Behrstock), Acmon Blue (Robert Behrstock), Fiery Skipper.

Betula nigra. **River Birch**. Betulaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Maple Spanworm (*Ennomos magnaria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Betula papyrifera. **Paper Birch**. Betulaceae.

Hostplant for Western Tiger Swallowtail, Viceroy, Mourning Cloak, Green Comma, Oreas Comma (Canada), and Satyr Comma.

Arctiidae: Oregon Cynia (*Cynia oregonensis*). Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Banded Woollybear (*Pyrrharctia isabella*).

Choreutidae: Diana's Choreutis (*Choreutis diana*, Canada). Apple Leaf Skeletonizer (*Choreutis pariana*, Canada).

Drepanidae: Arched Hooktip (*Drepana arcuata*). Warty Birch Caterpillar (*Drepana bilineata*). Lettered Habrosyne (*Habrosyne scripta*). Tufted Thyatirid (*Pseudothyatira cymatophoroides*, Canada).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray (*Anavitrinella pampinaria*). Infant (*Archiearis infans*). Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Hollow Dot Wave (*Cyclophora pendulinaria*, Canada). Dark-bordered Granite (*Digrammia neptaria*, Canada). Small Engrailed (*Ectropis crepuscularia*, Canada). Maple Spanworm (*Ennomos magnaria*, Canada). Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Northwest Phoenix (*Eulithis xyliana*, Canada). Columbia Pug (*Eupithecia columbiata*). *Eupithecia lachrymosa*. *Eupithecia perfusca*. Tawny Pug (*Eupithecia ravocostaliata*). Sulphur Wave (*Hesperumia sulphuraria*, Canada). July Highflier (*Hydriomena furcata*, Canada). Emasculated Gray (*Iridopsis emasculatum*, Canada). Bent-line Gray (*Iridopsis larvaria*, Canada). Twilight Moth (*Lycia rachelae*). Birch Angle (*Macaria notata*). Common Angle (*Macaria aemulataria*, Canada). Day Emerald (*Mesothea incertata*, Canada). Bruce Spanworm (*Operophtera bruceata*, Canada). Spring Cankerworm (*Paleacrita vernata*). Straight-lined Plagodis (*Plagodis phlogosaria*). American Barred Umber (*Plagodis pulveraria*). George's Carpet (*Plemyria georgii*, Canada). Friendly Probosc (*Proboscia amicaria*, Canada). Spear-marked Black (*Rheumaptera hastata*). White-banded Black (*Rheumaptera subhastata*, Canada). Brown-tipped Thorn (*Selenia alciphearia*, Canada). Sharp-lined Yellow (*Sicya macularia*, Canada).

Gracillariidae: Alder Leafminer (*Caloptilia alnivorella*, Canada). Cherry Leafcane Caterpillar (*Caloptilia invariabilis*, Canada).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*, Canada).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*). White Satin (*Leucoma salicis*, Canada). European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*).

Lyonetiidae: Sweet Potato Leafminer (*Bedellia somnulentella*, Canada).

Noctuidae: Alder Dagger (*Acronicta dactylina*). Fragile Dagger (*Acronicta fragilis*). Gray Dagger (*Acronicta grisea*). Yellow-haired Dagger (*Acronicta impleta*). Impressed Dagger (*Acronicta impressa*). Interrupted Dagger (*Acronicta interrupta*). Cottonwood Dagger (*Acronicta lepusculina*). Radcliffe's Dagger (*Acronicta radcliffei*). Copper Underwing (*Amphipyra pyramidoides*). Dappled Dart (*Anaplectoides pressus*). Canadian Giant (*Andropolia contacta*, Canada). Large Looper (*Autographa ampla*). White Underwing (*Catocala relictata*). Dusky Hooded Owlet (*Cucullia intermedia*). Pale Enargia (*Enargia decolor*). Smoked Sallow (*Enargia infumata*). Two-spot Dart (*Eueretagrotis perattentus*). Three-spotted Sallow (*Eupsilia tristigmata*). Wandering Brocade (*Fishia illocata*, Canada). Garden Arches (*Lacanobia radix*). American Brindle (*Lithomoia germana*). Amanda's Pinion (*Lithophane amanda*, Canada). Bailey's Pinion (*Lithophane baileyi*, Canada). Large Gray Pinion (*Lithophane georgii*, Canada). Nameless Pinion (*Lithophane innominata*, Canada). Wanton Pinion (*Lithophane petulca*). *Mniotype tenera* (Canada). Speckled Green Cutworm (*Orthosia hibisci*). *Paradiarsia littoralis*. Stormy Arches (*Polia nimbose*). *Protolampra rufipectus* (Canada). The Brother (*Raphia frater*). The Herald (*Scoliopteryx libatrix*). The Redwing (*Sideridis rosea*). Inscribed Looper (*Syngrapha epigaea*). Smith's Dart (*Xestia smithii*). Gray Swordgrass Moth (*Xylena cineritia*, Canada). Dot-and-Dash Swordgrass Moth (*Xylena curvimacula*). Western Swordgrass Moth (*Xylena thoracia*, Canada). Colorful Zale (*Zale minerea*).

Notodontidae: Apical Prominent (*Clostera apicalis*). Yellow-necked Caterpillar (*Datana ministra*). Gray Kitten (*Furcula cinerea*). Zigzag Kitten (*Furcula scolopendrina*). Banded Pebble Moth (*Gluphisia severa*, Canada). Rough Prominent (*Nadata gibbosa*). Red-washed Prominent (*Oligocentria*

semirufescens). Red-humped Caterpillar (*Schizura concinna*). Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*).

Oecophoridae: *Agonopterix argillacea* (Canada). *Depressariodes ciniflonella* (Canada).

Pyralidae: Destructive Pruneworm Moth (*Acrobasis tricolorella*, Canada). Lesser Aspen Webworm Moth (*Meroptera pravella*, Canada). *Oreana unicolorella* (Canada).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Ceanothus Silkmoth (*Hyalophora euryalus*, Canada).

Sphingidae: Blinded Sphinx (*Paonias excaecata*). Great Ash Sphinx (*Sphinx chersis*).

Tortricidae: *Acleris braunana* (Canada). *Acleris caliginosana* (Canada). *Acleris hastiana* (Canada). Marbled Dog'stooth Tortrix (*Acleris maccana*, Canada). Black-lined Acleris (*Acleris nigrolinea*, Canada). Yellow Birch Leafroller Moth (*Ancylis discigerana*, Canada). Sallow Apotomis (*Apotomis capreana*, Canada). Fruit-tree Leafroller (*Archips argyrospila*, Canada). Ugly-nest Caterpillar (*Archips cerasivorana*, Canada). Large Aspen Tortrix (*Choristoneura conflictana*, Canada). *Choristoneura obsoletana* (Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*). Zapulata (*Choristoneura zapulata*, Canada). White-triangle Tortrix (*Clepsis persicana*, Canada). Poplar Branchlet Borer (*Epinotia nisella*, Canada). *Epinotia rectiplicana* (Canada). Birch Leafroller (*Epinotia solandriana*, Canada). Dusky Leafroller (*Orthotaenia undulana*, Canada). Three-lined Leafroller (*Pandemis limitata*). Poplar Leafroller (*Pseudosciaphila duplex*, Canada). Black-and-Gray Banded Leafroller (*Syndemis afflictana*, Canada).

Betula pendula. **European White Birch**. Betulaceae.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Arctiidae: Garden Tiger Moth (*Arctia caja*, Finland).

Geometridae: Peppered Moth (*Biston betularia*, Finland). Small Engrailed (*Ectropis crepuscularia*, in Europe). Spear-marked Black (*Rheumaptera hastata*, Finland).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*, Finland).

Noctuidae: Inscribed Looper (*Syngrapha epigaea*).

Bidens. Asteraceae. Coreopsidae. Nectar for Queen, Gulf Fritillary, Fiery Skipper.

Bidens aristosa. **Tickseed Sunflower**. Asteraceae. Coreopsidae. Nectar: Pipevine Swallowtail, Black Swallowtail, Clouded Sulphur, Dainty Sulphur, Cabbage White, Monarch (fq), Viceroy, Great Spangled Fritillary, Painted Lady (fq), American Snout, Silver-spotted Skipper, Tawny-edged Skipper, Corn Earworm.

Bidens cernua. **Nodding Bur Marigold**. Asteraceae. Coreopsidae. Nectar: Clouded Sulphur (fq), Dainty Sulphur, Cabbage White, Monarch (fq), Viceroy, Red Admiral, American Lady, Pearl Crescent, Dun Skipper, Fiery Skipper, Sachem, Yellow-collared Scape Moth, Celery Moth, Bent-line Dart, and Corn Earworm.

Hostplant for Dainty Sulphur (Todd Stout).

Bidens ferulifolia '**Golden Goddess**'. Asteraceae. Coreopsideae. Good nectar plant.

Larval host for the Dainty Sulphur.

Boltonia asterioides. **False Aster**. Asteraceae. Astereae. Nectar: Clouded Sulphur (fq), Cabbage White, Checkered White, Monarch, Common Buckeye, Painted Lady, Virginia Lady, Pearl Crescent, American Snout, Eastern Tailed Blue, American Copper, Gray Hairstreak, Fiery Skipper, Tawny-edged Skipper, Bella Moth, Yellow-collared Scape Moth, and Corn Earworm.

Borago officinalis. **Borage**. Boraginaceae. Nectar: Pine White, Monarch.

Hostplant for Painted Lady.

Bougainvillea glabra. **Lesser Bougainvillea**. Nyctaginaceae. Nectar: California Dogface (NABA, Santa Barbara Foothills).

Bougainvillea spectabilis. **Bougainvillea**. Nyctaginaceae. Nectar: Giant Swallowtail, Two-tailed Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Cloudless Sulphur, Orange-barred Sulphur, Monarch, Painted Lady, Gulf Fritillary, Long-tailed Skipper, Violet-clouded Skipper, White-lined Sphinx.

Bouvardia ternifolia. **Firecracker Bush**. Rubiaceae. Nectar: Two-tailed Swallowtail, Zebra Longwing.

Brachyglottis '**Silver Dormouse**'. Asteraceae. Senecioneae. Some butterfly value according to U.C. Riverside Botanic Gardens.

Brassica rapa subsp. *rapa*. **Turnip**. Brassicaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) University of Florida.

Brassica oleracea. **Cabbage**. Brassicaceae.

Foodplant for the Gray-veined White (Margined White), Cabbage White (fq), Checkered White. Todd Stout finds it a suitable lab host for Checkered White.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow Woollybear (*Spilosoma virginica*).

Cosmopterigidae: Florida Pink Scavenger (*Anatrachyntis badia*).

Gelechiidae: Potato Moth (*Phthorimaea operculella*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale-sided Cutworm (*Agrotis malefida*). Old Man Dart (*Agrotis vetusta*). Celery Moth (*Anagrapha falcifera*). Yellow-headed Cutworm (*Apamea amputatrix*). Glassy Cutworm (*Apamea devastator*). Golden Looper (*Argyrogramma verruca*). Alfalfa Semilooper (*Autographa californica*). Soybean Looper (*Chrysodeixis includens*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa infausta*. *Euxoa intirta*. Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Dingy Cutworm (*Feltia jaculifera*). Subterranean Dart (*Feltia subterranea*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Speckled Cutworm (*Lacanobia subjuncta*). Bertha Armyworm

(*Mamestra configurata*). Stephen's Gem (*Megalographa biloba*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Large Yellow Underwing (*Noctua pronuba*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Bicolored Sallow (*Sunira bicolorago*, Noctuidae – rare in California, perhaps a waif). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Cabbage Webworm (*Hellula rogatalis*). Beet Webworm (*Loxostege stricticalis*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Yponomeutidae: Diamondback Moth (*Plutella xylostella*).

Buddleja alternifolia. **Fountain Butterfly Bush**. Scrophulariaceae. Butterfly favorite at U.C. Riverside Arboretum. Flowers in spring.

Considered one of the best in the genus by some.

Buddleja asiatica. **White Butterfly Bush**. Scrophulariaceae. Nectar: Western Tiger Swallowtail. Butterfly favorite at U.C. Riverside Arboretum. An evergreen species that flowers in winter. January – April. 9' x 9' or larger.

Only one sex per plant. Very fragrant, compares to Freesia.

Buddleja davidii. **Butterfly Bush**. Scrophulariaceae. Nectar: Pipevine Swallowtail, Polydamas Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail, Giant Swallowtail, Old World Swallowtail, Two-tailed Swallowtail, Clodius Parnassian. Cabbage White (fq), Pine White, Western White, Margined White, Cloudless Sulphur, Clouded Sulphur, Orange Sulphur, California Dogface, Southern Dogface. American Snout, Monarch, Queen, Common Wood-Nymph, Mourning Cloak, Satyr Comma, Zephyr Anglewing, Milbert's Tortoiseshell, Painted Lady (fq), West Coast Lady (fq), American Lady, Red Admiral, Common Buckeye, Lorquin's Admiral, Weidemeyer's Admiral, Bordered Patch, Gulf Fritillary, Variegated Fritillary, Callippe Fritillary, Coronis Fritillary, Great Spangled Fritillary, Hydaspes Fritillary, Variable Checkerspot (fq), Viceroy, Zebra Longwing. Gray Hairstreak, Coral Hairstreak, Great Purple Hairstreak, American Copper, Echo Azure. Northern Cloudywing, Mournful Duskywing, Funereal Duskywing, Common Sootywing, Long-tailed Skipper, Silver-spotted Skipper, Common Checkered-Skipper, Common Roadside Skipper, Sachus, Woodland Skipper (fq), Fiery Skipper, Juba Skipper, Tawny-edged Skipper, European Skipper, Orange Skipperling, Arizona Skipper, Hammock Skipper, Dun Skipper, Umber Skipper. Western Snowberry Clearwing, White-lined Sphinx, Yellow-collared Scape Moth, Corn Earworm, Large Yellow Underwing (*Noctua pronuba*), The Mouse (*Amphipyra tragopoginis*, Noctuidae), Setaceous Hebrew Character (*Xestia c-nigrum*, Noctuidae).

Reported as a larval host for Variable Checkerspot (HOSTS, others, California), Common Buckeye (Shady Oak Butterfly Farm) and Echo Azure (Robert Pyle, in his Washington butterfly garden).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

'Ellen's Blue' is only 4' x 4', said to be choice for smaller gardens. 'Pink Delight' proves especially good for attracting butterflies. 'Opera' is one of the better selections for Louise Hallberg in Sebastopol. 'Attraction' and the dwarf 'Buzz Pink Purple' works at U.C. Riverside. 'Purple Emperor' is a good

compact variety. ‘Peakeep’ aka ‘English Peacock’, a compact Monrovia offering, proved excellent in a trial by Paul Cherubini. ‘Miss Ruby’ and ‘Orchid Beauty’ are two of the best. ‘Miss Molly’ said to work well. ‘Asian Moon’ is a sterile variety said to work well for butterflies and appropriate where Butterfly Bush is ecologically invasive. ‘Harlequin’ is one of the less attractive varieties. Scott found white varieties much less attractive to Colorado butterflies. ‘White Profusion’ works for moths.

Buddleja globosa. **Orange Butterfly Bush**. Scrophulariaceae. California Sister, Monarch. May work better for bumblebees than butterflies.

Buddleja lindleyana. Scrophulariaceae. Nectar: Gulf Fritillary. A gardener with a collection of the genus found this one ‘ignored’ in the presence of the others. Apparently less attractive than other *Buddleja* species.

To 6’, spreads by runners.

Buddleja marrubifolia. **Woolly Butterfly Bush**. Scrophulariaceae. Nectar: Pipevine Swallowtail (fq), Giant Swallowtail, Monarch (fq), Gulf Fritillary, Tiny Checkerspot, Great Purple Hairstreak, Silver-banded Hairstreak, Leda Ministreak, Mallow Scrub-Hairstreak, Silver-banded Hairstreak (fq), Reakirt’s Blue, Marine Blue, Ceraunus Blue, Common Sootywing, Hammock Skipper. Hummingbirds. Seems less attractive than *Buddleja davidii*, though especially attractive in the fall in some desert gardens – “everything comes to it”.

Buddleja x pikei ‘**Hever**’. Scrophulariaceae. Butterfly favorite at U.C. Riverside Arboretum.

Buddleja salviifolia. **Winter Buddleja. Sagewood**. Scrophulariaceae. Evergreen and in flower in February in San Francisco; good for attracting early butterflies. U. C. Riverside Botanic Gardens: “butterfly favorite!” Mid-winter-flowering with strong fragrance likened to lilacs, some consider it the strongest scent of the genus.

Dave’s Garden says it grows 4 – 8’ tall and should be spaced 4 – 6’ apart. Sold by Annie’s Annuals, who say it grows 5’ x 4’.

Buddleja x weyeriana ‘**Honeycomb**’ (*B. davidii* X *B. globosa*). Scrophulariaceae. Nectar: Western Tiger Swallowtail, Monarch, Common Buckeye, Red Admiral. Butterfly favorite at U.C. Riverside Arboretum, as are ‘**Bicolor**’ and ‘**Sungold**’; flower summer/fall.

Caesalpinia gilliesii. **Yellow Bird of Paradise**. Fabaceae. Caesalpinieae. Nectar: Pink-spotted Hawkmoth (*Agrius cingulata*), White-lined Sphinx (*Hyles lineata*), Rustic Sphinx (*Manduca rustica*), and Carolina Sphinx (*Manduca sexta*). In its native Argentina, especially hawkmoths and noctuid moths visit the flowers. (More, et.al. 2006).

Hostplant for Orange-barred Sulphur (Dallas Butterflies web site).

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*).

Caesalpinia mexicana. **Mexican Bird of Paradise**. Fabaceae. Caesalpinieae. Nectar: Variegated Fritillary (Carl Cohen), Eufala Skipper (Anne Reeves photograph). She reports it very attractive to carpenter bees.

Caesalpinia pulcherrima. **Red Bird of Paradise. Pride of Barbados**. Fabaceae. Caesalpinieae. Nectar: Pipevine Swallowtail (fq), Pale Swallowtail, Polydamas Swallowtail, Giant Swallowtail (fq), Western

Tiger Swallowtail, Two-tailed Swallowtail, Indra Swallowtail, Old World Swallowtail, Cloudless Sulphur, Dainty Sulphur, Orange Sulphur, Large Orange Sulphur, [White-angled Sulphur], Sleepy Orange, Monarch (fq), Queen, (fq), Gulf Fritillary, Zebra Longwing (fq), Painted Lady, Bordered Patch, American Snout (fq) (Belinda Brodie), Gray Hairstreak, “tiny blues” (Belinda Brodie), Funereal Duskywing and White-lined Sphinx. When a Montezuma’s Cattleheart (*Parides montezuma*, Papilionidae) strayed to California, it sought nectar on Pride of Barbados. Flowers attract swallowtails, sulphurs, nymphalids and skippers. Hummingbirds.

Butterfly pollinated. Cruden, R. W., and Sharon M. Hermann-Parker. 1979 "Butterfly Pollination of *Caesalpinia Pulcherrima*, with Observations on a Psychophilous Syndrome." *Journal of Ecology* 67 (1): 155-68. doi:10.2307/2259342.

Hostplant for Orange-barred Sulphur (Cayman Butterflies web site).

Calamintha grandiflora. **Showy Calamint**. Lamiaceae. Recommended as a butterfly nectar plant by the San Diego Natural History Museum.

Calamintha nepetoides aka *C. nepeta*. **Lesser Calamint**. Lamiaceae. Nectar: Clouded Sulphur, Cabbage White, Checkered White, Common Buckeye. Recommended as a butterfly nectar plant by the San Diego Natural History Museum. In the experience of some more attractive to insects than Showy Calamint. Attracts geometrid moths (Sivinski, J. 2014. “The attraction of Lepidoptera to flowering plants also attractive to parasitoids (Diptera, Hymenoptera).” *The Florida Entomologist*, 97 (4): 1317-1327. Retrieved from <http://www.jstor.org/stable/24364093> .)

Calendula officinalis. **Pot Marigold**. Asteraceae. Calenduleae. Nectar: Cabbage White, Painted Lady, Common Sootywing. Shapiro considers Pot Marigold generally not attractive to butterflies, my experience also.

Calliandra californica. **Baja Fairy Duster**. Fabaceae. Ingeae. Nectar: Cloudless Sulphur, Southern Dogface, Monarch (fq), Ceraunus Blue, Marine Blue. Anna’s Hummingbird.

Baja Fairy Duster is a favorite hostplant for Marine Blue.

Calliandra emarginata. **Dwarf Powder Puff**. Fabaceae. Ingeae.

Proved a hostplant for Mimosa Yellow, Marine Blue and Reakirt’s Blue in Berry Nall’s Texas garden.

Calliandra tweedii. **Trinidad Flame Bush**. Fabaceae. Ingeae.

No known larval host values.

Callistemon citrinus. **Lemon Bottlebush**. Myrtaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Cloudless Sulphur, Gulf Fritillary, Monarch, White-lined Sphinx. Mostly hummingbirds.

No larval host values.

Callistephus chinensis. **China Aster**. Asteraceae. Astereae. Nectar: Cabbage White, Orange Sulphur, Silver-spotted Skipper, Sachem (fq), Fiery Skipper.

Calonyction aculeatum see Ipomoea alba. **Moonflower**.

Calluna vulgaris. **Scotch Heather**. Ericaceae. Cabbage White, Painted Lady, Red Admiral, American Copper.

Calylophus hartwegii. **Sundrops**. Onagraceae. Nectar: Sphinx moths. White-lined Sphinx.

Camellia japonica. **Japanese Camellia**. Theaceae.

No larval host values.

Camellia sasanqua. **Sasanqua**. Theaceae. Slight nectar value: American Lady, Long-tailed Skipper.

Campanula glomerata ‘Superba’. Campanulaceae.

Campsis radicans. **Common Trumpet Creeper**. Bignoniaceae. Nectar: Cloudless Sulphur (a favorite nectar plant for it in the Washington, D.C. area) and Carolina Sphinx. Important hummingbird plant.

Canna indica. **Canna**. Cannaceae. Nectar for Cloudless Sulphur, Monarch, Brazilian Skipper.

Larval host for the Brazilian Skipper.

Capsicum annuum. **Cayenne Pepper**. Solanaceae.

Gelechiidae: Tomato Pinworm (*Keiferia lycopersicella*).

Noctuidae: Black Cutworm, Pale-sided Cutworm, Subterranean Dart, *Anhimella contrahens*, Corn Earworm, Variegated Cutworm, Armyworm, Beet Armyworm, Fall Armyworm.

Pyralidae: Eggplant Leafroller (*Lineodes integra*).

Saturniidae: Polyphemus Moth.

Sphingidae: Five-spotted Hawkmoth, Carolina Sphinx.

Tortricidae: Chrysanthemum Flower Borer (*Loria scarificata*). Omnivorous Leafroller (*Platynota stultana*).

Carica papaya. **Papaya**. Caricaceae. Minno & Minno find them visited by medium and large butterflies in Florida. The flowers are somewhat fragrant and copiously produce nectar. Pink-spotted Hawkmoth (*Agrilus cingulata*). In a Kenyan study hawkmoths, a noctuid and a skipper, the prime pollinators, frequently visited papaya flowers. At least seven species of hawkmoths are by far its most important pollinators in Australia. Hummingbirds also visit the flowers.

Sphingidae: Ello Sphinx (*Erinnyis ello*), likely secondary, it prefers Euphorbiaceae.

Noctuidae: Corn Earworm (*Helicoverpa zea*). In Cuba, Fall Armyworm (*Spodoptera frugiperda*) and Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Carpinus caroliniana. **American Hornbeam**. Betulaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Autumnal Moth (*Epirrita autumnata*). Linden Looper (*Erannis tiliaria*). Friendly Proboscis (*Probole amicaria*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Gray Dagger (*Acronicta grisea*, Canada). Three-spotted Sallow (*Eupsilia tristigmata*, Canada). Colorful Zale (*Zale minerea*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Carya illinoensis. **Pecan**. Juglandaceae.

Larval host for Gray Hairstreak.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Omnivorous Looper (*Sabulodes aegrotata*).

Nepticulidae: Pecan Serpentine Leafminer (*Stigmella juglandifoliella*).

Noctuidae: Penitent Underwing (*Catocala piatrix*). Tobacco Budworm (*Chloridea virescens*). Hypocala (*Hypocala andremona*, Cuba). Fall Armyworm (*Spodoptera frugiperda*). Colorful Zale (*Zale minerea*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*). American Plum Borer (*Euzophera semifuneralis*).

Caryopteris x clandonensis 'Sterling Silver' and other varieties. **Blue Mist**. Lamiaceae. Nectar: Cabbage White, Zephyr Anglewing, Common Buckeye, Eastern Tailed Blue, Silver-spotted Skipper, Common Checkered-Skipper, Sachus, Ailanthus Webworm (*Atteva aurea*, Yponomeutidae). Butterfly favorite at U. C. Riverside Botanic Gardens. Jerry Sedenko compares it to the Butterfly Bush in general attractiveness. Scott found it sometimes visited by butterflies. Summer/fall flowering.

Cassia bicapsularis 'Butter Creme'. Fabaceae. Cassieae.
Hostplant for Cloudless Sulphur, Orange-barred Sulphur.

Cassia didymobotrya. Cassieae.

Hostplant for Cloudless Sulphur (Richard James).

Cassia leptophylla. **Gold Medallion Tree**. Fabaceae. Cassieae.

Larval host for the Cloudless Sulphur.

Cassia tomentosa. Fabaceae. Cassieae.

Likely foodplant for the Sleepy Orange according to the Natural History of Orange County web site.

Castanea mollissima. **Chinese Chestnut**. Fagaceae. Nectar: American Lady (fq), Common Buckeye (fq), Gulf Fritillary, Eastern Tailed Blue, Silver-spotted Skipper.

Castanospermum australe. **Moreton Bay Chestnut**. Fabaceae. Angylocalyceae.

No larval host values.

Catalpa bignonioides. **Common Catalpa**. Bignoniaceae. Flowers attract butterflies and moths.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Catalpa speciosa. **Northern Catalpa**. Bignoniaceae. Nectar: Yellow-collared Scape Moth (*Cisseps fulvicollis*, Arctiidae), Confused Eusarca (*Eusarca confusaria*, Geometridae), and the Large Lace-border (*Scopula limboundata*, Geometridae), Ipsilon Dart (*Agrotis ipsilon*, Noctuidae), Armyworm (*Mythimna unipuncta*, Noctuidae).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Spring Cankerworm (*Alsophila pometaria*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Catanache caerulea. **Cupid's Dart**. Asteraceae. Cichorieae. Nectar: Especially attractive to Viceroy, Painted Lady and Great Spangled Fritillary (Jerry Sedenko).

Catharanthus roseus. **Madagascar Periwinkle**. Apocynaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Black Swallowtail, Cloudless Sulphur, Large Orange Sulphur, Sleepy Orange, Great Purple Hairstreak (The Firefly Forest), Longtail Skipper, Banded Sphinx.

Ceanothus x delilianus 'Glorie de Versailles'. Rhamnaceae. Said to be much more attractive to butterflies and bees than most varieties of *ceanothi*.

Cedrus deodara. **Deodar Cedar**. Pinaceae.

Robert Pyle observes Pine White in numbers in and around the crowns of cultivated specimens in Cedro Wooley, Washington and believes it is a hostplant.

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Celtis australis. **European Hackberry**. Ulmaceae.

No known larval host values.

Centaurea americana. **Basket-flower**. Asteraceae. Cardueae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Painted Lady (Karen Chiasson), American Lady, Gulf Fritillary, Hackberry Emperor, Northern Cloudywing, White-lined Sphinx. Butterfly magnet.

Centaurea cyanus. **Bachelor's Button**. Asteraceae. Cardueae. Nectar: Cabbage White, Orange Sulphur, Painted Lady, American Lady, Common Buckeye, Gray Hairstreak, Eastern Tailed Blue, Fiery Skipper, Sachem, Silver-spotted Skipper, Common Checkered-Skipper, Tawny-edged Skipper. Single flowered forms are best.

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*, Canada).

Centaurea gymnocarpa. **Velvet Knapweed**. Asteraceae. Cardueae. Nectar plant.

Centaurea moschata. **Sweet Sultan**. Asteraceae. Cardueae. Flowers attract butterflies.

Centaurea nigra. **Lesser Knapweed**. Asteraceae. Cardueae. Attracts bees, butterflies and moths in England, including the Old World Swallowtail, Painted Lady. In Newfoundland gets Monarch, Milbert's Tortoiseshell, Atlantis Fritillary, Red Admiral, American Lady, Painted Lady, Green Comma and European Skipper. Elsewhere: Orange-barred Sulphur.

A larval host for the Painted Lady.

Centaurea rothrockii. **Rothrock's Knapweed**. Basketflower. Asteraceae. Cardueae. Nectar observations in Arizona and New Mexico: Pipevine Swallowtail, Giant Swallowtail, Two-tailed Swallowtail, Black Swallowtail, Nokomis Fritillary, Hammock Skipper, Pahaska Skipper, Dull Firetip.

Rothrock's Knapweed is an Arizona and New Mexico native offered by Annie's Annuals.

Centaurea scabiosa. **Greater Knapweed**. Asteraceae. Cardueae. In England, "a great nectar plant for bees, butterflies and moths".

Said to be a foodplant for the Tropical Buckeye in Brazil.

Centranthus ruber. **Red Valerian**. Valerianaceae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail (fq), Desert Black Swallowtail, Two-tailed Swallowtail. Cabbage White. Monarch, Red Admiral, Painted Lady (fq), West Coast Lady, American Lady, Common Buckeye (fq), Gulf Fritillary (fq), California Tortoiseshell, Milbert's Tortoiseshell. Bramble Green Hairstreak, Juniper Hairstreak, American Copper, Great Copper. Common Checkered-Skipper, Silver-spotted Skipper, Mournful Duskywing, Fiery Skipper, Sandhill Skipper, Tawny-edged Skipper, Umber Skipper, Woodland Skipper (fq), Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae), Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), White-lined Sphinx (*Hyles lineata*, Sphingidae), Large Yellow Underwing (*Noctua*

pronuba, Noctuidae). In the Xerces Society “Master Plant List” for butterfly gardens. Attracts “many” species of butterflies says Lotusland. Likely better for moths than for butterflies. Scott rates it as generally “moderately popular” with butterflies. Likely, the white varieties work even better for moths.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) – photograph by Alice Abela.

Ceratonia siliqua. **Carob**. Fabaceae. Caesalpinieae.

Pyralidae: Tropical Warehouse Moth (*Cadra cautella*). Raisin Moth (*Cadra figulilella*). Locust Bean Moth (*Ectomyelois ceratoniae*). Indian Meal Moth (*Plodia interpunctella*).

Ceratostigma griffithii. **Blue Leadwort**. Plumbaginaceae. Nectar: Gulf Fritillary, Painted Lady, American Lady, West Coast Lady, Skippers.

Ceratostigma plumbaginoides. **Dwarf Plumbago**. Plumbaginaceae. Nectar: Sulphurs, Red Admiral, Painted Lady, Viceroy, Blues, Umber Skipper, White-lined Sphinx.

Marine Blue may use it as a hostplant (Bryan Reynolds).

Cercis canadensis. **Eastern Redbud**. Fabaceae. Cercideae. Nectar: Pipevine Swallowtail, Cloudless Sulphur, American Snout, Red Admiral, American Lady, Brown Elfin, Gray Hairstreak, Great Purple Hairstreak, Juniper Hairstreak, Silvery Blue, Eastern Tailed Blue, Dreamy Duskywing, Sleepy Duskywing, Silver-spotted Skipper, Ipsilon Dart (*Agrotis ipsilon*, Noctuidae).

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). Mouse Moth (*Amphipyra tragopoginis*).

Notodontidae: Red-washed Prominent (*Oligocentria semirufescens*). Morning-glory Prominent (*Schizura ipomoeae*).

Pyralidae: Grape Leafroller (*Desmia funeralis*). *Sosipatra thurberi*.

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Oblique-banded Leafroller (*Choristoneura rosaceana*, Kansas).

Cestrum aurantiacum. **Orange Cestrum**. Solanaceae. Nectar: Giant Swallowtail (fq), Monarch, Gulf Fritillary. Reputedly, one of the best butterfly garden plants in Houston.

Cereus repandus. **Peruvian Apple Cacti**. Cactaceae. The flowers visited by Rustic Sphinx.

Cestrum nocturnum. **Night Jessamine**. Solanaceae. Nectar: Cabbage Looper, and large sphinx moths.

Pyralidae: *Lineodes elcodes*, discovered recently in California.

Chaenomeles japonica. **Flowering Quince**. Rosaceae. Maleae. Scott notes a flower visit by Western Tiger Swallowtail. Barbara Deutsch finds it gets Pipevine Swallowtail.

Chelone lyonii. **Pink Turtlehead**. Scrophulariaceae. Nectar: Silver-spotted Skipper.

Chenopodium quinoa. **Quinoa**. Chenopodiaceae.

Gelechiidae: Goosefoot Groundling Moth (*Euscrobipalpa atriplicella*).

Chionanthus retusus. **Chinese Fringe Tree**. Oleaceae.

No larval host records.

Chionanthus virginicus. **Fringe Tree**. Oleaceae.

Sphingidae: Rustic Sphinx (*Manduca rustica*). Great Ash Sphinx (*Sphinx chersis*).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Sesiidae: Ash Borer (*Podosesia syringae*).

Chionodoxa. **Glory-of-the-Snow**. Asparagaceae. Scilloideae. Nectar: Cabbage White, moths at night.

Choisya ternata. **Mexican Orange**. Rutaceae.

No larval host values.

Chorisia speciosa. **Silk Floss Tree**. Malvaceae. Nectar: Monarch.

No larval host values.

Chrysactinia mexicana. **Damianita**. Asteraceae. Tageteae. Nectar plant.

Chrysanthemum leucanthemum (aka and now Leucanthemum vulgare). **Ox-eye Daisy**. Asteraceae. Anthemideae. Nectar: Sleepy Orange, Cabbage White, Margined White, American Lady, Common Buckeye, Atlantis Fritillary, Milbert's Tortoiseshell, Pearl Crescent, Common Wood-Nymph. Juniper Hairstreak, Eastern Tailed Blue, Melissa Blue, Arctic Skipper, European Skipper, Fiery Skipper, Woodland Skipper. Generally of slight interest.

Chrysanthemum x superbum (aka and now Leucanthemum maximum). **Shasta Daisy**. Asteraceae. Anthemideae. Nectar: Dainty Sulphur, Orange Sulphur, Cabbage White, Western White, Milbert's Tortoiseshell, Mourning Cloak, Red Admiral (Jerry Sedenko), Lorquin's Admiral, Common Wood-Nymph, Mylitta Crescent, Leanira Checkerspot (Ted Fristrom). Painted Lady, Gray Hairstreak, Common Checkered-Skipper, Sachem, Sonora Skipper, Tawny-edged Skipper, and Woodland Skipper.
Cicer arietinum. **Chickpea**. Fabaceae. Cicereae.

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Corn Earworm (*Helicoverpa zea*).

Pyralidae: Tropical Warehouse Moth (*Cadra cautella*).

Cinnamomum camphora. **Camphor Tree**. Lauraceae.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*).

Citrofortunella microcarpa. **Calamondin**. Rutaceae.

Larval food for Giant Swallowtail.

Citrullus lanatus. **Watermelon**. Cucurbitaceae.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Old Man Dart (*Agrotis vetusta*). Alfalfa Semilooper (*Autographa californica*). Corn Earworm (*Helicoverpa zea*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Melonworm Moth (*Diaphania hyalinata*).

Citrus X aurantium. **Bitter Orange. Seville Orange**. Rutaceae.

Hostplant for Giant Swallowtail.

Citrus X aurantifolia. **Key Lime**. Rutaceae.

Giant Swallowtail and Gray Hairstreak larval host (Nall).

Citrus limon. **Lemon**. Rutaceae. Nectar: Western Tiger Swallowtail.

Hostplant for Giant Swallowtail and Gray Hairstreak. Reportedly a hostplant for Old World Swallowtail and Anise Swallowtail.

Pyralidae: Navel Orangeworm (*Amyelois transitella*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leafroller (*Platynota stultana*).

Citrus japonica. **Kumquat**. Rutaceae. White-lined Sphinx visits flowers.

Citrus sinensis. **Navel Orange**. Rutaceae.

Hostplant for Giant Swallowtail, Anise Swallowtail, Painted Lady.

Cosmopterigidae: Florida Pink Scavenger (*Anatrachyntis badia*).

Geometridae: Common Gray (*Anavitrinella pampinaria*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). *Egira curialis*. Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*, Cuba).

Pyralidae: Navel Orangeworm (*Amyelois transitella*). Locust Bean Moth (*Ectomyelois ceratoniae*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leafroller (*Platynota stultana*).

Clematis terniflora. **Sweet Autumn Clematis**. Ranunculaceae. Nectar: American Lady, Viceroy, Juniper Hairstreak.

Clerodendrum bungei. **Rose Glory Bower**. Verbenaceae. Nectar: Giant Swallowtail, Pipevine Swallowtail, Monarch (fq), Queen.

Does well in containers.

Clerodendrum paniculatum. **Pagoda Flower**. Verbenaceae. Nectar: Giant Swallowtail, Monarch. Reputed to be one of the better species of this genus for butterflies.

A returning perennial in USDA Zones 8B – 9.

Clerodendrum speciosum. **Javanese Glory Bower**. Verbenaceae. Nectar: Giant Swallowtail, Polydamas Swallowtail, and Cloudless Sulphur.

Clerodendrum splendens. Verbenaceae. Popular with many butterflies.

Clerodendrum trichotomum. **Harlequin Glory Bower**. Verbenaceae.

Clerodendrum ugandense. **Purple Butterfly Bush**. Verbenaceae. Nectar: Monarch, Queen, Common Buckeye.

Clethra alnifolia. **Summersweet**. Clethraceae. Excellent nectar plant in its native east – attracting many species there such as Eastern Tiger Swallowtail, Palamedes Swallowtail, Spicebush Swallowtail (fq), Cabbage White, American Snout (fq), Monarch, American Lady, Red Admiral, White Admiral (fq), Red-spotted Purple (fq), Pearl Crescent, Question Mark (fq), Juniper Hairstreak, Gray Hairstreak, Great Purple Hairstreak, Red-banded Hairstreak, Striped Hairstreak, White-M Hairstreak, Spring Azure, Summer Azure, Silver-spotted Skipper (fq), Confused Cloudywing (fq), Northern Broken Dash, Southern Broken Dash, Delaware Skipper, Fiery Skipper, Lace-winged Roadside-Skipper, Sachem, Two-spotted Skipper, Yehl Skipper, and Zabulon Skipper.

Clytostoma callistegioides. **Violet Trumpet Vine**. Bignoniaceae.

No known larval host values.

Cnidocolus aconitifolius. **Chaya. Tree Spinach**. Euphorbiaceae. Has some butterfly value according to U. C. Riverside Botanic Gardens.

Sphingidae: Likely hostplant for Ello Sphinx (*Erinnyis ello*).

Coleonema pulchellum. **Pink Breath-of-heaven**. Rutaceae.

Colletia cruciata. **Anchor Plant**. Rhamnaceae. Nectar: Ladies, Red Admiral, Common Buckeye, Monarch.

Conoclinium coelestinum. **Mistflower**. Asteraceae. Eupatorieae. Nectar: Cabbage White, Sleepy Orange, Cloudless Sulphur, Lyside Sulphur, Orange Sulphur, Clouded Sulphur (fq). Monarch, Queen, Viceroy, Gulf Fritillary, Variegated Fritillary, Painted Lady, American Lady, Common Buckeye, Red Admiral, Pearl Crescent, Texan Crescent, Bordered Patch. Gray Hairstreak, Ceraunus Blue, Eastern Tailed Blue. Common Sootywing, Common Checkered-Skipper, Silver-spotted Skipper, Long-tailed Skipper, Sachem (fq), Dun Skipper, Tawny-edged Skipper, Common Roadside-Skipper, Eufala Skipper, Fiery Skipper. Yellow-collared Scape Moth.

Conoclinium greggii 'Boothill'. **Boothill Boneset**. Asteraceae. Eupatorieae. Nectar: Queen, Monarch, Gulf Fritillary.

Consolida ajacis. **Rocket Larkspur**. Ranunculaceae. Nectar: Two-tailed Swallowtail (fq), Western Tiger Swallowtail, Checkered White, Painted Lady, Variegated Fritillary, Melissa Blue, and Tawny-edged Skipper.

Consolida orientalis. **Larkspur, Oriental Knight's-spur**. Ranunculaceae. Nectar: Pipevine Swallowtail, Silver-spotted Skipper, Field Skipper aka Sachem.

Convallaria majalis. **Lily-of-the-Valley**. Asparagaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*) (Wynne, et. al. 1991).

Convolvulus sabatius (aka *C. mauritanicus*). **Ground Mourning Glory**. Convolvulaceae. Blue flowers, recommended by California Garden Clubs, Inc., El Nativo Growers, and Julie A. West, for nectar.

Cordia boissieri. **Anacahuita. Mexican Olive**. Boraginaceae. Nectar: Giant Swallowtail, Cloudless Sulphur, Large Orange Sulphur, Gulf Fritillary, Mournful Duskywing, Long-tailed Skipper, Sphinx moths, including the day-flying *Clavipes Sphinx* (*Aellopos clavipes*, Sphingidae) and White-lined Sphinx (*Hyles lineata*). Hummingbirds. In Houston a favorite of the Black Swallowtail. Said to attract a wide variety of butterflies. (Zilpa Longtail. Favorite of the White-angled Sulphur.) Rated an "excellent" nectar source in south Texas (Mike Quinn). (Adriano, 2011).

Cordia parviflora. **Little-leaf Cordia**. Boraginaceae.

Coreopsis grandiflora. **Large-flower Tickseed**. Asteraceae. Coreopsidae. Nectar: Western Tiger Swallowtail, Sleepy Orange, Cloudless Sulphur, Orange Sulphur, American Lady, Common Buckeye (fq), Gulf Fritillary, Variegated Fritillary, Viceroy, Pearl Crescent (fq), Gray Hairstreak, American Copper, Eastern Tailed Blue, Spring Azure, Silver-spotted Skipper.

Coreopsis lanceolata. **Sand Coreopsis**. Asteraceae. Coreopsidae. Nectar: Clouded Sulphur [Michigan], Monarch, American Lady, Red Admiral, Pearl Crescent, Melissa Blue.

Coreopsis major. **Great Tickseed**. Asteraceae. Coreopsidae. Nectar: Sleepy Orange (fq), American Lady, Common Buckeye, Pearl Crescent (fq), Gulf Fritillary, Variegated Fritillary, Pearl Crescent, Coral Hairstreak, Gray Hairstreak, Eastern Tailed Blue, Common Checkered-Skipper, Dun Skipper, Fiery Skipper.

Coreopsis palmata. **Prairie Coreopsis**. Asteraceae. Coreopsidae. Nectar: Clouded Sulphur, Cabbage White, Checkered White, Great Spangled Fritillary, American Lady, Pearl Crescent, Gray Hairstreak, Melissa Blue, Common Sootywing, Tawny-edged Skipper, Yellow-collared Scape Moth, and Celery Moth.

Coreopsis rosea. **Pink Coreopsis**. Asteraceae. Coreopsidae. Nectar: Orange Sulphur, Common Buckeye, Viceroy, Pearl Crescent, American Copper, Eastern Tailed Blue, Spring Azure.

Coreopsis tinctoria. **Plains Coreopsis**. Asteraceae. Coreopsidae. Nectar: Dainty Sulphur (fq), Checkered White, Painted Lady, American Lady, Common Buckeye, Pearl Crescent, Western Pygmy Blue, Hackberry Emperor.

Oviposition obtained on it by Dainty Sulphur: Douglas, Matthew M., and John W. Grula. 1978. "Thermoregulatory Adaptations Allowing Ecological Range Expansion by the Pierid Butterfly, *Nathalis iole* Boisduval." *Evolution* 32 (4): 776-83. doi:10.2307/2407493.

Coreopsis tripteris. **Tall Coreopsis**. Asteraceae. Coreopsidae. Nectar: Monarch, Sleepy Orange, Pearl Crescent, Melissa Blue, Tawny-edged Skipper.

Coreopsis verticillata. **Threadleaf Coreopsis**. Asteraceae. Coreopsidae. Nectar: Dainty Sulphur, Orange Sulphur, American Lady, Common Buckeye, Viceroy, Pearl Crescent, American Copper, Eastern Tailed Blue, Spring Azure, Common Checkered-Skipper. 'Moonbeam'.

Coriandrum sativum. **Coriander. Cilantro**. Apiaceae. Coriandreae.

Hostplant for Anise Swallowtail and Old World Swallowtail.

Cornus florida. **Flowering Dogwood**. Cornaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*) (Wynne, et. al., 1991).

Cosmos. Asteraceae. Coreopsidae. Nectar: Cloudless Sulphur, Orange Sulphur, Sleepy Orange, Southern Dogface, Queen, West Coast Lady, Painted Lady, Sachem.

Noctuidae: Gray Looper Moth (*Rachiplusia ou*).

Cosmos bipinnatus. Asteraceae. Coreopsidae. Nectar: Western Tiger Swallowtail, Giant Swallowtail, Checkered White, Pine White, Clouded Sulphur, Monarch, Painted Lady, West Coast Lady, Red Admiral, Gray Hairstreak, Silver-spotted Skipper, Common Checkered-Skipper, Sachem, Fiery Skipper, Umber Skipper, Orange Skipperling. 'Sonata'.

Noctuidae: Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Cosmos sulphureus. **Yellow Cosmos**. Asteraceae. Coreopsidae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Giant Swallowtail, Cloudless Sulphur, Orange Sulphur, Southern Dogface, Sleepy Orange, Monarch, Queen, Viceroy, Great Spangled Fritillary, Gulf Fritillary, Variegated Fritillary, Painted Lady, West Coast Lady, Red Admiral, Common Buckeye, Texan Crescent, Bordered Patch (fq), American Copper, Funereal Duskywing, Mournful Duskywing, Dorantes Longtail, Hammock Skipper, Sachem.

Cosmos ‘Sensation’. Asteraceae. Coreopsidae. Nectar: Orange Sulphur, Sleepy Orange, Painted Lady, Sachem, doubtless others.

Cotinus coggygria. **Smoke Tree**. Anacardiaceae.

Cotula (Oscar Clarke). **Brass Buttons**. Asteraceae. Anthemideae.

Crambe cordifolia. **Crambe**. Brassicaceae. Nectar: Painted Lady, Mourning Cloak, Milbert’s Tortoiseshell (Jerry Sedenko).

Crassula ovata. **Jade Plant**. Crassulaceae. Marc Kummel photograph shows a freshly emerged Pale Swallowtail specimen in his garden at nectar.

Crataegus crus-galli. **Cockspur Hawthorn**. Rosaceae. Maleae. Nectar: Pipevine Swallowtail, Monarch.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Crataegus phaenopyrum. **Washington Thorn**. Rosaceae. Maleae. Nectar: Ipsilon Dart (*Agrotis ipsilon*).

Crinum spp. **Swamplily**. Amaryllidaceae. Nectar: Five-spotted Hawkmoth, Banded Sphinx.

Crococima masoniorum ‘Lucifer’. Iridaceae. Nectar: Western Tiger Swallowtail.

Crotalaria agatiflora. **Canarybird Bush**. Fabaceae. Crotalariaeae.

Hostplant for Cloudless Sulphur, the butterfly more common in previous decades when the plant was much more popular with southern California gardeners!

Cucumis melo. **Muskmelon. Cantaloupe**. Cucurbitaceae. Nectar: Common Sootywing, Common Checkered-Skipper.

Reported as a larval host for the Painted Lady and the Orange Sulphur.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Arctiidae: Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Old Man Dart (*Agrotis vetusta*). Alfalfa Semilooper (*Autographa californica*). Striped Cutworm (*Euxoa tessellata*). Dingy Cutworm (*Feltia jaculifera*). Corn Earworm (*Helicoverpa zea*). Miranda Moth (*Proxenus miranda*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Cabbage Looper (*Trichoplusia ni*).

Pyrallidae: Melonworm Moth (*Diaphania hyalinata*), a striking species.

Cucumis sativus. **Garden Cucumber**. Cucurbitaceae. Nectar: Common Sootywing, Fiery Skipper (Fernandez-Hernandez). Scott notes flower visits by Cabbage White and Common Checkered-Skipper.

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Alfalfa Semilooper (*Autographa californica*). Soybean Looper (*Chrysodeixis includens*). Striped Cutworm (*Euxoa tessellata*). Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Melonworm Moth (*Diaphania hyalinata*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Cucurbita maxima. **Winter Squash**. Cucurbitaceae.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Black Cutworm, Alfalfa Semilooper (*Autographa californica*). Striped Cutworm (*Euxoa tessellata*). Corn Earworm (*Helicoverpa zea*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Melonworm Moth (*Diaphania hyalinata*).

Cucurbita pepo. **Field Pumpkin**. Cucurbitaceae.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Corn Earworm (*Helicoverpa zea*). Clandestine Dart (*Spaelotis clandestina*).

Pyralidae: Melonworm Moth (*Diaphania hyalinata*).

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Cuphea hyssopifolia. **Mexican Heather**. Lythraceae. Nectar: Sleepy Orange, Dainty Sulphur, Gulf Fritillary (Jim McCulloch), Variegated Fritillary, Pearl Crescent, Mat-plant Crescent, Common Checkered-Skipper, White Checkered-Skipper, Sachem, Eufala Skipper, Fiery Skipper.

Cuphea llavea. **Bat-faced Cuphea**. Lythraceae. Nectar: Cloudless Sulphur, also said to attract swallowtails and larger butterflies. White-lined Sphinx.

Cupressus sempervirens. **Italian Cypress**. Cupressaceae.

Tortricidae: *Argyrotaenia cupressae*.

Cymbalaria muralis. **Kenilworth Ivy**. Plantaginaceae.

Common Buckeye oviposited on it in Sally Levinson's garden, very likely hostplant.

Cynara scolymus. **Artichoke**. Asteraceae. Cardueae.

Larval host for Painted Lady.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Gelechiidae: *Helcystogramma badia*.

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: Figwort Stem Borer (*Papaipema sauzalitae*). Variegated Cutworm (*Peridroma saucia*). V-lined Quaker (*Zosteropoda hirtipes*).

Pterophoridae: Coyote Brush Borer Plume Moth (*Hellinsia grandis*). Artichoke Plume Moth (*Platyptilia carduidactylus*).

Pyralidae: Weedfield Sable (*Pyrausta subsequalis*). Greenhouse Leaf-tier (*Udea rubigalis*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). *Clepsis fucana*. Garden Tortrix (*Clepsis peritana*).

Dahlia capitata ‘**Sierra Gold**’. Asteraceae. Coreopsidae.

Dahlia imperialis. **Tree Dahlia**. Steve Rosenthal got a photograph of a Monarch at nectar on one.

Dais cotinifolia. **Pompom Tree**. Thymelaeaceae. Nectar: Western Tiger Swallowtail.

Dalea albiflora. **Whiteflower Prairie Clover**. Fabaceae. Amorpheae. Nectar: Golden-headed Scallopwing (The Firefly Forest, adding that it is one of the best for other butterflies as well.)

Dalea bicolor. **Silver Prairie Clover**. Fabaceae. Amorpheae. Nectar: American Snout, Reakirt’s Blue, Echo Azure, Acmon Blue, Leda Ministreak.

Larval host for Southern Dogface.

Dalea candida. **White Prairie Clover**. Fabaceae. Amorpheae. Nectar: Ceraunus Blue (fq), Hammock Skipper (both from The Firefly Forest).

Dalea frutescens. **Black Dalea**. Fabaceae. Amorpheae. Nectar: Dainty Sulphur. Queen. Gray Hairstreak. Ceraunus Blue. Eastern Tailed Blue. Reakirt’s Blue. White Checkered-Skipper.

Larval host for Southern Dogface. Reakirt’s Blue appeared to be ovipositing on one (Roberta Gibson). A “tex-anne” photograph of 12 Oct 2017 shows a late instar Ceraunus Blue caterpillar on a flower head of it.

Dalea greggii. **Trailing Indigo Bush**. Fabaceae. Amorpheae. Nectar: Reakirt’s Blue (Anne Reeves photograph).

Dalea pulchra. **Bush Dalea**. Fabaceae. Amorpheae. Nectar: Reakirt’s Blue, Arizona Powdered-Skipper, Funereal Duskywing (fq) (The Firefly Forest).

Hostplant for Southern Dogface, Reakirt’s Blue.

Dalea purpurea. **Purple Prairie Clover**. Fabaceae. Amorpheae. Nectar plant.

Dalea versicolor var. sessilis. Fabaceae. Amorpheae. Nectar plant.

Daucus carota. **Wild Carrot. Queen Anne's Lace.** Apiaceae. Scandiceae. Nectar: Anise Swallowtail, Cabbage White, Pine White, Orange Sulphur, Common Buckeye, Lorquin's Admiral, Red Admiral, Variegated Fritillary, Mylitta Crescent, Pearl Crescent, American Snout, Gray Hairstreak, California Hairstreak, Juniper Hairstreak, Silver-spotted Skipper, Brazilian Skipper, Dun Skipper, Fiery Skipper, Woodland Skipper, Yellow-collared Scape Moth, Corn Earworm.

Anise Swallowtail host plant.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Gray (*Anavitrinella pampinaria*).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Celery Moth (*Anagrapha falcifera*). Alfalfa Semilooper (*Autographa californica*). Striped Cutworm (*Euxoa tessellata*). Subterranean Dart (*Feltia subterranea*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Large Yellow Underwing (*Noctua pronuba*). Variegated Cutworm (*Peridroma saucia*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Beet Webworm (*Loxostege strictalis*). False Greenhouse Leaf-tier (*Udea profundalis*). Reported outside the continental United States, populations of Black Cutworm (*Agrotis ipsilon*, Noctuidae) Beet Armyworm (*Spodoptera exigua*, Noctuidae) and the Diamondback Moth (*Plutella xylostella*, Yponomeutidae) (HOSTS). Variations in host preferences by various populations is a reason for interdicting "pests" at borders ...

Daucus carota ssp. *sativus*. **Carrot** (cultivated). Apiaceae. Scandiceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) University of Florida.

Delonix regia. **Royal Poinciana.** Fabaceae. Caesalpinieae. Nectar: Polydamas Swallowtail, Cloudless Sulphur.

Delosperma cooperi. **Trailing Iceplant.** Aizoaceae. Nectar: Eastern-Tailed Blue.

Delphinium ajacis is now *Consolida ajacis*. **Larkspur.**

Dianthus sp. Caryophyllaceae.

Noctuidae: Capsule Moth (*Hadena capsularis*).

Dianthus armeria. **Deptford Pink.** Caryophyllaceae. Nectar: Sleepy Orange, Pearl Crescent, Eastern Tailed Blue, Northern Cloudywing, European Skipper.

Dianthus barbatus. **Sweet William.** Caryophyllaceae. Nectar: Old World Swallowtail, Western Tiger Swallowtail,

Two-tailed Swallowtail, Green Comma, Painted Lady, American Lady, Red Admiral, Silver-spotted Skipper, Dun Skipper (Pyle), Eufala Skipper, Field Skipper aka Sachem, European Skipper, nocturnal moths. Scott considers it generally “not popular” with butterflies.

Orange and red work best. ‘Wee Willie’ works.

Dianthus caryophyllus. **Clove Pink, Carnation**. Caryophyllaceae. Nectar.

Noctuidae: Corn Earworm (*Helicoverpa zea*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Omnivorous Leafroller (*Platynota stultana*, Hawaii).

Dianthus deltoides. **Maiden Pink**. Caryophyllaceae. Nectar: Cabbage White, Sleepy Orange, European Skipper.

Dianthus gratianopolitanus ‘Bath’s Pink’. **Cheddar Pink**. Caryophyllaceae. Nectar: Western Tiger Swallowtail, White-lined Sphinx, noctuid moths – well-visited by butterflies and diurnal and nocturnal moths in its native range (Erhardt, Andreas. 1990. “Pollination of *Dianthus Gratianopolitanus* (Caryophyllaceae).” *Plant Systematics and Evolution*. 170 (1/2): 125–132 www.jstor.org/stable/23674426).

Dicentra cucullaria. **Dutchman’s Breeches**. Papaveraceae. Nectar: Cabbage White, Red Admiral.

Warren reports it is a hostplant for *Clodius Parnassian*.

Dicentra spectabilis. **Common Bleeding Heart**. Papaveraceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*) (Wynne, 1991).

Digitalis purpurea. **Common Foxglove**. Plantaginaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail.

Diospyros kaki. **Japanese Persimmon**. Ebenaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Sesiidae: Currant Clearwing (*Synanthedon tipuliformis*).

Diospyros virginiana. **Common Persimmon**. Ebenaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: The Penitent (*Catocala patrix*). Hypocala (*Hypocala andremona*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Pyralidae: American Plum Borer (*Euzophera semifuneralis*).

Distichis buccinatoria. **Blood-red Trumpet Vine**. Bignoniaceae.

Dodonaea viscosa. **Hopseed Bush**. Sapindaceae.

Geometridae: *Psamatodes everiata* [Jennifer Bundy].

Noctuidae: *Melipotis perpendicularis*.

Dolichos lablab. **Hyacinth Bean**. Fabaceae. Phaseoleae.

Hostplant for Marine Blue.

Dracopis amplexicaulis. **Clasping Coneflower**. Asteraceae. Heliantheae.

Duranta erecta. **Pigeon Berry**. Verbenaceae. Nectar: Pipevine Swallowtail, Pale Swallowtail, Western Tiger Swallowtail, Giant Swallowtail, Anise Swallowtail, Orange Sulphur, Large Orange Sulphur, Cloudless Sulphur, Clouded Sulphur, Sleepy Orange, Orange-barred Sulphur, Checkered White, Monarch, Queen, Gulf Fritillary, Painted Lady, West Coast Lady, Red Admiral, Long-tailed Skipper, Orange Skipperling, Sachem, Umber Skipper, skippers, White-lined Sphinx, Clavipes Sphinx. Some visits by Zebra Longwing (it much prefers *Hamelia patens*).

Sphingidae: Rustic Sphinx (*Manduca rustica*).

‘Sapphire Showers’. ‘Sarasota’.

Dymondia margaretae. **Silver Carpet**. Asteraceae. Arctotideae.

Dyschoriste linearis. **Snake Herb**. Acanthaceae.

Hostplant for Common Buckeye.

Ebenopsis ebano (*Pithecellobium flexicaule*). **Texas Ebony**. Fabaceae. Ingeae.

Larval host for the Large Orange Sulphur.

Pyralidae: Navel Orangeworm (*Amyelois transitella*).

Echinacea angustifolia. **Narrow-leaved Purple Coneflower**. Asteraceae. Heliantheae. Nectar: Orange Sulphur, Clouded Sulphur, Monarch, Viceroy, Painted Lady (fq), American Lady (Bryan Reynolds), Pearl Crescent, Great Spangled Fritillary, Variegated Fritillary, Common Wood-Nymph, Sachem, Tawny-edged Skipper. Bryan Reynolds considers it a “butterfly magnet”, even out-drawing milkweeds.

Echinacea pallida. **Pale Purple Coneflower**. Asteraceae. Heliantheae. Nectar: Checkered White, Orange Sulphur, Clouded Sulphur, Viceroy, Monarch, American Lady, Red Admiral, Variegated Fritillary, Great Spangled Fritillary, Gray Hairstreak, Silver-spotted Skipper, Dun Skipper, Tawny-edged Skipper, Eight-spotted Forester (*Alypia octomaculata*, Noctuidae).

Geometridae: Caterpillars of the Wavy-lined Emerald (*Synchlora aerata*) and Common Eupithecia (*Eupithecia miserulata*) eat the flower heads.

Echinacea purpurea. **Purple Coneflower**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Two-tailed Swallowtail (fq), Giant Swallowtail, Black Swallowtail. California Dogface, Southern Dogface, Orange Sulphur, Clouded Sulphur, Cloudless Sulphur, Large Orange Sulphur, Sleepy Orange, Cabbage White, Checkered White. Common Wood-Nymph, Great Basin Wood-Nymph, Monarch, Queen, Viceroy, Great Spangled Fritillary, Variegated Fritillary, Gulf Fritillary, Red Admiral, West Coast Lady, Painted Lady (fq), American Lady (fq), Common Buckeye, Bordered Patch, Pearl Crescent, Milbert's Tortoiseshell, Green Comma. Gray Hairstreak, Eastern Tailed Blue. Silver-spotted Skipper, Arizona Powdered-Skipper, Long-tailed Skipper, Common Checkered-Skipper, Sachem, Fiery Skipper, Tawny-edged Skipper, Western Branded Skipper (Carol Kirwin). White-lined Sphinx. California Pyrausta Moth (*Pyrausta californicalis*, Pyralidae). Anna's Hummingbird.

'Magnus' is a choice selection.

Echinacea simulata. **Glade Coneflower**. Asteraceae. Heliantheae. Close to Pale Purple Coneflower, a very attractive species.

Echinacea tennesseensis. **Tennessee Coneflower**. Asteraceae. Heliantheae.

Echinops sp. **Globe Thistle**. Asteraceae. Cardueae. Nectar: Cabbage White, California Dogface, Painted Lady, Common Buckeye, Fiery Skipper.

Echinops bannaticus 'Blue Glow'. Asteraceae. Cardueae.

Echinops ritro ruthenicus. Asteraceae. Cardueae. Nectar: Painted Lady, American Copper, Gray Hairstreak. 'Great butterfly attractor' – Annie's Annuals.

Painted Lady hostplant.

Echinopsis candicans. **Argentine Giant**. Cactaceae. Nectar: Rustic Sphinx.

A night-blooming cactus.

Echium amoenum. **Red Feathers**. Boraginaceae.

Echium candicans. **Pride of Madeira**. Boraginaceae. Nectar: Pipevine Swallowtail, Anise Swallowtail, Western Tiger Swallowtail, Cabbage White, Monarch (fq), Painted Lady, White-lined Sphinx. Butterfly favorite at U.C. Riverside Arboretum.

Echium vulgare. **Viper's Bugloss**. Boraginaceae. Nectar: Pipevine Swallowtail, Painted Lady, Common Buckeye, Northern Cloudywing (iNaturalist photograph), Dun Skipper.

Hostplant for Painted Lady and reported for the American Lady.

Echium wildpretii. **Tower of Jewels**. Boraginaceae.

Elaeagnus pungens. **Silverberry**. Elaeagnaceae.

No larval host values.

Elaeagnus umbellata. **Autumn Olive**. Elaeagnaceae. Nectar: Sleepy Orange, Cloudless Sulphur, American Lady, Gulf Fritillary, Ipsilon Dart, Armyworm.

Emilia coccinea. **Scarlet Tasseflower**. Asteraceae. Senecioneae. Nectar: Mimosa Yellow.

Encelia ventorum. **Baja Bush Sunflower**. Asteraceae. Heliantheae. Nectar: attractive to butterflies, from coastal habitats.

Epidendrum polyanthum. Orchidaceae. Nectar: Flowers very attractive to the Brown Ctenucha (*Ctenucha brunnea*, Arctiidae). Many butterflies visit flowers of *Epidendrum paniculatum* in Costa Rica (DeVries, P., & Stiles, F. 1990. "Attraction of Pyrrolizidine Alkaloid Seeking Lepidoptera to *Epidendrum paniculatum* Orchids". *Biotropica*, 22 (3): 290-297. doi:10.2307/2388540). In American greenhouses strongly attracts male Monarch.

Erigeron karvinskianus 'Spindrift'. **Santa Barbara Daisy**. Asteraceae. Astereae. Nectar: Common Checkered-Skipper (T.J. Gehling).

Erigeron speciosus. **Showy Daisy**. Asteraceae. Astereae. Nectar: Cabbage White, Checkered White, Pine White, Western White (blue, Scott), Orange Sulphur, Clouded Sulphur, Dainty Sulphur, Queen Alexandra's Sulphur. Red Admiral, Painted Lady, American Lady, Field Crescent, Coronis Fritillary, Great Spangled Fritillary, Mormon Fritillary (fq), Northwestern Fritillary, Zerene Fritillary (fq), Northern Checkerspot, Common Ringlet, Common Wood-Nymph, Small Wood-Nymph (fq), Green Comma. Gray Hairstreak, Behr's Hairstreak, Hedgerow Hairstreak, Blue Copper, Ruddy Copper, Tailed Copper (fq), Eastern Tailed Blue, Greenish Blue. Dun Skipper, Woodland Skipper (fq).

Eriobotrya japonica. **Loquat**. Rosaceae. Maleae. Nectar: Monarch, Queen, Red Admiral, Mourning Cloak.

Foodplant for the Gray Hairstreak.

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*). Locust Bean Moth (*Ectomyelois ceratoniae*). Darker Moodna (*Moodna ostrinella*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*). Codling Moth (*Cydia pomonella*).

Cosmopterigidae: Florida Pink Scavenger (*Anatrachyntis badia*).

Erysimum 'Bowles Mauve'. Brassicaceae. Nectar: Western Tiger Swallowtail, Cabbage White (fq), West Coast Lady, Painted Lady, Red Admiral, Fiery Skipper, Umber Skipper.

Erythrina crista-galli. **Cockspur Coral Tree**. Fabaceae. Phaseoleae. Nectar: Cloudless Sulphur.

No larval host values.

Eryngium amethystinum. **Amethyst Sea-holly**. Apiaceae. Saniculeae. Nectar: Painted Lady, American Lady. Nymphalids, Lycaenids. Link highly recommends as butterfly nectar plant.

Eryngium leavenworthii. **Leavenworth's Eryngo. False Purple Thistle**. Apiaceae. Saniculeae. Nectar: Monarch (Kay Martinez), Gulf Fritillary (Jim McCulloch), Juniper Hairstreak.

Annual wildflower from south-central United States, attracting attention lately – considered “easy” and flowering from seed in the first year.

Eryngium yuccifolium. **Rattlesnake Master**. Apiaceae. Saniculeae. Nectar: Pipevine Swallowtail, Clouded Sulphur, Checkered White, American Snout, Monarch, Viceroy, Painted Lady, Common Buckeye (fq), Variegated Fritillary, Pearl Crescent (fq), Common Wood-Nymph, Eastern Tailed Blue, Gray Hairstreak, Common Sootywing, Fiery Skipper, Tawny-edged Skipper, Yellow-collared Scape Moth, Olive-shaded Bird Dropping Moth (*Ponomotia candefacta*, Noctuidae).

Escallonia bifida (montevidensis). **White Escallonia**. Escalloniaceae. Nectar: Western Tiger Swallowtail, other Swallowtails, Ladies, Red Admiral, Monarch.

Escallonia rubra. **Pink Escallonia**. Escalloniaceae. Shapiro considers it good for everything as an excellent general nectar source. Funereal Duskywing.

Euonymus fortunei. **Winter Creeper**. Celastraceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*) (Wynne, et. al., 1991).

Eupatorium dubium 'Little Joe'. Asteraceae. Eupatorieae. Nectar: Monarch (fq), Fritillary, American Lady, Common Buckeye, Gray Hairstreak.

Eupatorium greggii (*Conoclinium dissectum*, now *Conoclinium greggii*). **Blue Mist Plant**. Asteraceae. Eupatorieae. Nectar: Pipevine Swallowtail, Southern Dogface, Monarch, Queen, Common Buckeye, Painted Lady, Bordered Patch, Gulf Fritillary, Mexican Fritillary, Variegated Fritillary, American Snout, Juniper Hairstreak, Mallow Scrub-Hairstreak, Silver-banded Hairstreak, Funereal Duskywing, White Checkered-Skipper, Fiery Skipper, Sachem, Clavipes Sphinx, Veined Ctenucha (Dave Beaudette).

Eupatorium maculatum said now to be *Eutrochium maculatum*. **Spotted Joe Pye Weed**. Asteraceae. Eupatorieae. Nectar: Giant Swallowtail, Orange Sulphur, Pine White, Monarch [Michigan]. Viceroy [Michigan], Variegated Fritillary, Atlantis Fritillary, Great Spangled Fritillary [Michigan], Milbert's Tortoiseshell (fq), Green Comma, Painted Lady (fq), American Lady [Michigan], Red Admiral (fq), Field Crescent, Pearl Crescent, Viceroy (fq), Monarch (fq), Common Wood-Nymph, Silver-spotted Skipper (fq). Moths.

Eupatorium rugosum is now *Ageratina altissima*. **White Snakeroot**. Asteraceae. Eupatorieae. Nectar: Cabbage White, Monarch, Viceroy, Pearl Crescent, Yellow-collared Scape Moth, Celery Moth.

Eupatorium sordidum formerly *Ageratum corymbosum*. **Butterfly Mist. Desert Ageratum**. Asteraceae. Eupatorieae. Nectar: Strongly attracts male Queens. Gets other butterflies such as Monarch (fq) and Southern Dogface. A butterfly favorite at U.C. Riverside Arboretum and on the Desert Butterfly

Gardening booklet “most recommended” list. Veined Ctenucha (*Ctenucha venosa*, Arctiidae), White-lined Sphinx (*Hyles lineata*, Sphingidae).

Mounding perennial 1' high by 3' wide.

Euphorbia heterophylla. **Mexican Fire Plant**. Euphorbiaceae. Nectar: especially for Marine Blue, Western Pygmy Blue. Long-tailed Skipper.

Sphingidae: Ello Sphinx (*Erinnyis ello*).

Euphorbia maculata. **Spotted Spurge**. Euphorbiaceae. Nectar: Purplish Copper. June – August.

Euphorbia marginata. **Snow-on-the-Mountain**. Euphorbiaceae. Nectar: Monarch, Painted Lady, noctuid moth (possible Corn Earworm, *Helicoverpa zea*, Noctuidae) (Flickr photographs by John Frisch, Kansas).

Euphorbia pulcherimma. **Poinsettia**. Euphorbiaceae.

Sphingidae: Ello Sphinx (*Erinnyis ello*).

‘Eckespoint’ mentioned as a good cultivar.

Euryops lateriflorus. Asteraceae. Senecioneae.

Euryops pectinatus ‘Viridis’. Asteraceae. Senecioneae. Nectar: Checkered White, Orange Sulphur, Large Orange Sulphur, Monarch, Queen, West Coast Lady, Painted Lady, American Lady, Red Admiral, Mylitta Crescent (fq), Gray Hairstreak, Mournful Duskywing, Common Checkered-Skipper.

Euryops speciosissimus. **Clanwilliam Daisy**. Asteraceae. Senecioneae. Flowers in winter.

Euryops tysonii. **Cape Daisy Bush**. Asteraceae. Senecioneae.

Eutrochium [Eupatoriadelphus] purpureus (Eupatorium purpureum). **Sweet Joe-Pye Weed**. Asteraceae. Eupatorieae. Nectar: Pipevine Swallowtail, Anise Swallowtail, Cabbage White, Checkered White, Clouded Sulphur, Monarch, Viceroy, Mourning Cloak, Green Comma, Milbert’s Tortoiseshell, Great Spangled Fritillary, Red Admiral, American Lady, Painted Lady, Pearl Crescent, Gray Hairstreak, Silver-spotted Skipper, Sachem. Yellow-collared Scape Moth, Celery Moth (*Anagrapha falcifera*, Noctuidae), Bent-line Dart (*Feltia jaculifera*, Noctuidae), Armyworm (*Mythimna unipuncta*, Noctuidae), and the Currant Clearwing (*Synanthedon tipuliformis*, Sesiidae).

Eysenhardtia orthocarpa. **Kidneywood**. Fabaceae. Amorpheae. Nectar: Bordered Patch (fq), Great Purple Hairstreak, Juniper Hairstreak, Marine Blue, mostly hairstreaks and blues. Among ‘Most Recommended’ by *Desert Butterfly Gardening*.

Hostplant for Gray Hairstreak, Marine Blue.

Fagopyrum esculentum. **Buckwheat**. Polygonaceae. Nectar: American Lady.

Noctuidae: Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Zebra Caterpillar (*Melanchra picta*). Clandestine Dart (*Spaelotis clandestina*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Felicia echinata. **Dune Daisy**. Asteraceae. Astereae.

Ferula communis. **Giant Fennel**. Apiaceae. Scandiceae.

Anise Swallowtail host.

Ficus carica. **Fig**. Moraceae. Over-ripe figs attract Red Admiral, Mourning Cloak.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Erebidae: Black Witch (*Ascalapha odorata*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Pyralidae: Navel Orangeworm (*Amyelois transitella*). Tropical Warehouse Moth (*Cadra cautella*). Raisin Moth (*Cadra figulilella*). Locust Bean Moth (*Ectomyelois ceratoniae*). Beehive Honey Moth (*Vitula serratilineella*).

Fraxinus americana. **American Ash**. Oleaceae. Wind-pollinated.

Hostplant for Western Tiger Swallowtail and the Mourning Cloak.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Maple Spanworm (*Ennomos magnaria*). Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena johnsonaria*). Spring Cankerworm (*Paleacrita vernata*), Sharp lined Yellow (*Sicya macularia*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*).

Notodontidae: Rough Prominent (*Nadata gibbosa*). Morning-glory Prominent (*Schizura ipomoeae*).

Sesiidae: Ash Borer (*Podosesia syringae*).

Sphingidae: Great Ash Sphinx (*Sphinx chersis*).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*). Oblique-banded Leafroller (*Choristoneura rosaceana*).

Fraxinus angustifolia 'Raywood'. **Raywood Ash**. Oleaceae.

Sphingidae: Caterpillars of Great Ash Sphinx (*Sphinx chersis*) found on it and successfully reared (Joan Ambu).

Fraxinus greggii. **Little Leaf Ash**. Oleaceae.

Sphingidae: Incense Cedar Sphinx (*Sphinx libocedrus*).

Fraxinus pennsylvanica. **Green Ash**. Oleaceae.

Hostplant for Two-tailed Swallowtail.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*). Yellow Woollybear (*Spilosoma virginica*).

Cossidae: Locust Borer (*Prionoxystus robiniae*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Small Engrailed (*Ectropis crepuscularia*). Maple Spanworm (*Ennomos magnaria*). Spring Cankerworm (*Paleacrita vernata*). Sharp-lined Yellow (*Sicya macularia*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Sesiidae: Ash Borer (*Podosesia syringae*).

Sphingidae: Great Ash Sphinx (*Sphinx chersis*).

Tortricidae: Ugly-Nest Caterpillar (*Archips cerasivorana*). Dusky Leafroller (*Orthotaenia undulana*). Poplar Leafroller (*Pseudosciaphila duplex*).

Fuchsia hybrida. Onagraceae. Sometimes visited for nectar by some of the larger butterflies, such as the Pale Swallowtail.

Sphingidae: Banded Sphinx (*Eumorpha fasciatus*). White-lined Sphinx (*Hyles lineata*).

Fuchsia magellanica. Onagraceae.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Gaillardia aristata. **Blanket Flower**. Asteraceae. Helenieae. Callippe Fritillary (Scott). Butterfly favorites at U.C. Riverside Botanic Gardens. ‘Gallo Dark Bicolour’, ‘Gallo Red’, ‘Lemon Ball’. Western White (3 flower visits in a sub-alpine meadow study).

Gaillardia x grandiflora ‘Oranges & Lemons’. Asteraceae. Helenieae.

Gaillardia pulchella. **Firewheel**. Asteraceae. Helenieae. Nectar: Pipevine Swallowtail, Checkered White (fq), Sleepy Orange (Randy Floyd), Orange Sulphur, Clouded Sulphur, Cloudless Sulphur, Southern Dogface, Monarch, Viceroy, Common Buckeye, Painted Lady, American Lady, Variegated Fritillary, Texan Crescent, Bordered Patch, Tiny Checkerspot, Gray Hairstreak, Great Purple Hairstreak, Funereal Duskywing, Common Checkered-Skipper, Eufala Skipper, Sachem, Fiery Skipper.

Larval host for Bordered Patch.

Galanthus nivalis. **Snowdrops**. Amaryllidaceae. Nectar: Red Admiral.

Gaura lindheimeri ‘Whirling Butterflies’. **Lindheimer’s Clockweed**. Nectar: Attracts very few butterflies. Ceraunus Blue (Anne Reeves), White-lined Sphinx.

Gazania ringens. **Trailing Gazania**. Asteraceae. Arctotideae. Nectar: Pipevine Swallowtail, West Coast Lady, Gabb’s Checkerspot, Grass Skippers. Shapiro finds the plain yellow-flowered varieties best.

American Lady may use as a larval host.

Geijera parviflora. **Wilga**. Rutaceae.

The Giant Swallowtail seen to oviposit on this cultivated Australian species; it typically develops on Rutaceae.

Gelsemium sempervirens. **Carolina Jessamine**. Loganiaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Sleepy Orange, Cloudless Sulphur.

Geranium maculatum. **Spotted Cranesbill**. Geraniaceae. Nectar: Clouded Sulphur, Eastern Tailed Blue, Silver-spotted Skipper, and Arctic Skipper. Important for Arctic Skipper in Massachusetts, where it is a common native plant (The Butterflies of Massachusetts web site).

Geum ‘Totally Tangerine’. Rosaceae. Colurieae.

Ginkgo biloba. **Maidenhair Tree**. Ginkgoaceae.

Geometridae: Peppered Moth, Omnivorous Looper.

Lymantriidae: European Gypsy Moth.

Pyralidae: American Plum Borer.

Gladiolus tristis. Fragrant at night, adapted for moth pollination (Goldblatt, P., & Manning, J. 2002. “Evidence for Moth and Butterfly Pollination in Gladiolus (Iridaceae-Crocoideae).” *Annals of the Missouri Botanical Garden*, 89 (1): 110-124. doi:10.2307/3298660).

Glandularia bipinnatifida. **Purple Prairie Verbena**. Verbenaceae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail, Anise Swallowtail, Checkered White (Anne Reeves), Southern Dogface, Sleepy Orange, Cloudless Sulphur, Monarch, Painted Lady, West Coast Lady, Gulf Fritillary, Eastern Tailed Blue, Northern Cloudywing, Northern White-Skipper (Laurie Nessel photograph), Dun Skipper, Eufala Skipper, Fiery Skipper, White-lined Sphinx.

Glandularia canadensis, aka *Verbena canadensis*. **Rose Vervain** 'Homestead Purple' [likely a garden hybrid].

Glechoma hederacea. Gill-over-the-ground. **Ground Ivy**. Lamiaceae. Nectar: Cabbage White, Sleepy Orange, Cloudless Sulphur, Orange Sulphur, Clouded Sulphur, American Lady, Spring Azure, Eastern Tailed Blue, Arctic Skipper [secondary, UK Butterflies], Common Roadside-Skipper, Celery Moth (*Anagrapha falcifera*, Noctuidae). Slight value, useful especially early in the year.

Gleditsia triacanthos. **Honey Locust**. Fabaceae. Caesalpinieae. Nectar: Monarch, Red Admiral, Bordered Patch. Scott notes the tree as common in Denver but he has never seen a butterfly on it.

Foodplant for the Silver-spotted Skipper.

Saturniidae: Polyphemus Moth, Burns' Buckmoth, Juno Buckmoth.

Arctiidae: Yellow-spotted Tiger Moth, Fall Webworm.

Geometridae: Common Gray, Peppered Moth, Linden Looper, Spring Cankerworm.

Lymantriidae: European Gypsy Moth, White-marked Tussock Moth.

Noctuidae: Variegated Cutworm.

Notodontidae: Yellow-necked Caterpillar, Morning-glory Prominent.

Pyrilidae: Navel Orangeworm (*Amyelois transitella*). Genista Broom Moth (*Uresiphita reversalis*).

Globularia cordifolia. **Leatherleaf Powder Puff**. **Globe Daisy** Plantaginaceae. A butterfly favorite at U. C. Riverside Botanic Gardens.

Gloriosa superba. **Climbing Lily**. Colchicaceae. Nectar: Said to be very attractive to the Common Lime (*Papilio demoleus*). In tropical areas pollinated by butterflies and sunbirds.

A tropical novelty.

Glycine max. **Soybean**. Fabaceae. Phaseoleae. Nectar: Corn Earworm (fq).

Foodplant for Orange Sulphur, Clouded Sulphur, Painted Lady, Variegated Fritillary and Long-tailed Skipper.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Citrus Looper (*Iridopsis fragilaria*). Southern Emerald (*Synchlora frondaria*).

Noctuidae: Celery Moth (*Anagrapha falcifera*). Nutmeg (*Anarta trifolii*). Golden Looper (*Argyrogramma verruca*). Bean LeafSkeletonizer (*Autoplusia egea*). Forage Looper (*Caenurgina erechtea*). Tobacco Budworm (*Chloridea virescens*). Soybean Looper (*Chrysodeixis includens*). Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*). Bordered Sallow (*Pyrrhia umbra*). Gray Looper (*Rachiplusia ou*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Garden Webworm (*Achyra rantalis*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Limabean Pod Borer (*Etiella zinckenella*). Beet Webworm (*Loxostege stricticalis*). Lucerne Moth (*Nomophila nearctica*).

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Gomphrena globosa. **Globe Amaranth**. Amaranthaceae. Nectar: Anise Swallowtail, Cabbage White, Checkered White, Monarch, Common Buckeye, Variegated Fritillary, Painted Lady, American Lady, American Snout, Gray Hairstreak, Silver-spotted Skipper, Common Sootywing, Common Checkered-Skipper (fq), Fiery Skipper, Sachem, Tawny-edged Skipper (fq), Dun Skipper, and Corn Earworm Moth. Scott rates it a “moderately popular” butterfly nectar source.

Goniolimon tataricum. **German Statice**. Plumbaginaceae. Said to attract butterflies.

Gossypium spp. **Cotton**. Malvaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Gossypium barbadense Pima. **Pima Cotton**. Malvaceae. Nectar for migrating Cloudless Sulphur (observer in New Mexico).

Gossypium herbaceum. **Levant Cotton**. Malvaceae.

Hostplant for Gray Hairstreak, also known as the “Cotton Square Borer”.

Sphingidae: White-lined Sphinx.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS, Fall Webworm, Yellow Woollybear.

Geometridae: Common Gray.

Lymantriidae: White-marked Tussock Moth.

Noctuidae: Black Cutworm, Pale-sided Cutworm, Subterranean Dart, Old Man Dart, Golden Looper, Alfalfa Semilooper, Army Cutworm (*Euxoa auxiliaris*), Tobacco Budworm, Corn Earworm, Variegated Cutworm, Soybean Looper, Beet Armyworm, Fall Armyworm, Velvet Armyworm, Yellowstriped Armyworm, Western Yellowstriped Armyworm, Cabbage Looper.

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Gossypium hirsutum. **Mexican Cotton** or Upland Cotton. Malvaceae. Nectar for migrating Cloudless Sulphur (observer in New Mexico).

Noctuidae: Black Cutworm, Corn Earworm.

Pyralidae: Garden Webworm (*Achyra rantalis*). Dusky Raisin Moth (*Ephesiodes gilvescentella*). American Plum Borer (*Euzophera semifuneralis*). Darker Moodna Moth (*Moodna ostrinella*).

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Grevillea robusta. **Silk Oak**. Proteaceae.

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Hamamelis virginiana. **Common Witch Hazel**. Hamamelidaceae. Nectar: for several noctuid moths: Corn Earworm (*Helicoverpa zea*), Armyworm (*Mythimna unipuncta*), Fall Armyworm (*Spodoptera frugiperda*), Cabbage Looper (*Trichoplusia ni*).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Mournful Thorn (*Lambdina fiscellaria*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Charred Dagger (*Acronicta brumosa*). Yellow-haired Dagger (*Acronicta impleta*). Impressed Dagger (*Acronicta impressa*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Morning-glory Prominent (*Schizura ipomoeae*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Hamelia patens. **Scarlet Bush**. Rubiaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Cloudless Sulphur, Orange-barred Sulphur, Monarch, Gulf Fritillary, Zebra Longwing (fq).

In one study it attracted only female Zebra Longwing: Luis Mendoza-Cuenca, & Macías-Ordóñez, R. 2005. "Foraging Polymorphism in Heliconius charitonia (Lepidoptera: Nymphalidae): Morphological Constraints and Behavioural Compensation". *Journal of Tropical Ecology*, 21 (4): 407-415. Retrieved from <http://www.jstor.org/stable/4092018>

No larval host values.

Havardia pallens. **Tenaza. Guajillo. Ape's Ear Ring**. Fabaceae. Ingeae. Nectar: Pipevine Swallowtail, Western Giant Swallowtail. Queen. Common Sootywing, Hammock Skipper. Long-tailed Skipper. Clavipes Sphinx (*Aellopos clavipes*, Sphingidae).

Hostplant for Ceraunus Blue (Jim Brock).

In Tucson in the cold winter of 2012, Jim Brock found it more cold hardy than Feather Tree (*Lysiloma watsonii*).

Hebe. Scrophulariaceae. Nectar for Fiery Skipper, Umber Skipper.

'Great Orme' is said to be best. 'Youngii' [aka Hebe Carl Teschner] is also very good, and apparently, *Hebe salicifolia*.

Hedera helix. **English Ivy.** Araliaceae. Lady. Paul Cherubini posted a YouTube video: http://www.youtube.com/watch?v=qC_6FRtog-Q shows a heavy concentration of Monarch at nectar on large sunlit flowering masses of English Ivy at Cayucos, California on 11 October 2011. Flowers also attract Cabbage White, Painted Lady, Red Admiral, California Tortoiseshell. Attractive to the Herald (*Scoliopteryx libatrix*, Noctuidae) in England, and likely here, too. Also a nectar source for the Genista Broom Moth (*Uresiphita reversalis*).

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*). Omnivorous Looper (*Sabulodes aegrotata*).

Pyralidae: False Greenhouse Leaf-tier (*Udea profundalis*).

Hedychium coronarium. **White Ginger Lily.** Zingiberaceae. Nectar: Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae).

Helenium amarum. **Bitterweed.** Asteraceae. Helenieae. Nectar: Pipevine Swallowtail, Sleepy Orange, Cloudless Sulphur, Dainty Sulphur, American Lady, Painted Lady, Common Buckeye, Bordered Patch, Gulf Fritillary, Variegated Fritillary, Pearl Crescent (fq), Gray Hairstreak, Eastern Tailed Blue, Silver-spotted Skipper, Common Checkered-Skipper, Dun Skipper, Eufala Skipper, Fiery Skipper (fq), and Sagem.

Helenium autumnale. **Sneezeweed.** Asteraceae. Helenieae. Nectar: Clouded Sulphur, Cloudless Sulphur, Orange Sulphur, Cabbage White, American Lady, Common Buckeye, Gulf Fritillary, Pearl Crescent, Common Checkered-Skipper, Tawny-edged Skipper, Fiery Skipper, Eufala Skipper, Juba Skipper and Yellow-collared Scape Moth. Its nectar attraction seems rather modest for Lepidoptera.

Helianthus grosseserratus. **Sawtooth Sunflower.** Asteraceae. Heliantheae. Pipevine Swallowtail, Southern Dogface, Clouded Sulphur, Monarch (fq), Painted Lady, American Lady, Variegated Fritillary, Yellow-collared Scape Moth, Celery Moth. Shapiro finds it generally good at attracting butterflies, especially Monarch.

Helianthus microcephalus. **Small Wood Sunflower.** Asteraceae. Heliantheae. Monarch. Butterflies said to 'adore' it. 'Lemon Queen' is a selection.

Helianthus mollis. **Downy Sunflower.** Asteraceae. Heliantheae. Nectar: Clouded Sulphur, Monarch, and Pearl Crescent.

Helianthus tuberosus. **Jerusalem Artichoke.** Asteraceae. Heliantheae. Nectar: Checkered White, Orange Sulphur (fq), Clouded Sulphur, Monarch (fq), Red Admiral, Painted Lady, American Lady, Pearl Crescent, Variegated Fritillary and Common Sootywing.

Hostplant for Bordered Patch.

Noctuidae: Army Cutworm (*Euxoa auxiliaris*).

Pyralidae: American Sunflower Moth (*Homoeosoma electella*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Helichrysum bracteatum (now *Xerochrysum bracteatum*). **Golden Everlasting. Strawflower.** Asteraceae. Gnaphalieae. Nectar: Milbert's Tortoiseshell, Mourning Cloak, Red Admiral, Painted Lady, West Coast Lady, Fiery Skipper.

Heliopsis helianthoides. **Ox-eye Sunflower.** Asteraceae. Heliantheae. Nectar: Orange Sulphur (fq), Clouded Sulphur, Dainty Sulphur, Checkered White, Monarch (fq), Painted Lady, American Lady, Pearl Crescent, Great Spangled Fritillary, Variegated Fritillary, Gray Hairstreak, Eastern Tailed Blue, Common Sootywing, Common Checkered-Skipper, Sachem, Tawny-edged Skipper, European Skipper, Currant Clearwing (*Synanthedon tipuliformis*, Sesiidae).

Heliotropium amplexicaule. **Clasping Heliotrope.** Boraginaceae. Nectar: Pipevine Swallowtail, Cabbage White, Cloudless Sulphur (fq), Sleepy Orange (fq), Orange Sulphur, American Lady, Common Buckeye (fq), Gulf Fritillary, Variegated Fritillary (fq), Pearl Crescent (fq), Gray Hairstreak, Common Checkered-Skipper, Common Sootywing, Dun Skipper, Fiery Skipper (fq), Eufala Skipper, Sachem.

Heliotropium arborescens. **Heliotrope.** Boraginaceae. Nectar: Cabbage White, Orange Sulphur, Monarch, Painted Lady, Red Admiral, Gulf Fritillary, Pearl Crescent, Gray Hairstreak, Ceraunus Blue, Common Sootywing, Silver-spotted Skipper, Eufala Skipper, Sachem, and Fiery Skipper. Moths also.

No known larval host values.

'Atlantis' and 'Fragrant Delight' are some varieties.

Heliotropium indicum. **Indian Heliotrope.** Boraginaceae. Nectar: Sleepy Orange, Queen, Monarch, Mexican Fritillary, Pearl Crescent, hairstreaks, blues, Common Checkered-Skipper, Eufala Skipper.

Helipterum anthemoides. **Chamomile Sunray.** Asteraceae. Gnaphalieae.

Hemerocallis fulva. **Daylily.** Liliaceae. Nectar: Two-tailed Swallowtail.

Heptacodium miconioides. **Seven Sons.** Caprifoliaceae. Nectar: Ladies, Red Admiral, Viceroy, Monarch (fq) and hawkmoths. Attracts Eastern Tiger Swallowtail in the East. Likely others.

Typically flowers about September, fragrant.

Deciduous. Monrovia suggests USDA Zones 5-8.

Hesperaloe parviflora. **Red Yucca.** Agavaceae. Nectar: Western Tiger Swallowtail. Hummingbirds.

Hesperis matronalis. **Dame's Rocket.** Brassicaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Pale Swallowtail (fq), Old World Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail (fq),

Cabbage White (fq), Checkered White, Margined White (fq), Orange Sulphur, Monarch, Red Admiral, Painted Lady (fq), American Lady, Northwest Fritillary, Gray Hairstreak, Juniper Hairstreak, Silver-spotted Skipper (fq), Sachem. Ipsilon Dart (*Agrotis ipsilon*). Moths. Scott says “not very popular in my backyard.” April – July.

Jeremy Tatum found and reared Cabbage White and Margined White caterpillars from Dame’s Rocket on southern Vancouver Island. Scott also notes it for Checkered White and Cabbage White.

Plutellidae: Dame's Rocket Moth (*Plutella porectella*), an introduced moth.

Deadheading recommended preventing seed set, as it may be invasive.

Hibiscus. Malvaceae. Nectar: Cloudless Sulphur.

Hibiscus brackenridgei. Malvaceae.

Gelechiidae: Pink Bollworm (*Pectinophora gossypiella*).

Hibiscus moscheutos. **Rose-mallow**. Malvaceae. Nectar: Cloudless Sulphur; other butterflies and moths.

Noctuidae: Corn Earworm (*Helicoverpa zea*).

Hibiscus rosa-sinensis. **Chinese Hibiscus**. Malvaceae. Nectar: Western Tiger Swallowtail, Cloudless Sulphur, Orange-barred Sulphur, Gulf Fritillary, hairstreaks and blues.

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Hibiscus sabdariffa. **Roselle**. Malvaceae.

Noctuidae: Corn Earworm (*Helicoverpa zea*).

Pyralidae: Alfalfa Webworm (*Loxostege cerealis*).

Hibiscus syriacus. **Rose of Sharon**. Malvaceae. Nectar: Northern Cloudywing, Eufala Skipper. Photograph at 1:00 a.m. on a white one: Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae). Slight nectar value for butterflies.

Hostplant for Gray Hairstreak.

Arctiidae: Fall Webworm.

Lymantriidae: White-marked Tussock Moth.

Hibiscus trionum. **Flower-of-an-Hour**. Malvaceae. Nectar: Clouded Sulphur, Cabbage White.

Foodplant for the Common Checkered-Skipper.

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Corn Earworm (*Helicoverpa zea*).

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Hordeum vulgare. **Barley**. Poaceae. Hordeae.

Noctuidae: Pale Western Cutworm, Glassy Cutworm, Rusty Shoulder Knot, Alfalfa Looper, Army Cutworm (*Euxoa auxiliaris*), Red-backed Cutworm, *Euxoa ridingsiana*, Stephen's Gem, Armyworm, Fall Armyworm, and Setaceous Hebrew Character.

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Hosta sp. **Plantain Lily**. Asparagaceae. Nectar: White-lined Sphinx.

Humulus lupulus. **Hops**. Cannabaceae.

Reportedly, a larval host for the Red Admiral, but some populations will not even accept it. Reportedly a hostplant for Gray Hairstreak.

Noctuidae: Hop Looper (*Hypena humuli*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Hyacinthoides non-scripta (*Scilla non-scripta*). **English Bluebell**. Hyacinthaceae. A nectar plant for Old World Swallowtail, Cabbage White, Gray-veined White (Margined White) and Arctic Skipper, at least in England. Considered secondary, according to UK Butterflies.

Hydrangea spp. **Hydrangea**. Hydrangeaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Hydrangea arborescens. **Smooth Hydrangea**. Hydrangeaceae. Nectar: Pipevine Swallowtail, Pearl Crescent, Coral Hairstreak, Northern Cloudywing, Silver-spotted Skipper, Dun Skipper (Missouri study by Smart, et.al.).

Hydrangea macrophylla. **Bigleaf Hydrangea**. Saxifragaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*) (Wynne, et.al. 1991).

Hylotelephium spectabile (syn. *Sedum spectabile*). **Showy Stonecrop**. Crassulaceae. Nectar: Monarch, Painted Lady, American Lady, Red Admiral (fq), Common Buckeye, Gulf Fritillary, Green Comma, Comma, Milbert's Tortoiseshell, Gray Hairstreak, American Copper, Silver-spotted Skipper, Sachem, Fiery Skipper, Woodland Skipper. Shapiro finds this the only common succulent that attracts butterflies.

'Brilliant' (bright pink) one the best. 'Carmen' (rose pink). 'Meteor' (red) said to be very good. 'Iceberg' (white). 'Neon' (deeper rose pink than 'Brilliant') also said to be very good.

Hyssopus officinalis. **Hyssop**. Lamiaceae. Nectar: Western Tiger Swallowtail, Cabbage White (fq), Painted Lady, Common Buckeye, Common Wood-Nymph, European Skipper. One of the best 'herbs' for butterflies ... a blue variety of Hyssop proved more effective than lavender at drawing butterflies. Attracts 16 species of butterflies in Britain.

Iberis amara. **Rocket Candytuft. Wild Candytuft.** Brassicaceae. Attracts the Monarch. Fragrant nectar plant. The English find it the most attractive in the genus for butterflies.

Best sown direct to the garden.

Iberis gibraltarica. **Gibraltar Candytuft.** Nectar plant.

Spreading sub-shrub with lilac-colored flowers; national flower of Gibraltar.

Iberis sempervirens. **Evergreen Candytuft.** Brassicaceae. Sulphurs, especially; California Pyrausta Moth (*Pyrausta californicalis*, Pyralidae).

Iberis umbellata. **Globe Candytuft.** Brassicaceae. Nectar: Monarch, Red Admiral, Painted Lady, Spring Azure, Silvery Blue. Said to be a good nectar plant in San Diego.

Very easy to grow from seed.

Ilex aquifolium **English Holly.** Aquifoliaceae.

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*, Tortricidae) – a cosmopolitan micromoth. Reported from Europe for the Red-barred Tortrix (*Ditula angustiorana*), which moth also occurs in California. No other known values.

Ilex cornuta. **Chinese Holly.** Aquifoliaceae.

No known Lepidopteran values.

Impatiens capensis. **Jewelweed.** Balsaminaceae. Nectar: Sleepy Orange, Cloudless Sulphur (fq), Monarch [Michigan], Painted Lady, American Lady.

Impatiens wallerana (syn. *Impatiens sultanii* Hook f.). **Impatiens.** Balsaminaceae. Nectar: Cloudless Sulphur, Cabbage White, Gulf Fritillary, Fiery Skipper, White-lined Sphinx.

Inula helenium. **Elecampane.** Asteraceae. Inuleae. Nectar: American Lady, Variable Checkerspot, Common Wood-Nymph. In England, their Large White, Meadow Brown, Peacock, Small Copper, Small Tortoiseshell, and Wall Brown.

Inula magnifica. **Magnificent Elecampane.** Asteraceae. Inuleae. Attracts butterflies, at least in England.

Ipomoea alba (*Calonyction aculeatum*). **Moonflower.** Convolvulaceae. Nectar: White-lined Sphinx (*Hyles lineata*, Sphingidae), Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae), Achemon Sphinx (*Eumorphia achemon*), Carolina Sphinx (*Manduca sexta*, Sphingidae) (fq), and Rustic Sphinx (*Manduca rustica*, Sphingidae). Great plant for the moth garden!

Ipomoea batatas. **Sweet Potato.** Convolvulaceae. Nectar: Cloudless Sulphur.

Foodplant for Variegated Fritillary and Painted Lady.

Arctiidae: Yellow Woollybear.

Noctuidae: Subterranean Dart, Miranda Moth, Dark-sided Cutworm, Dingy Cutworm, Corn Earworm, Armyworm, Soybean Looper, Beet Armyworm, Fall Armyworm, Yellowstriped Armyworm, Cabbage Looper.

Pterophoridae: Morning Glory Plume Moth (*Emmelina monodactyla*).

Pyralidae: American Plum Borer (*Euzophera semifuneralis*). Spinach Moth (*Spoladea recurvalis*).

Sphingidae: Pink-spotted Hawkmoth (*Agrius cingulata*) (fq). White-lined Sphinx (*Hyles lineata*).

Tineidae: Banana Moth (*Opogona sacchari*).

Ipomoea coccinea. **Red Morning Glory. Redstar.** Convolvulaceae. Nectar: Sleepy Orange, Cloudless Sulphur, Gulf Fritillary. Hummingbirds!

Larval host for the Morning-glory Prominent.

Ipomoea purpurea. **Common Morning-glory.** Convolvulaceae. Nectar: Cloudless Sulphur, Pink-spotted Hawkmoth, White-lined Sphinx, Corn Earworm.

Reported in Brazil as a larval host for the Laviana Skipper.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Lyonetiidae: Sweet Potato Leafminer (*Bedellia somnulentella*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Corn Earworm (*Helicoverpa zea*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pterophoridae: Morning Glory Plume Moth.

Sphingidae: Pink-spotted Hawkmoth (*Agrius cingulata*, Brazil).

Ipomoea quamoclit. **Cypressvine.** Convolvulaceae. Nectar: Sleepy Orange, Cloudless Sulphur (fq), Gulf Fritillary, Variegated Fritillary. Hummingbirds.

Ipomoea triloba. **Littlebell.** Convolvulaceae.

Sphingidae: Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae).

Iris pseudacorus. **Yellow Flag Iris.** Iridaceae. Nectar: Cloudless Sulphur (occasional). In England, considered a “moth plant”.

Iris versicolor. **Blue Flag.** Iridaceae. Nectar: Tawny-edged Skipper.

Ixora coccinea. **Flame of the Woods.** Rubiaceae. Nectar: Monarch, Gulf Fritillary.

Zone 24.

Jacaranda mimosifolia. **Jacaranda**. Bignoniaceae.

No larval host values.

Jasminum nudiflorum. **Winter Jasmine**. Oleaceae. Nectar: Cloudless Sulphur, Sleepy Orange.

Jasminum officinale. **Common White Jasmine**. Oleaceae. Attracts moths at night (Royal Horticultural Society).

No known value as a larval host.

Juglans regia. **English Walnut**. Juglandaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Walnut Spanworm (*Phigalia plumogeraria*), *Prochoerodes forficaria*.

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*), Western Tussock Moth (*Orgyia vetusta*).

Nepticulidae: Pecan Serpentine Leafminer (*Stigmella juglandifolliella*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). The Penitent (*Catocala piatrix*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Pyralidae: Navel Orangeworm (*Amyelois transitella*), Almond Moth (*Cadra cautella*), American Plum Borer (*Euzophera semifuneralis*), Stored Nut Moth (*Paralipsa gularis*), Indian Meal Moth (*Plodia interpunctella*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*), Orange Tortrix (*Argyrotaenia cupressae*), Codling Moth (*Cydia pomonella*).

Juglans nigra. **Black Walnut**. Juglandaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*), Yellow-spotted Tiger Moth (*Lophocampa maculata*), Yellow Woollybear or Virginian Tiger Moth (*Spilosoma virginica*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*), Spring Cankerworm (*Paleacrita vernata*), Walnut Spanworm (*Phigalia plumogeraria*), Omnivorous Looper (*Sabulodes aegrotata*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*), White-marked Tussock Moth (*Orgyia leucostigma*), Western Tussock Moth (*Orgyia vetusta*).

Nepticulidae: Pecan Serpentine Leafminer (*Stigmella juglandifolliella*).

Noctuidae: Yellow-haired Dagger (*Acrionicta impleta*), *Catocala californica*, Penitent Underwing (*Catocala piatrix*), Bordered Salween (*Pyrrhia umbra*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*), Red-humped Caterpillar (*Schizura concinna*), Morning-glory Prominent (*Schizura ipomoeae*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*), Locust Bean Moth (*Ectomyelois ceratoniae*), American Plum Borer (*Euzophera semifuneralis*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Tortricidae: Codling Moth (*Cydia pomonella*).

Juniperus chinensis. **Chinese Juniper**. Cupressaceae.

Cosmopterigidae: *Periploca nigra*.

Geometridae: *Digrammia atrofasciata*.

Yponomeutidae: Cypress Tip Moth (*Argyresthia cupressella*).

Juniperus scopulorum. **Rocky Mountain Juniper**. Cupressaceae.

Recorded as a foodplant for the Juniper Hairstreak, Nelson's Hairstreak, and Siva Hairstreak.

Geometridae: Freyer's Pug (*Eupithecia intricata*), *Eupithecia placidata*, *Stannoctenis morrisata*.

Noctuidae: *Abagrotis glenni* and *Abagrotis mirabilis*.

Tortricidae: Larvae of *Henricus infernalis*, which occurs naturally in Californian juniper woodlands, successfully reared on Rocky Mountain Juniper.

Justicia brandegeana. **Shrimp Plant**. Acanthaceae. Nectar: Cloudless Sulphur.

Justicia candicans. Acanthaceae. Nectar: Mexican Yellow (Charles Melton).

Kallstroemia grandiflora. **Desert Poppy**. Zygophyllaceae. A good butterfly nectar plant [Xerces Society]. Common Sootywing is a flower visitor.

Knautia arvensis. **Field Scabious**. Caprifoliaceae. In England, preferred nectar source for Essex Skipper, Small Skipper and Small Tortoiseshell.

Koelreuteria bipinnata. **Chinese Flame Tree**. Sapindaceae.

No known larval host values for California Lepidoptera.

Koelreuteria paniculata. **Goldenrain Tree**. Sapindaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae), Armyworm (*Mythimna unipuncta*, Noctuidae).

No known larval host values for California Lepidoptera.

Lactuca sativa. **Lettuce**. Asteraceae. Cichorieae.

Sphingidae: White-lined Sphinx, Carolina Sphinx.

Arctiidae: Garden Tiger Moth, Salt Marsh Moth (*Estigmene acrea*) HOSTS, Ornate Tiger Moth, Mexican Tiger Moth, Yellow Woollybear.

Noctuidae: Black Cutworm, Pale-sided Cutworm, Subterranean Dart, Old Man Dart, Celery Moth, Yellow-headed Cutworm, Glassy Cutworm, Alfalfa Semilooper, Nutmeg, *Euxoa laetificans* (Noctuidae), Dark-sided Cutworm, Striped Cutworm, Dingy Cutworm, Corn Earworm, Darker-spotted Straw Moth, Tobacco Budworm, Stephen's Gem, Large Yellow Underwing, Variegated Cutworm, Armyworm, Soybean Looper, Clandestine Dart, Beet Armyworm, Velvet Armyworm, Yellowstriped Armyworm, Cabbage Looper, and the Setaceous Hebrew Character.

Lagerstroemia indica. **Crape Myrtle**. Lythraceae.

Sphingidae: Rustic Sphinx (*Manduca rustica*).

Cosmopterigidae: Florida Pink Scavenger (*Anatrachyntis badia*).

Lamium galeobdolon. **Yellow Archangel**. Lamiaceae. In England, its flowers are popular with moths.

Lantana camara. **Lantana**. Verbenaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Giant Swallowtail (fq), Cabbage White, Checkered White, Sara Orangetip, Southern Dogface, Sleepy Orange, Lyside Sulphur, Orange Sulphur, Large Orange Sulphur, Cloudless Sulphur, Little Yellow. Monarch, Queen, West Coast Lady, Painted Lady, American Lady, West Coast Lady, Common Buckeye, Tropical Buckeye, Texan Crescent, Lorquin's Admiral, Red Admiral, Milbert's Tortoiseshell, Great Spangled Fritillary, Bordered Patch, California Patch, Variegated Fritillary, Mexican Fritillary, Gulf Fritillary (fq), Zebra Longwing, Common Wood-Nymph, Julia. Gray Hairstreak, Leda Ministreak. Funereal Duskywing, Mournful Duskywing, Northern Cloudywing, Arizona Powdered-Skipper, Erichson's White Skipper, Common Checkered-Skipper, Silver-spotted Skipper, Hammock Skipper, Long-tailed Skipper, Dorantes Longtail, Common Sootywing, Common Roadside-Skipper, Brazilian Skipper, Fiery Skipper (fq), Eufala Skipper, Sachem, Sandhill Skipper, Umber Skipper, Orange Skipperling. White-lined Sphinx, Snowberry Clearwing (fq), Clavipes Sphinx. Brown Ctenucha (fq).

Among the 'Most Recommended' by *Desert Butterfly Gardening*.

A study found Zebra Longwing flower visitors exclusively the males: Luis Mendoza-Cuenca, & Macías-Ordóñez, R. 2005. "Foraging Polymorphism in *Heliconius charitonia* (Lepidoptera: Nymphalidae): Morphological Constraints and Behavioural Compensation". *Journal of Tropical Ecology*, 21 (4): 407-415. Retrieved from <http://www.jstor.org/stable/4092018>

Noctuidae: Lantana Stick Moth (*Neogalea sunia*) [Seven Backyards web site].

Sphingidae: Reported as a larval host for the Rustic Sphinx (*Manduca rustica*).

Lantana camara '**Dallas Red**'. Verbenaceae. Nectar: Cloudless Sulphur, Sleepy Orange, Gulf Fritillary (fq). Butterfly favorite at U.C. Riverside Arboretum.

Lantana 'Miss Huff'. Verbenaceae. Cloudless Sulphur, Sleepy Orange.

Orange and pink flowers, cold hardier than many varieties.

Lantana montevidensis. **Purple Lantana. Trailing Lantana.** Verbenaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Baird's Old World Swallowtail, Western Giant Swallowtail (Anne Reeves). California Dogface, Southern Dogface, Sleepy Orange, Mexican Yellow. American Snout. Monarch, Queen, Gulf Fritillary, Variegated Fritillary, American Lady, Painted Lady, West Coast Lady, Common Buckeye, Texan Crescent, Bordered Patch, Lorquin's Admiral, Red Admiral, Mourning Cloak. Gray Hairstreak, Great Purple Hairstreak, Juniper Hairstreak, Leda Ministreak, Purplish Copper. Silver-spotted Skipper, White Checkered-Skipper (David Horner), Long-tailed Skipper, Funereal Duskywing, Mournful Duskywing, Eufala Skipper, Fiery Skipper, Umber Skipper, Western Branded Skipper, Woodland Skipper. White-lined Sphinx. Generally less of a draw than Lantana camara. Among the 'Most Recommended' by *Desert Butterfly Gardening*.

Larix occidentalis. **Western Larch.** Pinaceae.

Hostplant for Pine White.

Lathyrus odoratus. **Sweet Pea.** Fabaceae. Fabeae. Nectar: Umber Skipper.

May serve as a hostplant for Marine Blue and Long-tailed Skipper. Suitable lab host for Western Tailed Blue.

Noctuidae: Tobacco Budworm (*Chloridea virescens*). Soybean Looper (*Chrysodeixis includens*). Corn Earworm (*Helicoverpa zea*). Darker-spotted Straw Moth (*Heliothis phloxiphaga*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Cabbage Looper (*Trichoplusia ni*).

Laurus nobilis. **Sweet Bay.** Lauraceae.

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*).

Lavandula angustifolia. **English Lavender.** Lamiaceae. Nectar: Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail, Cabbage White (fq), Checkered White, California Dogface, Monarch, Painted Lady, Eastern Tailed Blue, Reakirt's Blue, Common Checkered-Skipper. Some think it better than Spanish Lavender for butterflies.

'Blue Cushion'. 'Dwarf Blue'.

Lavandula '**Goodwin Creek Gray**'. Lamiaceae. Nectar: Sara Orangetip, Hairstreaks, Mournful Duskywing, Fiery Skipper.

Lavandula X intermedia. Lamiaceae. Nectar: Cabbage White, American Copper, Red Admiral.

Lavandula latifolia. **Spike Lavender**. Lamiaceae. Nectar: Monarch, American Lady, Common Buckeye, skippers. Said to be one of the better lavenders for butterflies. In its native range attracts a diurnal hawkmoth and 4 pierids including Cabbage White, seven Nymphalidae, three Lycaenidae, 4 Hesperidae including Branded Skipper (*Hesperia comma*). (Herrera, C. 1987. "Components of Pollinator "Quality": Comparative Analysis of a Diverse Insect Assemblage". *Oikos*, 50 (1): 79-90. doi:10.2307/3565403).

Lavandula 'Lisa Marie'. Lamiaceae.

Lavandula minutolli. **Fernleaf Lavender**. Lamiaceae. An especially favored nectar plant for the Monarch.

Lavandula stoechas 'Madrid Blue'. 'White'. **Spanish Lavender**. Lamiaceae. Marine Blue.

Lavatera x clementii 'Lavender Lady' 'Barnsley Baby'. Malvaceae. Attracts butterflies according to U. C. Riverside Botanic Gardens.

Lavatera 'Red Rum'. Malvaceae.

Lens culinaris. **Lentil**. Fabaceae. Fabeae.

Noctuidae: Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Leonotis leonurus. **Lion's Tail**. Lamiaceae. Nectar: Monarch. A suitable nectar source for African sunbirds, but also gets butterflies in its native South African habitat.

Liatris aspera. **Rough Blazing Star**. Asteraceae. Eupatorieae. Nectar: Swallowtails, Cabbage White, Southern Dogface, Cloudless Sulphur, Common Sulphur, Orange Sulphur, Monarch, Common Buckeye, Painted Lady, Coral Hairstreak, Melissa Blue, Silver-spotted Skipper, Dun Skipper, Sachem, Tawny-edged Skipper, Yellow-Collared Scape Moth, Corn Earworm.

Liatris ligulistylis. **Rocky Mountain Blazing Star. Meadow Blazing Star**. Asteraceae. Eupatorieae. Nectar: Giant Swallowtail, Monarch (fq) -- "tops", fritillary. Popular with butterflies, possibly more so than *L. spicata*.

Liatris spicata. **Marsh Blazing Star**. Asteraceae. Eupatorieae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail. Cabbage White, Sleepy Orange, Clouded Sulphur, Cloudless Sulphur (fq). Common Wood-Nymph, Monarch, American Lady, Red Admiral, Common Buckeye (fq), Great Spangled Fritillary, Gulf Fritillary (fq), Variegated Fritillary, Pearl Crescent. Gray Hairstreak, Eastern Tailed Blue. Northern Cloudywing (fq), Common Checkered-Skipper, Silver-spotted Skipper (fq), Long-tailed Skipper(fq), Dun Skipper, Eufala Skipper, Fiery Skipper (fq), Sachem, Tawny-edged Skipper. Armyworm (*Mythimna unipuncta*, Noctuidae). '**Kobold Original**' is a butterfly favorite.

Ligustrum japonicum. **Wax-leaf Privet**. Oleaceae.

No known larval host value here; does serve Rustic Sphinx caterpillars in Brazil.

Ligustrum lucidum. **Glossy Privet**. Oleaceae.

Reported to serve as a larval host for Two-tailed Swallowtail, likely exceptionally.

Ligustrum ovalifolium. **California Privet**. Oleaceae. Nectar: Ipsilon Dart, Armyworm.

Reported to serve as a larval host for the West Coast Lady, likely rather secondary.

Sphingidae: Great Ash Sphinx, Elegant Sphinx, and Incense Cedar Sphinx. In Brazil, it has served as a larval host for the Rustic Sphinx.

Ligustrum vulgare. **Common Privet**. Oleaceae. Nectar: Clouded Sulphur, American Snout, Painted Lady, American Lady, Red Admiral, Silver-spotted Skipper, Yellow-collared Scape Moth.

Recorded as a larval host for the Two-tailed Swallowtail, West Coast Lady.

Arctiidae: Fall Webworm.

Geometridae: Spring Cankerworm.

Lymantriidae: White-marked Tussock Moth.

Sphingidae: Great Ash Sphinx, Incense Cedar Sphinx.

Lilium speciosum. **Oriental Lily**. Liliaceae. Nectar: Monarch, Silver-spotted Skipper.

Lilium superbum. **Swamp Lily**. Liliaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail.

Limonium perezii. **Sea Lavender**. Plumbaginaceae. Nectar: Giant Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Cabbage White, Checkered White, Sara Orangetip, West Coast Lady, Painted Lady, Common Buckeye, Gray Hairstreak, Common Checkered-Skipper, Sachem, Umber Skipper, Fiery Skipper, White-lined Sphinx. Butterfly favorite at U.C. Riverside Arboretum.

Limonium platyphyllum (L. latifolium). **German Statice**. Plumbaginaceae. Nectar: Scott notes flower visits by Checkered White, Reakirt's Blue, noting it "popular with tiny lycaenids".

Linum usitatissimum. **Common Flax**. Linaceae.

In Brazil and Neotropical areas, the Variegated Fritillary reported to utilize Common Flax as a caterpillar plant.

Geometridae: Spring Cankerworm.

Noctuidae: Striped Cutworm, Nutmeg, Early Cutworm, Bertha Armyworm, Armyworm, Fall Armyworm, Setaceous Hebrew Character.

Pyralidae: Lesser Cornstalk Borer, Beet Webworm.

Tortricidae: Omnivorous Leaf-tier.

Linaria maroccana. **Moroccan Toadflax**. Plantaginaceae.

Foodplant for Common Buckeye.

Linaria vulgaris. **Butter-and-eggs**. Plantaginaceae. Scott observed some nectar visits, some through possible carpenter bee bites. Orange Sulphur, Gray Hairstreak, Tailed Copper.
Foodplant for Common Buckeye.

Lippia cf. alba (Oscar Clarke). **Juanilama**. Verbenaceae. Summer flowers attract butterflies (U. C. Riverside Botanic Gardens).

Liquidamber styraciflua. **American Sweet Gum**. Hamamelidaceae.

Shapiro reports some populations, as in Sacramento, of Western Tiger Swallowtail developing on American Sweet Gum.

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Maple Spanworm (*Ennomos magnaria*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Copper Underwing, *Paectes declinata*.

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Pyralidae: American Plum Borer (*Euzophera semifuneralis*).

Liriodendron tulipifera. **Tulip Tree**. Magnoliaceae.

Saturniidae: Polyphemus Moth. Serves many species of silkmoths found east of California.

Arctiidae: Fall Webworm.

Geometridae: Linden Looper.

Lymantriidae: European Gypsy Moth. White-marked Tussock Moth.

Lithospermum canescens. **Puccoon**. Boraginaceae. Nectar: Pipevine Swallowtail.

Depressariidae: Gray Ethmia (*Ethmia monticola*) (Moths of North Dakota web site).

Lobelia erinus. **Garden Lobelia**. Campanulaceae. Nectar: Umber Skipper.

Lobelia laxiflora. **Mexican Bush Lobelia**. Campanulaceae. Nectar for Western Tiger Swallowtail. Hummingbirds.

Lobelia siphilitica. **Great Blue Lobelia**. Campanulaceae. Nectar: Pipevine Swallowtail, Orange Sulphur, Painted Lady, American Lady, Variegated Fritillary (fq), Monarch, Silver-spotted Skipper (fq), Common Checkered-Skipper, Sachem, Eufala Skipper, Fiery Skipper, Tawny-edged Skipper. Scott rates it very popular as a butterfly nectar plant.

Lobularia maritima. **Sweet Alyssum**. Brassicaceae. Nectar: Cabbage White, Clouded Sulphur, Mylitta Crescent, Spring Azure, Silvery Blue, Sonoran Blue, skippers.

Lonicera fragrantissima. **Winter Honeysuckle**. Caprifoliaceae. Nectar: Red Admiral (fq), American Snout, and others wintering as adults. In Georgia attracts: Eastern Tiger Swallowtail, Sleepy Orange, Cloudless Sulphur, American Lady, Red Admiral, Question Mark and Gray Hairstreak.

Lonicera japonica. **Japanese Honeysuckle**. Caprifoliaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Cabbage White, Sleepy Orange, Cloudless Sulphur (fq), Orange Sulphur, American Lady, Silver-spotted Skipper, White-lined Sphinx, Carolina Sphinx, Five-spotted Hawkmoth, Great Ash Sphinx, Wild Cherry Sphinx, and Achemon Sphinx.

Reported as a larval host for the Snowberry Clearwing (*Hemaris diffinis*).

Lonicera periclymenum. **Woodbine. European Honeysuckle**. Caprifoliaceae. Nectar: Giant Swallowtail, Silver-spotted Skipper. Sweet evening fragrance attracts moths (Royal Horticultural Society), pollinated by hawkmoths.

'Graham Thomas'.

Lonicera sempervirens. **Coral Honeysuckle**. Caprifoliaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Cloudless Sulphur, White-lined Sphinx. Mostly hummingbirds.

Lycium berlandieri. **Wolfberry**. Solanaceae. Nectar: Monarch, Queen, Arizona Powdered-Skipper, Funereal Duskywing.

Lychnis. Caryophyllaceae.

Noctuidae: Variable Capsule Moth (*Hadena variolata*).

Lychnis chalcedonica. **Maltese Cross**. Caryophyllaceae. Nectar: Two-tailed Swallowtail, Monarch, unidentified fritillary. Characterized as a "butterfly magnet". Hummingbirds.

Lychnis coronaria. **Rose Campion**. Caryophyllaceae. Nectar: Western Tiger Swallowtail, Cabbage White, Sleepy Orange, Gulf Fritillary, Silver-spotted Skipper, Tawny-edged Skipper, Umber Skipper. Scott notes three brief visits by Two-tailed Swallowtail, seems not very attractive for butterflies to him. Noted as a butterfly nectar plant in England.

Lycopersicon spp. **Tomatoes**. Solanaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Lycopersicon esculentum. **Tomato**. Solanaceae.

Gelechiidae: Tomato Pinworm (*Keiferia lycopersicella*). Potato Moth (*Phthorimaea operculella*).

Noctuidae: Pale-sided Cutworm, Pale Western Cutworm, Subterranean Dart, Old Man Dart, Alfalfa Semilooper, Army Cutworm (*Euxoa auxiliaris*), Dark-sided Cutworm, Striped Cutworm, Dingy Cutworm, Corn Earworm, Darker-spotted Straw Moth, Tobacco Budworm, Bertha Armyworm, Large Yellow Underwing, Variegated Cutworm, Soybean Looper, Beet Armyworm, Fall Armyworm, Yellowstriped Armyworm, Western Yellowstriped Armyworm, Cabbage Looper, Setaceous Hebrew Character.

Pyralidae: Eggplant Leafroller (*Lineodes integra*).

Sphingidae: White-lined Sphinx. Five-spotted Sphinx. Carolina Sphinx [aka Tomato Hornworm].

Tortricidae: Fruit Tortricid (*Acleris variegana*). Omnivorous Platynota (*Platynota rostrana*), Omnivorous Leafroller (*Platynota stultana*).

Lysiloma watsonii (aka *L. microphylla* var. *thornberi* or *L. thornberi*). **Littleleaf False Tamarind. Feather Tree. Fern-of-the-Desert.** Fabaceae. Ingeae. Nectar: Red Admiral. Value as a nectar source seems generally slight to nil, with generally no noticeable usage.

Hostplant for Large Orange Sulphur, Marine Blue. A Leda Ministreak caterpillar reared on it but came out deformed.

Hawked as a desert plant with a tropical feel.

Lysimachia atropurpurea. **Burgundy Loosestrife.** Primulaceae. Attracts butterflies and hummingbirds according to Annie's Annuals. Flowers May – September, needs optimum drainage, suitable for large containers.

Lysimachia clethroides. **Gooseneck Loosestrife.** Primulaceae. Attracts Swallowtails, Viceroy, Monarch (Jerry Sedenko). Also Common Wood-Nymph (Sighting 915730 on Butterflies and Moths of North America).

Magnolia grandiflora. **Southern Magnolia.** Magnoliaceae.

No values for Californian Lepidoptera.

Magnolia x soulangeana. **Saucer Magnolia.** Magnoliaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, et. al. 1991).

Magnolia stellata. **Star Magnolia.** Magnoliaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, et. al. 1991).

Malus spp. **Apples.** Rosaceae. Maleae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Malus pumila. **Apple.** Rosaceae. Maleae. Nectar: Pipevine Swallowtail, Mourning Cloak, Painted Lady, Red Admiral, Spring Azure, Mournful Duskywing, Ipsilon Dart.

Hostplant for Pale Swallowtail, Western Tiger Swallowtail, Viceroy, Lorquin's Admiral, Spring Azure, Brown Elfin, and the Gray Hairstreak.

Arctiidae: Garden Tiger Moth, Salt Marsh Moth (*Estigmene acrea*) HOSTS. Fall Webworm, Yellow-spotted Tiger Moth, Ruby Tiger Moth.

Choreutidae: Apple Leaf Skeletonizer (*Choreutis pariana*).

Coleophoridae: Pistol Casebearer (*Coleophora multipulvella*). Cherry Casebearer (*Coleophora pruniella*). *Coleophora sacramenta*.

Gelechiidae: Lesser Bud Moth (*Recurvaria nanella*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray, Peppered Moth, Small Engrailed, Maple Spanworm, Linden Looper, Lesser Grapevine Looper, *Eupithecia misturata* (Geometridae), Scallop Shell (*Rheumaptera undulata*, Geometridae), Horned Spanworm, Bruce Spanworm, Spring Cankerworm. Walnut Spanworm. Straight-line Plagodis. *Prochoerodes forficaria*. Large Lace Border. Wavy-lined Emerald.

Gracillariidae: *Phyllonorycter mespilella*.

Lasiocampidae: Western Tent Caterpillar, Forest Tent Caterpillar. Lappet Moth.

Lymantriidae: Variable Tussock Moth. European Gypsy Moth. Antique Tussock Moth. White-marked Tussock Moth. Western Tussock Moth.

Lyonetiidae: *Lyonetia prunifoliella*.

Noctuidae: Striped Cutworm. *Abagrotis orbis*, Red Cutworm (*Abagrotis placida*), Funerary Dagger, Gray Dagger, Yellow-haired Dagger, Impressed Dagger, Interrupted Dagger (*Acronicta interrupta*), Lost Dagger, Radcliffe's Dagger, Ipsilon Dart, Copper Underwing, *Annaphila arvalis*, *Apamea alia*, Alfalfa Semilooper, Three-spotted Sallow, Army Cutworm (*Euxoa auxiliaris*), Dark-sided Cutworm, Striped Cutworm, Dingy Cutworm, the Soothsayer, Corn Earworm, Large Gray Pinion, Zebra Caterpillar, Speckled Green Cutworm, Variegated Cutworm, Rufous Quaker (*Protorthodes rufula*), Armyworm, Clandestine Dart, Beet Armyworm, Fall Armyworm, Western Yellowstriped Armyworm, *Tetanolita palligera*, Setaceous Hebrew Character, *Xestia plebeia*, Gray Swordgrass Moth, Dot-and-Dash Swordgrass Moth, and the American Swordgrass Moth.

Notodontidae: Yellow-necked Caterpillar. Red-washed Prominent. Red-humped Caterpillar. Unicorn Caterpillar.

Psychidae: Snailcase Bagworm (*Apterona helicoidella*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*). Destructive Pruneworm Moth (*Acrobasis tricolorella*). Navel Orangeworm (*Amyelois transitella*). Almond Moth (*Cadra cautella*). Locust Bean Moth (*Ectomyelois ceratoniae*). American Plum Borer (*Euzophera semifuneralis*). Beet Webworm (*Loxostege stricticalis*). Darker Moodna Moth (*Moodna ostrinella*). *Oreana unicolorella*. Beehive Honey Moth (*Vitula serratilineella*).

Saturniidae: Polyphemus Moth, Ceanothus Silk Moth.

Sesiidae: Peachtree Borer.

Sphingidae: White-lined Sphinx, Blinded Sphinx, Wild Cherry Sphinx, Elegant Sphinx.

Tortricidae: *Acleris maximana*. Snowy-shouldered Acleris (*Acleris nivisellana*). Fruit Tortricid (*Acleris variegana*). Fruit Tree Leafroller (*Archips argyrospila*). Orange Tortrix. Oblique-banded Leafroller (*Choristoneura rosaceana*). Omnivorous Leaf-tier (*Cnephasia longana*). Codling Moth (*Cydia pomonella*, the typical 'apple worm'). Apricot Moth (*Ditula angustiorana*, a non-native species). Lesser Appleworm Moth (*Grapholita prunivora*). Off-white Hedya (*Hedya ochroleucana*). *Oreana unicolorella* (BugGuide). Pandemis Leafroller (*Pandemis pyrusana*). Maple Tip Moth (*Proteoteras aesculana*). Eye-spotted Bud Moth (*Spilonota ocellana*, a non-native species). Gray Leafroller (*Syndemis afflictana*).

Malva crispa. **Curled Mallow**. Malvaceae.

A specimen at U.C. Botanic Garden in Berkeley a popular hostplant for Ladies, presumably Western Lady.

Malva moschata. **Musk Mallow**. Malvaceae. Nectar: Painted Lady (fq).

Hostplant for Painted Lady, Common Checkered-Skipper. Works well for Painted Lady.

Malvaviscus arboreus. **Turk's Cap**. Malvaceae. Nectar: Pipevine Swallowtail, Sleepy Orange, Cloudless Sulphur (fq), Orange-barred Sulphur, Large Orange Sulphur, Gulf Fritillary, Brazilian Skipper.

Tortricidae: Cotton Tipworm (*Crocidosema plebejana*).

Matthiola incana. **Stock**. Brassicaceae. Nectar: Anise Swallowtail, Cabbage White, Monarch, Painted Lady.

Hostplant for Cabbage White.

Yponomeutidae: Diamondback Moth (*Plutella xylostella*).

Matricaria chamomila. **Chamomile**. Asteraceae. Anthemideae. Nectar: Mylitta Crescent, California Pyrausta (*Pyrausta californicalis*, Pyralidae). (Barbara Robeson).

Melaleuca lineariifolia. **Flaxleaf Paperbark. Cajeput Tree**. Myrtaceae. One tree in Tustin hosted twenty Mourning Cloak at nectar; also West Coast Lady. http://bugyou.blogspot.com/2008_05_01_archive.html

Melampodium leucanthemum. **Blackfoot Daisy**. Asteraceae. Millerieae. Nectar: Western Pygmy Blue (Laura Miller), Fiery Skipper.

Zones 2, 3, 10-13.

Melia azedarach. **Chinaberry**. Meliaceae. Slight nectar value, as for Pipevine Swallowtail, Cabbage White.

No larval host values for Californian Lepidoptera.

Melochia tomentosa. **Pyramid Bush. Teabush.** Sterculiaceae. Nectar: Sleepy Orange (Jim McCulloch), Gulf Fritillary. Said to be attractive to butterflies, plant native to Texas, not yet cultivated in California.

Mentha x piperita (hybrid of Mentha aquatica and Mentha spicata). **Peppermint.** Lamiaceae. Nectar: Common Buckeye, Pearl Crescent.

Mentha requienii. **Jewel Mint of Corsica.** Lamiaceae.

Pyralidae: Hostplant for California Pyrausta Moth (*Pyrausta californicalis*). Richard Worth found it most attracted to this particularly fragrant mint in his Salem, Oregon yard (NorWestLeps #6649).

Mentha spicata. **Spearmint.** Lamiaceae. Nectar: Western Tiger Swallowtail, Anise Swallowtail, Cabbage White (fq), Orange Sulphur, Pacific Fritillary, Coronis Fritillary (Nancy Asquith), Red Admiral, Painted Lady, Common Buckeye, Bordered Patch, Mylitta Crescent, Gray Hairstreak (Marc Kummel), Acmon Blue, Purplish Copper, Mournful Duskywing, Common Checkered-Skipper, Field Skipper aka Sachem, Sandhill Skipper, Silver-spotted Skipper, Snapdragon Plume Moth (*Amblyptilia pica*, Pterophoridae).

Hostplant for Painted Lady, Gray Hairstreak.

Geometridae: Wavy-lined Emerald (*Synchlora aerata*).

Noctuidae: Alfalfa Semilooper (*Autographa californica*). Bean Leafsketonizer (*Autoplusia egea*).

Pyralidae: California Pyrausta Moth (*Pyrausta californicalis*).

Mertensia virginica. **Virginia Bluebells.** Boraginaceae. Nectar: Monarch.

Mirabilis jalapa. **Four O'clock.** Nyctaginaceae. Nectar: One visit by Sleepy Orange reported. Pink-spotted Hawkmoth (*Agrius cingulata*, Sphingidae), Ello Sphinx (*Erinnyis ello*) (fq), Banded Sphinx (*Eumorpha fasciatus*, Sphingidae), Carolina Sphinx (*Manduca sexta*, Sphingidae), Rustic Sphinx (*Manduca rustica*), White-lined Sphinx (*Hyles lineata*) (fq). Del Rio and Burquez found the Ello Sphinx the main pollinator, followed by White-lined Sphinx.

One useful study: Del Rio, Carlos Martinez., & Alberto Burquez. 1986. "Nectar Production and Temperature Dependent Pollination in *Mirabilis jalapa* L." *Biotropica*, 18 (1): 28-31.

Geometridae: Somber Carpet (*Disclisiosprocta stellata*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Momordica charantia. **Bitter Melon.** Cucurbitaceae. Nectar: Sleepy Orange, Cloudless Sulphur, Little Yellow, Zebra Longwing (Fernandez-Hernandez).

Monarda fistulosa. **Wild Bergamot.** Lamiaceae. Nectar: Pipevine Swallowtail (fq), Giant Swallowtail (fq), Black Swallowtail, Two-tailed Swallowtail, Rocky Mountain Parnassian. Checkered White, Margined White, Clouded Sulphur, Orange Sulphur, Sleepy Orange. Monarch (fq -- Michigan), Common Wood-Nymph (fq), Mourning Cloak, Hackberry Emperor, Viceroy, Great Spangled Fritillary (fq), Callippe Fritillary (fq), Coronis Fritillary, Northwestern Fritillary (fq), Variegated Fritillary, Weidemeyer's Admiral, Red Admiral, Painted Lady (fq), American Lady, Pearl Crescent. Behr's

Hairstreak, Coral Hairstreak [fq in Michigan], Eastern Tailed Blue, Melissa Blue. Silver-spotted Skipper (fq), Common Sootywing, Northern Cloudywing, Afranius Duskywing, Field Skipper aka Sachem, Dun Skipper (fq), Pahaska Skipper, Tawny-edged Skipper, Uncas Skipper, Woodland Skipper. Western Snowberry Clearwing (Kummel). Bumblebees. One of the best for attracting a wide diversity of bees (Logan Rowe, Daniel Gibson, Douglas Landis, Jason Gibbs, Rufus Isaacs; A Comparison of Drought-Tolerant Prairie Plants to Support Managed and Wild Bees in Conservation Programs, *Environmental Entomology*, Volume 47, Issue 5, 3 October 2018, Pages 1128–1142.)

Tortricidae: *Xenotemna pallorana*.

Monarda ‘Claire Grace’ and ‘Petite Delight’. Lamiaceae. Said to thrive in California. *Montanoa grandiflora*. **Daisy Tree**. Asteraceae. Heliantheae. Nectar: Anise Swallowtail, West Coast Lady; a strong draw for the Monarch. Flowers in early winter.

Morus alba. **White Mulberry**. Moraceae.

Pyrilidae: Raisin Moth (*Cadra figulilella*). American Plum Borer (*Euzophera semifuneralis*). No other known larval host values for Californian Lepidoptera.

Bombycidae: Preferred hostplant for Silkworm or Domesticated Silkworm (*Bombyx mori*, Bombycidae), an insect which does not occur in the wild, raised to produce raw silk.
http://en.wikipedia.org/wiki/Bombyx_mori

Muhlenbergia dumosa. **Bamboo Muly**. Poaceae. Chlorideae.

Larval host for Orange Skipperling.

Murraya paniculata. **Orange Jessamine**. Rutaceae. Nectar: Hammock Skipper.

Muscari armeniacum. **Grape Hyacinth**. Liliaceae. Nectar: Desert Orangetip, Clouded Sulphur, Orange Sulphur, Painted Lady, Silver-spotted Skipper. I have seen several photographs of the Arctic Skipper hanging out on what appears to be grape hyacinth. Travis Owen observed plume moths (Pterophoridae) at nectar on its flowers over several nights: “Plume moths (family Pterophoridae) have been observed to be highly interested in the grape hyacinths at night. During a brief walk through the garden after work one night (who doesn't do that, am I right?), I saw a moth on almost every grape hyacinth!” He also notes geometrid moths as flower visitors. *Epirrhoe plebeculata* (Geometridae) one of them, in daytime.

Muscari azureum. Liliaceae. Fragrant flowers said to attract butterflies.

Muscari botryoides. Liliaceae. Scott notes visits by Painted Lady mostly in superabundant migration.

Myoporum laetum. Myoporaceae.

This tough, fast growing tree often used near the seaside has no known values for Californian Lepidoptera.

Myoporum parvifolium. Myoporaceae. Nectar: Marine Blue.

Myosotis scorpioides. **True Forget-me-not**. Boraginaceae. Nectar: Sara Orangetip, Silver-spotted Skipper.

Nandina domestica. **Heavenly Bamboo**. Berberidaceae.

Heavenly Bamboo seems to have no value for Lepidoptera.

Narcissus sp. **Daffodil**. Amaryllidaceae. Nectar: Ipsilon Dart, White-lined Sphinx.

Nashia inaguensis. **Moujean Tea**. Verbenaceae. Flowers attract butterflies (from the Caribbean; strong draw for the Atala there).

Nelumbo lutea. **American Lotus**. Nymphaeaceae.

Noctuidae: Cattail Borer (*Bellura obliqua*).

Pyralidae: American Lotus Borer (*Ostrinia penitalis*).

Nepeta cataria. **Catnip**. Lamiaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Cabbage White (fq), Checkered White (fq), Clouded Sulphur, Callippe Fritillary, Great Spangled Fritillary, Northwestern Fritillary (fq), Red Admiral, American Painted Lady, Common Wood-Nymph, Gray Hairstreak, Purplish Copper, Tailed Copper, Silver-spotted Skipper, Common Checkered-Skipper, Mournful Duskywing, Propertius Duskywing (Marc Kummel), Common Sootywing, Dun Skipper, Fiery Skipper, Sachem, Woodland Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), Corn Earworm (*Helicoverpa zea*, Noctuidae), Armyworm, nocturnal moths.

Nepeta X faassenii Six Hills. **Giant Catmint**. Lamiaceae. Nectar for Cabbage White (fq), Checkered White, Painted Lady, Common Checkered-Skipper.

Nepeta x faassenii 'Walker's Low' **Walker's Low Catmint**. Lamiaceae. Nectar: American Lady (fq).

Nepeta grandiflora. **Giant Catmint**. Lamiaceae.

Nerium oleander. **Oleander**. Apocynaceae. Nectar for Marine Blue, moths.

Larval host for Queen.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS,

Cosmopterigidae: a micromoth that eats detritus, the Florida Pink Scavenger (*Anatrachyntis badia*).

Nicotiana glauca. **Flowering Tobacco**. Solanaceae. Nectar: Pink-spotted Hawkmoth, Carolina Sphinx, White-lined Sphinx, Wild Cherry Sphinx (5:20 a.m.?).

Nicotiana glauca. **Tobacco**. Solanaceae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Nyssa sylvatica. **Blackgum**. Cornaceae.

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*) – several found on cultivated specimen in Madera County, 2009 Season Summary.

Ocimum basilicum. **Basil**. Lamiaceae. Nectar: American Lady, Silver-spotted Skipper, Field Skipper aka Sachem, Fiery Skipper. No larval host values.

Oenothera speciosa. **Mexican Evening Primrose**. Onagraceae. Nectar: Some interest for Pipevine Swallowtail, Sachem. For the White-lined Sphinx, it is both a nectar source and a hostplant.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Olea europaea. **Olive**. Oleaceae.

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Nolidae: Black-olive Caterpillar (*Garella nilotica*).

Pyralidae: American Plum Borer (*Euzophera semifuneralis*).

Sesiidae: Ash Borer (*Podosesia syringae*, a moth that looks like the Paper Wasp).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Opuntia cochenillifera. **Cochineal Nopal Cactus**. Cactaceae.

Origanum laevigatum ‘Hopley’s’, ‘Herrenhausen’, ‘Rosenkuppel’. Lamiaceae. Nectar: Whites, skippers.

‘Rosenkuppel’ may be the best as a butterfly nectar plant.

Origanum majorana. **Marjoram**. Lamiaceae. Nectar: Western Pygmy Blue, Common Sootywing.

Origanum vulgare. **Oregano**. Lamiaceae. Nectar: Cabbage White, Pine White, Orange Sulphur, Painted Lady, Mylitta Crescent, American Snout, Variegated Fritillary, Western Pygmy Blue, Eastern Tailed Blue, Marine Blue, Gray Hairstreak, Coral Hairstreak, American Copper, Silver-spotted Skipper, Sachem, Fiery Skipper, Woodland Skipper. Loved by the Small Copper in England. A top nectar plant in Europe, but Scott found one in his Colorado yard decidedly unpopular. If a plant is “locally rare” in an area, it may simply be over-looked. A given animal seems to develop a taste for one or several local food sources and simply goes to them.

‘Aureum’.

Oryza sativa. **Rice**. Poaceae. Oryzae.

Reported as a foodplant for Painted Lady in Sierra Leone. Foodplant for Eufala Skipper and Nyctelius Skipper, though not necessarily in California.

Gelechiidae: Angoumois Grain Moth (*Sitotroga cerealella*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*, Pantropical areas). Subterranean Dart (*Feltia subterranea*, Brazil). Corn Earworm (*Helicoverpa zea*). Armyworm (*Mythimna unipuncta*, reported in Asian countries). Beet Armyworm (*Spodoptera exigua*, Somalia). Fall Armyworm (*Spodoptera frugiperda*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pyralidae: In other countries, the Tropical Warehouse Moth (*Cadra cautella*) eats rice.

Various populations of cosmopolitan pest insect species (generalist feeders) are keyed in to different food sources – one big reason governments attempt to prevent pests (often generalist feeders) from crossing borders!

Ozothamnus diosmifolius ‘Pink’. **Riceflower**. Asteraceae. Gnaphalieae.

Ozothamnus ledifolius. **Kerosene Bush**. Asteraceae. Gnaphalieae.

Parthenocissus quinquefolia. **Virginia Creeper**. Vitaceae.

Sphingidae: Achemon Sphinx (*Eumorpha achemon*). White-lined Sphinx (*Hyles lineata*).

Arctiidae: Fall Webworm (*Hyphantria cunea*). Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Langton’s Forester (*Alypia langtoni*). Eight-spotted Forester (*Alypia octomaculata*). Copper Underwing (*Amphipyra pyramidoides*).

Pyralidae: Grape Leaffolder (*Desmia funeralis*).

Zygaenidae: Western Grape Leaf Skeletonizer (*Harrisina brillians*).

Parthenocissus tricuspidata. **Boston Ivy**. Vitaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*).

Noctuidae: Eight-spotted Forester (*Alypia octomaculata*). Copper Underwing (*Amphipyra pyramidoides*).

Sphingidae: Achemon Sphinx (*Eumorpha achemon*).

Zygaenidae: Western Grapeleaf Skeletonizer (*Harrisina brillians*).

Passiflora caerulea. **Blue Crown Passion Flower**. Passifloraceae. Nectar: Gulf Fritillary.

Foodplant for the Gulf Fritillary.

Passiflora citrina. **Yellow Passion Vine**. Passifloraceae.

Passiflora foetida. **Passion Flower**. Passifloraceae. Among the 'Most Recommended' by *Desert Butterfly Gardening*.

Foodplant for the Gulf Fritillary (fq) and Variegated Fritillary.

Passiflora incarnata. **Maypop**. Passifloraceae. Some nectar value for Monarch, Gulf Fritillary, Variegated Fritillary, Gray Hairstreak.

Foodplant for Gulf Fritillary, Variegated Fritillary Zebra Longwing, Gray Hairstreak.

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Passiflora lutea. **Yellow Passionflower**. Passifloraceae.

Foodplant for Gulf Fritillary, Variegated Fritillary, Zebra Longwing, and Julia.

Passiflora manicata. **Red Passionflower**. Passifloraceae.

Foodplant for Gulf Fritillary.

Passiflora mollissima. **Banana Passion Vine**. Passifloraceae.

Foodplant for the Gulf Fritillary.

Passiflora suberosa. **Corky-stemmed Passionflower**. Passifloraceae.

Hostplant: Gulf Fritillary.

Passiflora '**Witchcraft**'.

Pastinacea sativa. **Parsnip**. Apiaceae. Tordylieae. Nectar: Monarch, American Snout, Banded Hairstreak, Tawny-edged Skipper.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Common Pug (*Eupithecia miserulata*).

Noctuidae: Striped Cutworm (*Euxoa tessellata*). Armyworm (*Mythimna unipuncta*).

Pavonia lasiopetala. **Rock Rosemallow**. Malvaceae. Nectar: Monarch (Jim McCulloch).

Pelargonium '**Chocolate Mint**'. Geraniaceae. This and other *Pelargonium* may serve as nectar plants.

Pelargonium crispum. **Lemon Pelargonium**. Geraniaceae.

Pelargonium domesticum. 'Brown's Butterfly', 'Prince Consort'. Geraniaceae.

Pelargonium 'Dr. Livingston', 'Fragrant Frosty', 'Ice Palace', 'Jeanne', 'Mrs. Cox', 'Mrs. Pollack'. Geraniaceae.

Pelargonium peltatum. **Ivy Geranium**. Geraniaceae.

Pelargonium tomentosum. **Peppermint Geranium**. Geraniaceae.

Penstemon 'Pike's Peak Purple'. **Border Penstemon**. Plantaginaceae.

Pentas lanceolata. **Pink Star Clusters**. Rubiaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Cloudless Sulphur, Clouded Sulphur, Orange-barred Sulphur, Sleepy Orange, Mimosa Yellow, Southern Dogface, Monarch, Queen, Viceroy, Gulf Fritillary, Red Admiral, Zebra Longwing, Gray Hairstreak (Anne Reeves), Northern Cloudywing, Sandhill Skipper, White-lined Sphinx.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Perovskia atriplicifolia. **Russian Sage**. Lamiaceae. Nectar: Pipevine Swallowtail, Checkered White, Cabbage White, Dainty Sulphur, Lyside Sulphur, Monarch (fq), Common Buckeye, Painted Lady, West Coast Lady, Bordered Patch, Variegated Fritillary, American Snout, Palmer's Metalmark, Reakirt's Blue, Northern White-Skipper, Common Checkered-Skipper, Fiery Skipper, many species of butterflies. 'Longin'. Scott considers it not very popular.

Persea americana. **Avocado**. Lauraceae.

Reported as a larval host for the Western Tiger Swallowtail.

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Noctuidae: Soybean Looper (*Chrysodeixis includens*). Corn Earworm (*Helicoverpa zea*). Variegated Cutworm (*Peridroma saucia*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Sesiidae: Sycamore Borer (*Synanthedon resplendens*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Orange Tortrix (*Argyrotaenia franciscana*). Omnivorous Leafroller (*Platynota stultana*). Light Brown Apple Moth (*Epiphyas postvittana*).

Yponomeutidae: Ailanthus Webworm (*Atteva aurea*), a non-native colorful day-flying and flower-visiting species.

Petrea volubilis. **Queen's Wreath**. Verbenaceae. Nectar: Gulf Fritillary, Palmer's Metalmark (DesertLeps #4005, Jim Brock). Attracts butterflies according to *The New Sunset Western Garden Book*. Gets many bees.

Petroselinum crispum. **Parsley**. Apiaceae. Apieae. Nectar for Spring Azure.

Hostplant for Anise Swallowtail, one of the best to get butterflies reproducing in the garden. Also Desert Black Swallowtail, Old World Swallowtail.

Noctuidae: Old Man Dart (*Agrotis vetusta*). Nutmeg (*Anarta trifolii*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Petunia axillaris. **Wild White Petunia**. Solanaceae. Nectar: Pink-spotted Hawkmoth, Ello Sphinx, Banded Sphinx (*Eumorpha fasciatus*), and Carolina Sphinx.

Petunia hybrida. Solanaceae. Nectar: Two-tailed Swallowtail, Cabbage White, Cloudless Sulphur, Common Buckeye, Painted Lady, Pink-spotted Hawkmoth, White-lined Sphinx, Five-spotted Hawkmoth, Rustic Sphinx, Carolina Sphinx, Great Ash Sphinx (*Sphinx chersis*), Achemon Sphinx (*Eumorpha achemon*). Much better for moths than for butterflies.

Phaseolus spp. **Bean**. Fabaceae. Phaseoleae.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Phaseolus lunatus. **Lima Bean**. Fabaceae. Phaseoleae. Nectar: Corn Earworm.

Foodplant for the Gray Hairstreak and the Long-tailed Skipper.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Bean LeafSkeletonizer (*Autoplusia egena*). Soybean Looper (*Chrysodeixis includens*). Corn Earworm (*Helicoverpa zea*). Noctuids reported by HOSTS as utilizing the Lima Bean elsewhere though not in the continental United States: Pale-sided Cutworm (*Agrotis malefida*). Subterranean Dart (*Feltia subterranea*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Limabean Pod Borer (*Etiella zinckenella*, also known as the Gold-banded Etiella).

Tortricidae: Cotton Tipworm (*Crociosema plebejana*).

Phaseolus vulgaris. **Common Bean** or **Kidney Bean**. Fabaceae. Phaseoleae. Nectar: Gray Hairstreak (Michael Schmidt).

Foodplant for the Variegated Fritillary, Painted Lady, Gray Hairstreak, Silver-spotted Skipper. Long-tailed Skipper, Plain Longtail, and Funereal Duskywing (Brazil). Scott lists it as a foodplant for Orange Sulphur, Graves and Shapiro express "low" confidence that applies in California.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Fall Webworm (*Hyphantria cunea*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Chevron (*Eulithis testata*).

Noctuidae: Black Cutworm, Pale-sided Cutworm, Subterranean Dart, Old Man Dart, Celery Moth, Glassy Cutworm, Alfalfa Semilooper, Bean Leafskeltonizer, Nutmeg, Dark-sided Cutworm, Red-backed Cutworm, Striped Cutworm, Dingy Cutworm, Bertha Armyworm, Stephen's Gem, Zebra Caterpillar, Armyworm, Soybean Looper, Beet Armyworm, Fall Armyworm, Yellowstriped Armyworm, Western Yellowstriped Armyworm, Cabbage Looper.

Pyralidae: Garden Webworm, Lesser Cornstalk Borer, Limabean Pod Borer, Beet Webworm, Indian Meal Moth, Celery Leaf-tier (*Udea rubigalis*, Pyralidae).

Tortricidae: Oblique-banded Leafroller. Light Brown Apple Moth (*Epiphyas postvittana*).

Phleum pratense. **Cultivated Timothy**. Poaceae. Poaceae.

Hostplant for the European Skipper, an introduced butterfly likely to spread to California.

Arctiidae: Wandering Tiger Moth (*Spilosoma vagans*).

Noctuidae: Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Apamea sordens*). Army Cutworm (*Euxoa auxiliaris*). Zebra Caterpillar (*Melanchra picta*). Broken-lined Brocade (*Mesapamea fractilinea*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Lempke's Gold Spot (*Plusia putnami*). Fall Armyworm (*Spodoptera frugiperda*). Aster Cutworm (*Trichordestra lilacina*).

Philadelphus coronarius. **Sweet Mock Orange**. Hydrangeaceae. Nectar: Achemon Sphinx, Ipsilon Dart.

Phlox divaricata. **Woodland Phlox**. Polemoniaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Black Swallowtail, Clouded Sulphur, Cabbage White, Monarch, Painted Lady, Silver-spotted Skipper, Dreamy Duskywing, Tawny-edged Skipper, Snowberry Clearwing, White-lined Sphinx, Celery Moth (*Anagrapha falcifera*, Noctuidae), Stephen's Gem (*Megalographa biloba*, Noctuidae) (fq).

Phlox drummondii. **Annual Phlox**. Polemoniaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Gulf Fritillary, White-lined Sphinx. "Many" butterflies in its native Texas (NABA). Hummingbirds. In England, it serves the Brimstone, Common Blue, and Small Tortoiseshell.

Phlox glaberrima. **Smooth Phlox**. Polemoniaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Black Swallowtail, Clouded Sulphur, Monarch, Common Buckeye, Yellow-collared Scape Moth.

Phlox paniculata. **Garden Phlox**. Polemoniaceae. Nectar: Giant Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Pipevine Swallowtail, Clouded Sulphur, Cabbage White, Monarch, Viceroy, Painted Lady, American Lady, Red Admiral, Milbert's Tortoiseshell, Mourning Cloak, Great Spangled Fritillary, Green Comma, Common Wood-Nymph, Silver-spotted Skipper, Woodland Skipper, White-lined Sphinx, Bedstraw Hawkmoth (*Hyles gallii*), Ipsilon Dart. The cultivar 'Jeana' proved most attractive in a trial planting, 'Lavelle' second (Keith Nevison, 2016).

Phlox subulata. **Moss Pink**. Polemoniaceae. Nectar: Pipevine Swallowtail, Pearl Crescent, American Lady, Painted Lady, Red Admiral, Silver-spotted Skipper.

Photinia x fraseri. **Red Tip Photinia**. Rosaceae. Maleae. Nectar: American Lady, Great Purple Hairstreak and other butterflies.

Photinia glabra. **Japanese Photinia**. Rosaceae. Maleae.

Tortricidae: Hostplant for Oriental Fruit Moth (*Grapholita molesta*), a pest of peaches and other stone fruits.

Phuopsis stylosa. **Creeping Crosswort. Caucasian Crosswort**. Rubiaceae. Low, fragrant.

Phyllostachys aurea. **Golden Bamboo**. Poaceae. Arundinarieae.

No Lepidoptera values.

Phyllostachys bambusoides. **Giant Timber Bamboo**. Poaceae. Arundinarieae.
Hostplant for Umber Skipper (Barbehenn, 1994) –a wild population observed for three generations.

Physalis ixocarpa. **Tomatillo**. Solanaceae.

Marine Blue oviposits on plants in Marc Kummel's garden in Santa Barbara County.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Physostegia virginiana. **Obedient Plant**. Lamiaceae. Nectar: Cloudless Sulphur, Monarch, Pearl Crescent – seems rather secondary.

Picea abies. **Norway Spruce**. Pinaceae.

Noctuidae: *Cosmia praeacuta*.

Tortricidae: *Epinotia normanana* (Tortricidae Foodplant Database).

Picea glauca. **White Spruce**. Pinaceae.

Geometridae: *Eupithecia casloata*. Spruce Cone Looper (*Eupithecia mutata*).

Noctuidae: *Cosmia praeacuta*.

Tortricidae: *Epinotia normanana* (Tortricidae Foodplant Database).

Picea pungens. **Colorado Spruce**. Pinaceae.

Numbers of Pine Whites seen around the crowns of cultivated trees in Walla Walla, Washington by Robert Pyle in late August 2011; likely a foodplant for them.

Tortricidae: *Epinotia normanana* (Tortricidae Foodplant Database).

Pinus brutia var. *eldarica*. **Afgan Pine**. Pinaceae.

No values noted for Californian Lepidoptera.

Pinus canariensis. **Canary Island Pine**. Pinaceae.

Tortricidae: Nantucket Pine Tip Moth (*Rhyacionia frustrana*). No other known values for Californian Lepidoptera.

Pinus halepensis. **Aleppo Pine**. Pinaceae.

Tortricidae: Nantucket Pine Tip Moth (*Rhyacionia frustrana*). No other known values for Californian Lepidoptera.

Pinus pinea. **Italian Stone Pine**. Pinaceae.

No value for Californian Lepidoptera.

Pinus strobus. **Eastern White Pine**. Pinaceae.

Hostplant for Pine White.

Pinus sylvestris. **Scotch Pine**. Pinaceae.

Hostplant for Pine White.

Pinus thunbergii. **Japanese Black Pine**. Pinaceae.

Saturniidae: Pandora Pinemoth (*Coloradia pandora*). Velda Pinemoth (*Coloradia velda*).

Tortricidae: Nantucket Pine Tip Moth (*Rhyacionia frustrana*).

Pistacia chinensis. **Chinese Pistache**. Anacardiaceae.

Saturniidae: Walters' Saturnia Moth (*Saturnia walterorum*).

Pistacia vera. **Pistachio**. Anacardiaceae.

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Pyralidae: Navel Orangeworm (*Amyelois transitella*).

Pisum sativum. **Pea**. Fabaceae. Fabeae. Nectar: Cloudless Sulphur.

Foodplant for Orange Sulphur, Clouded Sulphur, Painted Lady, Gray Hairstreak, Long-tailed Skipper. Suitable lab host for Marine Blue and Ceraunus Blue (Todd Stout).

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Pale-sided Cutworm (*Agrotis malefida*). Alfalfa Semilooper (*Autographa californica*). Soybean Looper (*Chrysodeixis includens*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). Red-backed Cutworm (*Euxoa ochrogaster*). Dingy Cutworm (*Feltia jaculifera*). Subterranean Dart (*Feltia subterranea*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Garden Webworm (*Achyra rantalis*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Limabean Pod Borer (*Etiella zinckenella*), Beet Webworm (*Loxostege stricticalis*). Indian Meal Moth (*Plodia interpunctella*). Celery Leaf-tier (*Udea rubigalis*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Tortricidae: Light Brown Apple Moth (*Epiphyas postvittana*).

Pittosporum tobira. **Japanese Mock Orange**. Pittosporaceae. Nectar: White-lined Sphinx.

Platanus x acerifolia. **London Plane Tree**. Platanaceae.

Shapiro says the Western Tiger Swallowtail eats all the introduced Platanus taxa.

Platanus occidentalis. **American Sycamore**. Platanaceae.

Hostplant for Western Tiger Swallowtail (Shapiro).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*), White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: American Plum Borer (*Euzophera semifuneralis*).

Sesiidae: Sycamore Borer (*Synanthedon resplendens*).

Plumbago capensis. **Cape Plumbago**. Plumbaginaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Polydamas Swallowtail, Giant Swallowtail, Cloudless Sulphur, Painted Lady, Red Admiral, Gulf Fritillary, Monarch, Zebra Longwing, Marine Blue, Gray Hairstreak, Umber Skipper, Skippers, White-lined Sphinx.

'Royal Cape' said to be a good variety.

Foodplant for Marine Blue and Gray Hairstreak.

[http://images.peabody.yale.edu/lepsoc/jls/1990s/1990/1990-44\(3\)200-Brown.pdf](http://images.peabody.yale.edu/lepsoc/jls/1990s/1990/1990-44(3)200-Brown.pdf)

Argentine ants generally associated with the larvae.

Noctuidae: Tobacco Budworm (*Chloridea virescens*). See link above.

Plumeria. **Frangipani**. Fragrant flowers may draw butterflies. Giant Swallowtail, Monarch.

Poa pratensis. **Kentucky Bluegrass**. Poaceae. Poaceae.

Supports caterpillars of Common Ringlet, Small Wood-Nymph, Common Wood-Nymph, Great Basin Wood-Nymph, Common Roadside-Skipper, Sandhill Skipper, Sachem, Sonora Skipper, Juba Skipper, Fiery Skipper, and Tawny-edged Skipper.

A standard test grass for species presumed to eat grasses, fed to caterpillars in the lab. However, it is not necessarily the plant wild female butterflies choose for egg laying! Warren did observe Sachem oviposit on it in a lawn, and it is a preferred Tawny-edged Skipper hostplant in eastern Colorado. Sonora Skipper also reported in close association with it there.

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Green Cutworm (*Anicla infecta*). Glassy Cutworm (*Apamea devastator*). Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa infracta*. Dingy Cutworm (*Feltia jaculifera*). Phragmites Wainscot (*Leucania phragmitidicola*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Subterranean Sod Webworm (*Chrysoteuchia topiarius*). Lucerne Moth (*Nomophila nearctica*). Bluegrass Webworm (*Parapediasia teterrellus*). Large Sod Webworm (*Pediasia trisecta*).

Podocarpus macrophyllus. **Yew Pine**. Podocarpaceae.

No value for Californian Lepidoptera.

Polygonum auberti. **Silver Lace Vine**. Attracts butterflies according to Cornflower Farms.

Pontederia cordata. **Pickrel Weed**. Pontederiaceae. Nectar: Cabbage White, Orange Sulphur, Clouded Sulphur, Monarch, Queen, Viceroy, Red Admiral, Gulf Fritillary, Silver-spotted Skipper, Fiery Skipper. Pyle finds it a "skipper magnet". Bumblebees prominent among its visitors.

A favorite of the Eastern Tiger Swallowtail.

Populus nigra 'Italica'. **Lombardy Poplar**. Salicaceae.

Listed as a hostplant for Giant Swallowtail [?? – likely an error, Eastern or Western Tiger Swallowtail seems much more likely, since Giant Swallowtail is usually a Rutaceae feeder, while they eat Salicaceae], Viceroy, Mourning Cloak, and Dreamy Duskywing.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).

Geometridae: Linden Looper (*Erannis tiliaria*, Canada).

Gracillariidae: Aspen Serpentine Leafminer (*Phyllocnistis populiella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Lymantriidae: White Satin Moth (*Leucoma salicis*). European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Lyonetiidae: Cottonwood Leafminer (*Leucoptera albella* aka *Paraleucoptera albella*).

Noctuidae: Cottonwood Dagger (*Acronicta lepusculina*). Copper Underwing (*Amphipyra pyramidoides*). White Underwing (*Catocala relictata*). *Ipomorpha nanimo* (Noctuidae), The Brother (*Raphia frater*). The Herald (*Scoliopteryx libatrix*).

Nolidae: Grey Midget (*Nycteola cinereana*).

Notodontidae: Red-washed Prominent (*Oligocentria semirufescens*). Black-rimmed Prominent (*Pheosia rimosata*).

Sphingidae: One-eyed Sphinx (*Smerinthus ophthalmica*).

Tortricidae: Green Aspen Leafroller (*Apotomis removana*, Canada).

Polygala x dalmaisiana. **Sweet Pea Shrub**. Polygalaceae.

Pratia pedunculata (*Laurentia fluviatilis*). **Blue Star Creeper**. Campanulaceae. Its flowers said to be very attractive to the White-lined Sphinx (*Hyles lineata*, Sphingidae).

Primula vulgaris. **Wild Primrose**. Primulaceae. In England attracts many butterflies and moths.

Prunus armeniaca. **Apricot**. Rosaceae. Amygdaleae. Nectar: Checkered White, Painted Lady, Red Admiral, Mylitta Crescent.

Larval host for Western Tiger Swallowtail.

Gelechiidae: Peach Twig Borer (*Anarsia lineatella*). Lesser Bud Moth (*Recurvaria nanella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Noctuidae: Interrupted Dagger (*Acronicta interrupta*). Bertha Armyworm (*Mamestra configurata*). Rufous Quaker (*Protorthodes rufula*).

Pyralidae: Destructive Pruneworm Moth (*Acrobasis tricolorella*). Raisin Moth (*Cadra figulilella*). American Plum Borer (*Euzophera semifuneralis*). Indian Meal Moth (*Plodia interpunctella*).

Sesiidae: Peachtree Borer (*Synanthedon exitiosa*).

Tortricidae: Fruit Tortricid (*Acleris variegana*). Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Omnivorous Leaf-tier (*Cnephasia longana*). Codling Moth (*Cydia pomonella*). Light Brown Apple Moth (*Epiphyas postvittana*).

Prunus avium. **Sweet Cherry**. Rosaceae. Amygdaleae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). *Operophtera danybi*. Large Lace-border (*Scopula limboundata*).

Gracillariidae: Apple Blotch Leafminer (*Phyllonorycter crataegella*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*). American Plum Borer (*Euzophera semifuneralis*).

Saturniidae: Western Sheepmoth (*Hemileuca eglanterina*).

Sesiidae: Peachtree Borer (*Synanthedon exitiosa*).

Sphingidae: Wild Cherry Sphinx (*Sphinx drupiferarum*).

Tortricidae: Fruit Tortricid (*Acleris variegana*). Fruit-tree Leafroller (*Archips argyrospila*). Ugly-nest Caterpillar (*Archips cerasivorana*). Orange Tortrix (*Argyrotaenia franciscana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Pandemis Leafroller (*Pandemis pyrusana*).

Prunus caroliniana. **Carolina Cherry**. Rosaceae. Amygdaleae. Some nectar value: Sleepy Orange, American Lady, Common Buckeye.

Lasiocampidae: Dot-lined White (*Artace cribara*) which seems to be an accidental species in California, and no other Californian species; thus essentially no larval host value for California Lepidoptera.

Prunus cerasifera. **Flowering Plum**. Rosaceae. Amygdaleae.

Noctuidae: Funerary Dagger (*Acronicta funeralis*).

Sphingidae: Elegant Sphinx (*Sphinx perelegans*).

This is the species from which are selected the popular purple-leaved plums.

Prunus cerasus. **Sour Cherry**. Rosaceae. Amygdaleae. Nectar source for Painted Lady (fq), Red Admiral.

Foodplant for Two-tailed Swallowtail, Western Tiger Swallowtail, and Coral Hairstreak.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Silver-spotted Tiger Moth (*Lophocampa argentata*). Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Linden Looper (*Erannis tiliaria*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: Yellow-haired Dagger (*Acrionicta impleta*). Interrupted Dagger (*Acrionicta interrupta*). Radcliffe's Dagger (*Acrionicta radcliffei*). Army Cutworm (*Euxoa auxiliaris*). Striped Cutworm (*Euxoa tessellata*). Speckled Cutworm (*Lacanobia subjuncta*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). *Xestia plebeia*.

Notodontidae: Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Western Sheepmoth (*Hemileuca eglanterina*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*). Small-eyed Sphinx (*Paonias myops*). Wild Cherry Sphinx (*Sphinx drupiferarum*).

Prunus domestica. **Plum**. Rosaceae. Amygdaleae. Flowers rarely used according to Scott, he has seen Mourning Cloak on it.

Foodplant for Pale Swallowtail, Western Tiger Swallowtail, Lorquin's Admiral, the Viceroy, Coral Hairstreak.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Fall Webworm (*Hyphantria cunea*). Mexican Tiger Moth (*Notarctia proxima*). Yellow Woolly Bear (*Spilosoma virginica*).

Carposinidae: Prune Limb Borer (*Bondia comonana*).

Coleophoridae: *Coleophora sacramenta*.

Drepanidae: *Ceranemota improvisa*. Tufted Thyatirid (*Pseudothyatira cymatophoroides*).

Gelechiidae: Peach Twig Borer (*Anarsia lineatella*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Peppered Moth (*Biston betularia*). Small Engrailed (*Ectropis crepuscularia*). Linden Looper (*Erannis tiliaria*). Spring Cankerworm (*Paleacrita vernata*). Walnut Spanworm (*Phigalia plumogeraria*). Tissue Moth (*Triphosa haesitata*).

Gracillariidae: Apple Blotch Leafminer (*Phyllonorycter crataegella*).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: Charred Dagger (*Acronicta brumosa*). Funerary Dagger (*Acronicta funeralis*). Impressed Dagger (*Acronicta impressa*). Interrupted Dagger (*Acronicta interrupta*). Radcliffe's Dagger (*Acronicta radcliffei*). Copper Underwing (*Amphipyra pyramidoides*). *Euxoa atomaris*. Army Cutworm (*Euxoa auxiliaris*). Striped Cutworm (*Euxoa tessellata*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Rufous Quaker (*Protorthodes rufula*). Lunate Zale (*Zale lunata*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Rough Prominent (*Nadata gibbosa*). Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*). Destructive Pruneworm Moth (*Acrobasis tricolorella*). *Ambesa walsinghami*. American Plum Borer (*Euzophera semifuneralis*). Indian Meal Moth (*Plodia interpunctella*). Beehive Honey Moth (*Vitula serratilineella*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Western Sheepmoth (*Hemileuca eglanterina*). Neumogen's Buckmoth (*Hemileuca neumogeni*). Nevada Buckmoth (*Hemileuca nevadensis*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Sesiidae: Peachtree Borer (*Synanthedon exitiosa*).

Sphingidae: White-lined Sphinx (*Hyles lineata*). Small-eyed Sphinx (*Paonias myops*). One-eyed Sphinx (*Smerinthus ophthalmica*? Ours a Salicaceae specialist, not formerly distinguished from *S. cerisyi*). Wild Cherry Sphinx (*Sphinx drupiferarum*). Elegant Sphinx (*Sphinx perelegans*).

Tortricidae: Fruit Tortricid (*Acleris variegana*). Ugly-nest Caterpillar (*Archips cerasivorana*). Orange Tortrix (*Argyrotaenia franciscana*). Red-barred Tortrix (*Ditula angustiorana*). Light Brown Apple Moth (*Epiphyas postvittana*). Lesser Appleworm Moth (*Grapholita prunivora*). Eye-spotted Bud Moth (*Spilonota ocellana*).

Prunus laurocerasus. **Cherry Laurel**, Common Laurel, or English Laurel. Rosaceae. Amygdaleae. Nectar: Echo Azure (fq) – a common early nectar for them, at least in Washington (R. M. Pyle). He has also seen whites and four species of post hibernial nymphalids at nectar on a tall specimen under his observation in Washington.

Prunus lusitanica. **Portugal Laurel**. Rosaceae. Amygdaleae. Has butterfly value according to U. C. Riverside Botanic Garden.

Prunus persica. **Peach**. Rosaceae. Amygdaleae. Peach flowers are occasionally a nectar source for the California Tortoiseshell (Las Pilitas Nursery); also visited by Anise Swallowtail, Two-tailed Swallowtail, Sleepy Orange.

Reported as hostplant for Pale Swallowtail and Western Tiger Swallowtail.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).

Carposinidae: Prune Limb Borer (*Bondia comonana*).

Choreutidae: Apple Leaf Skeletonizer (*Choreutis pariana*).

Cosmopterigidae: Florida Pink Scavenger (*Anatrachyntis badia*).

Gelechiidae: Peach Twig Borer (*Anarsia lineatella*). Lesser Bud Moth (*Recurvaria nanella*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Linden Looper (*Erannis tiliaria*), Spring Cankerworm (*Paleacrita vernata*).

Gracillariidae: Apple Blotch Leafminer (*Phyllonorycter crataegella*).

Lasiocampidae: Dot-lined White (*Artace cribraius*). Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*). Western Tussock Moth (*Orgyia vetusta*).

Noctuidae: *Abagrotis orbis*. Black Cutworm (*Agrotis ipsilon*). Copper Underwing (*Amphipyra pyramidoides*). Glassy Cutworm (*Apamea devastator*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Corn Earworm (*Helicoverpa zea*). Speckled Cutworm (*Lacanobia subjuncta*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). Rufous Quaker (*Protorthodes rufula*). Clandestine Dart (*Spaelotis clandestina*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Bicolored Sallow (*Sunira bicolorago*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*).

Pyralidae: Leaf Crumpler Moth (*Acrobasis indigenella*). Navel Orangeworm (*Amyelois transitella*). American Plum Borer (*Euzophera semifuneralis*). Darker Moodna Moth (*Moodna ostrinella*). *Ozamia fuscomaculella*. Indian Meal Moth (*Plodia interpunctella*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Sesiidae: Peachtree Borer (*Synanthedon exitiosa*).

Sphingidae: Wild Cherry Sphinx (*Sphinx drupiferarum*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*). Orange Tortrix (*Argyrotaenia franciscana*). Codling Moth (*Cydia pomonella*). Light Brown Apple Moth (*Epiphyas postvittana*). Lesser Appleworm Moth (*Grapholita prunivora*).

Pseudoarmeria ‘White Joystick’. Plumbaginaceae. Nectar: Western Tiger Swallowtail, Painted Lady.

Psiguria umbrosa. **Pygmy Melon**. **Amazon Cucumber**. Cucurbitaceae. Excellent nectar source for longwing butterflies, a strong favorite of Zebra Longwing.

Small flowers in yellow and orange. Grown in greenhouses and conservatories, outside to Zone 8a, at least as an annual. Native to Caribbean and South America.

Pteris. **Brake Ferns**. Pteridaceae.

Geometridae: *Philedia punctomacularia*.

Noctuidae: Florida Fern Moth (*Callopietria floridensis*).

Punica granatum. **Pomegranate**. Lythraceae.

Pyrilidae: Almond Moth (*Cadra cautella*). Locust Bean Moth (*Ectomyelois ceratoniae*).

Tortricidae: Filbertworm (*Cydia latiferreana*). Codling Moth (*Cydia pomonella*). Omnivorous Leafroller (*Platynota stultana*).

Pyrus communis. **Common Pear**. Rosaceae. Maleae. Reported as a foodplant for the Viceroy and Mourning Cloak.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Coleophoridae: Apple-and-plum Casebearer (*Coleophora spinella*). Pistol Casebearer (*Coleophora multipulvella*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray (*Anavitrinella pampinaria*). Peppered Moth (*Biston betularia*). Small Engrailed (*Ectropis crepuscularia*). Linden Looper (*Erannis tiliaria*). Lesser Grapevine Looper (*Eulithis diversilineata*). Horned Spanworm (*Nematocampa resistaria*). Bruce Spanworm (*Operophtera bruceata*). Spring Cankerworm (*Paleacrita vernata*).

Gracillariidae: Apple Blotch Leafminer (*Phyllonorycter crataegella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*). Lappet Moth (*Phyllodesma americana*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Interrupted Dagger (*Acronicta interrupta*). Copper Underwing (*Amphipyra pyramidoides*). Striped Cutworm (*Euxoa tessellata*). Corn Earworm (*Helicoverpa zea*). Speckled Green Cutworm (*Orthosia hibisci*). Rufous Quaker (*Protorthodes rufula*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*).

Pyrilidae: Leaf Crumpler Moth (*Acrobasis indigenella*). Navel Orangeworm (*Amyelois transitella*). Locust Bean Moth (*Ectomyelois ceratoniae*). American Plum Borer (*Euzophera semifuneralis*). Darker Moodna Moth (*Moodna ostrinella*). Indian Meal Moth (*Plodia interpunctella*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Sphingidae: White-lined Sphinx (*Hyles lineata*). Blinded Sphinx (*Paonias excaecata*). One-eyed Sphinx (*Smerinthus cerisyi* – if in our area the newly perceived *Smerinthus ophthalmica* Boisduval).

Tortricidae: Fruit Tortricid (*Acleris variegana*). Fruit-tree Leafroller (*Archips argyrospila*). Codling Moth (*Cydia pomonella*). Eye-spotted Bud Moth (*Spilonota ocellana*).

Pyrus kawakami. **Evergreen Pear**. Rosaceae. Maleae. No known Lepidopteran values.

Pyrus pyrifolia. **Asian Pear**. Rosaceae. Maleae. Pyle several Echo Azure at nectar on this in Washington.

Quercus ilex. **Holly Oak**. Fagaceae. *Lepidobalanus*, white oaks subgenus.

Hostplant for Mournful Duskywing (CODA).

Quercus suber. **Cork Oak**. Fagaceae. Section *Cerris* of the oaks.

Reported as a foodplant for the Mournful Duskywing.

Bucculatricidae: Oak-ribbed Skeletonizer (*Bucculatrix albertiella*).

Geometridae: an emerald geometer (*Nemoria glaucomarginaria*).

Gracillariidae: *Cameraria mediodorsella*.

Heliozelidae: *Coptodisca powellella*.

Lyonetiidae: Live Oak Ribbed Casemaker (*Bucculatrix albertiella*, CODA).

Notodontidae: California Oakworm (*Phryganidia californica*).

Oecophoridae: Stenomid Oak Leaf Tier (*Rectiostoma fernaldella*).

Tischeriidae: *Coptotriche discreta*.

Quercus virginiana. **Southern Live Oak**. Fagaceae.

Notodontidae: California Oakworm (*Phryganidia californica*).

Randia rhagocarpa. **Crucillo**. Rubiaceae.

Sphingidae: Clavipes Sphinx (*Aellopos clavipes*).

Raphanus sativus. **Radish**. Brassicaceae.

Hostplant for Cabbage White, Checkered White, Large Marble, Sara Orangetip, and even, likely rather exceptionally, Painted Lady.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Glassy Cutworm (*Apamea devastator*). Army Cutworm (*Euxoa auxiliaris*). Dark-sided Cutworm (*Euxoa messoria*). Red-backed Cutworm (*Euxoa ochrogaster*).

Nutmeg (*Anarta trifolii*). Zebra Caterpillar (*Melanchra picta*). Armyworm (*Mythimna unipuncta*).
Variegated Cutworm (*Peridroma saucia*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Garden Webworm (*Achyra rantalis*).

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Yponomeutidae: Diamondback Moth (*Plutella xylostella*).

Ratibida columnifera. **Mexican Hat**. Asteraceae. Heliantheae. Nectar: Orange Sulphur, Monarch, Queen, Red Admiral, American Lady, Variegated Fritillary (Johnson & Nixon, 1967), Bordered Patch, Gray Hairstreak (fq), Great Purple Hairstreak, Marine Blue (Randy Floyd), Reakirt's Blue, Funereal Duskywing. Generally slight usage as a butterfly nectar plant, but reported one of the better nectar sources at Boyce Thompson Arboretum (SoWestLep #8489). The dynamics may be different in deserts.

Ratibida pinnata. **Prairie Coneflower**. Asteraceae. Heliantheae. Nectar: Clouded Sulphur, Monarch, Viceroy, Common Buckeye, Pearl Crescent, Gray Hairstreak, Eastern Tailed Blue, Yellow-collared Scape Moth, Olive-shaded Bird-dropping Moth. Modest attraction.

Reseda lutea. **Wild Mignonette**. Resedaceae. In England, works well as butterfly nectar plant.

Reseda odorata. **Garden Mignonette**. Resedaceae.

Hostplant for Cabbage White and, at least abroad, for the Gray-veined White (close to Margined White).

Noctuidae: Corn Earworm (*Helicoverpa zea*). Zebra Caterpillar (*Melanchra picta*). Cabbage Looper (*Trichoplusia ni*).

Rhaphiolepis indica. **India Hawthorn**. Rosaceae. Maleae. Nectar: Painted Lady.

Rheum rhabarbarum. **Rhubarb**. Polygonaceae. Nectar: Common Checkered-Skipper (fq) (Johnson & Nixon, 1967).

Arctiidae: Garden Tiger Moth (*Arctia caja*, Finland). Yellow Woollybear (*Spilosoma virginica*).

Noctuidae: Army Cutworm (*Euxoa auxiliaris*). Striped Cutworm (*Euxoa tessellata*). Nutmeg (*Anarta trifolii*). Variegated Cutworm (*Peridroma saucia*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Rhodanthemum 'Tizi-n-Tichka'. **Moroccan Daisy**. Asteraceae. Anthemideae.

Rhododendron ponticum. **Common Rhododendron**. Ericaceae. Nectar: The flowers are popular with Western Tiger Swallowtail and Pale Swallowtail in Bob Pyle's Washington garden.

Rhus aromatica. **Fragrant Sumac**. Anacardiaceae. Nectar: Eastern Tailed Blue. Slight attraction.

Rhus copallina. **Shining Sumac**. Anacardiaceae. In Georgia, its flowers attract Cloudless Sulphur, Cabbage White, Viceroy, Painted Lady, American Lady, Common Buckeye (fq), Gulf Fritillary,

Variegated Fritillary, Pearl Crescent, Great Purple Hairstreak, Gray Hairstreak, Eastern Tailed Blue, Silver-spotted Skipper, Long-tailed Skipper, Fiery Skipper.

Rhus glabra. **Smooth Sumac**. Anacardiaceae. Nectar: Pipevine Swallowtail, Northwestern Fritillary, Red Admiral, Weidemeyer's Admiral, Common Wood-Nymph, Behr's Hairstreak, California Hairstreak, Coral Hairstreak, Hedgerow Hairstreak.

Rhus typhina. **Staghorn Sumac**. Anacardiaceae. In Kent County, Michigan, a preferred nectar plant for: American Snout, Great Spangled Fritillary, Red Admiral, and Hackberry Emperor.

Robinia pseudoacacia. **Black Locust**. Fabaceae. Robinieae. Nectar: Western Tiger Swallowtail, Monarch, White-lined Sphinx, Ipsilon Dart, Armyworm.

Black Locust is a hostplant for the Clouded Sulphur, Silver-spotted Skipper (fq) and the Dreamy Duskywing.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).
Cossidae: Locust Borer (*Prionoxystus robiniae*) (fq).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Peppered Moth (*Biston betularia*). Horned Spanworm (*Nematocampa resistaria*).

Gracillariidae: Poplar Caloptilia (*Caloptilia stigmatella*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*). Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Bordered Sallow (*Pyrrhia cilisca*). Species likely only a stray in California.

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Red-humped Caterpillar (*Schizura concinna*). Unicorn Caterpillar (*Schizura unicornis*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Limabean Pod Borer (*Etiella zinckenella*).

Saturniidae: Hubbard's Small Silkmoth (*Sphingicampa hubbardi*).

Sesiidae: Western Poplar Clearwing aka Locust Clearwing (*Paranthrene robiniae*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*).

Rosmarinus officinalis. **Rosemary**. Lamiaceae. Nectar: Desert Black Swallowtail, Indra Swallowtail, Desert or California Marble (Sharon Figula), Cabbage White, Checkered White, Desert Orangetip, Dainty Sulphur, Sleepy Orange, Tailed Orange, Orange Sulphur, Mexican Yellow, Variable Checkerspot, West Coast Lady (especially winter adults, according to Shapiro), Painted Lady, American Lady, Texan Crescent, Gulf Fritillary, American Snout, Fatal Metalmark, Bramble Green Hairstreak (Sharon Figula), Leda Ministreak, Spring Azure, Ceraunus Blue, Lupine Blue, Marine Blue, Reakirt's Blue, Western Pygmy Blue, White Checkered-Skipper, Funereal Duskywing (Sharon Figula), Erichson's White Skipper,

Long-tailed Skipper, Golden-headed Scallopwing, Eufala Skipper, Orange Skipperling, White-lined Sphinx, *Annaphila astrologa* (Noctuidae). Bert Johnson noticed migrating Painted Lady drawn especially to the tall 'Tuscan Blue' cultivar. Mary Klinkel reported many of these.

Pyralidae: *Pyrausta laticlavata* was reared on it; native host undetermined (Powell & Opler, p. 176). Volupial Pyrausta (*Pyrausta volupialis*) found on it and reared (Powell & Opler, p. 176).

Rudbeckia fulgida. **Gloriosa Daisy**. Asteraceae. Heliantheae. Nectar: American Lady, Common Buckeye, Pearl Crescent (fq), Fiery Skipper, Sachem. 'Early Bird Gold' is a patented day-length neutral variety.

Rudbeckia hirta. **Black-eyed Susan**. Asteraceae. Heliantheae. Nectar: Western Tiger Swallowtail, Anise Swallowtail. Cabbage White (usually ignores it in Scott's experience), Pine White, Sleepy Orange, Orange Sulphur, Clouded Sulphur, Queen Alexandra's Sulphur. Monarch, Queen, Viceroy, Red Admiral, Painted Lady, West Coast Lady, American Lady, Bordered Patch, Weidemeyer's Admiral, Field Crescent, Pearl Crescent, Northern Checkerspot, Callippe Fritillary, Great Spangled Fritillary, Northwestern Fritillary (fq), Mormon Fritillary, Nokomis Fritillary, Variegated Fritillary, Milbert's Tortoiseshell, Chryxus Arctic, Green Comma, Common Wood-Nymph, Small Wood-Nymph. Gray Hairstreak, Coral Hairstreak, Juniper Hairstreak, Sylvan Hairstreak, Great Copper, Lilac-bordered Copper, Ruddy Copper, Melissa Blue. Northern Cloudywing, Silver-spotted Skipper, Common Checkered-Skipper, Sachem, Dun Skipper, European Skipper, Sonora Skipper, Tawny-edged Skipper (but not popular with it according to Scott). Yellow-collared Scape Moth.

Rudbeckia laciniata. **Cutleaf Coneflower**. Asteraceae. Heliantheae. Nectar: Monarch, American Lady, Painted Lady, Great Spangled Fritillary, Northwestern Fritillary, Viceroy, Tailed Copper, Blues, Tawny-edged Skipper, Yellow-collared Scape Moth, Armyworm Moth, Bent-line Dart (*Feltia jaculifera*, Noctuidae) and no doubt others – reported as the main nectar plant attraction in a fieldtrip to the White Mountains, Arizona (DesertLeps #9201, Philip Kline).

Rudbeckia laciniata var. *ampla*. **Cutleaf Coneflower**. Asteraceae. Heliantheae. Western Tiger Swallowtail, Rocky Mountain Parnassian. Pine White, Queen Alexandra's Sulphur. Red Admiral, Painted Lady, American Lady, Callippe Fritillary (fq), Northwestern Fritillary (fq), Nokomis Fritillary, Zerene Fritillary, Variegated Fritillary, Common Wood-Nymph, Small Wood-Nymph (fq), Chryxus Arctic, Green Comma, and Hoary Comma. Behr's Hairstreak, California Hairstreak, Hedgerow Hairstreak, Blue Copper, Tailed Copper (fq). Silver-spotted Skipper, Common Checkered-Skipper, Dun Skipper, Woodland Skipper. (Scott).

Rudbeckia nitida 'Herbstsonne'. Asteraceae. Heliantheae. 'Loved by butterflies' – Annie's Annuals.

Rudbeckia triloba. **Brown-eyed Susan**. Asteraceae. Heliantheae. Nectar: Clouded Sulphur, Checkered White, Viceroy, Painted Lady, American Lady, Pearl Crescent (fq), and Eastern Tailed Blue.

Ruellia nodiflora. **Violet Wild Petunia**. Acanthaceae.

Hostplant for Common Buckeye.

Russelia equisetiformis. **Coral Fountain**. **Weeping Firecracker**. Scrophulariaceae. Nectar: Cloudless Sulphur, Orange-barred Sulphur.

Larval host for Common Buckeye.

Ruta graveolens. **Rue**. Rutaceae. Nectar: Giant Swallowtail.

Hostplant for Giant Swallowtail, Desert Black Swallowtail, Anise Swallowtail.

Salix alba. **White Willow**. Salicaceae. May – June.

Recorded in China as a foodplant for the Mourning Cloak.

Geometridae: Peppered Moth (*Biston betularia*, Finland).

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Lymantriidae: White Satin (*Leucoma salicis*). European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*, Finland).

Noctuidae: The Herald (*Scoliopteryx libatrix*, Finland).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Pyralidae: Lesser Aspen Webworm Moth (*Meroptera pravela*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Salix babylonica. **Weeping Willow**. February – May.

Foodplant for Western Tiger Swallowtail and Mourning Cloak.

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Notodontidae: Apical Prominent (*Clostera apicalis*). Red-humped Caterpillar (*Schizura concinna*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*). Ceanothus Silkmoth (*Hyalophora euryalus*).

Tortricidae: Hasty Acleris (*Acleris hastiana*).

Salix integra. **Dappled Willow**. Salicaceae.

Foodplant for the Viceroy and the Mourning Cloak.

Gracillariidae: Willow Leafblotch Miner Moth (*Micrurapteryx salicifoliella*). Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*). Nevada Buckmoth (*Hemileuca nevadensis*).

Sphingidae: White-lined Sphinx (*Hyles lineata*).

Salix purpurea. **Basket Willow**. Salicaceae.

Gracillariidae: Willow Leaf Blotch Miner Moth (*Phyllonorycter salicifoliella*).

Salpichroa origanifolia. **Lily-of-the-valley Vine**. Solanaceae. Nectar: West Coast Lady, Red Admiral (“much visited” – Shapiro).

Salvia azurea. **Azure Sage**. Lamiaceae. Nectar: Monarch, Silver-spotted Skipper.

Salvia canariensis. **Canary Island Salvia**. Lamiaceae.

Salvia chionoeplica. **Baja Sage**. Lamiaceae. John Rusk notes it as a particularly attractive nectar source for Pipevine Swallowtail at the Regional Parks Botanic Garden in Berkeley.

Salvia coccinea. **Tropical Sage**. Lamiaceae. Nectar: Giant Swallowtail, Polydamas Swallowtail, Cloudless Sulphur, Sleepy Orange, Checkered White, Gulf Fritillary, Common Checkered-Skipper. Hummingbirds.

Salvia darcyi. Lamiaceae. Nectar: Pipevine Swallowtail.

Salvia elegans. **Pineapple Sage**. Lamiaceae. Nectar: Cloudless Sulphur, Orange-barred Sulphur, Monarch. Considered rather secondary for butterflies. Hummingbirds.

Salvia farinacea ‘**Blue Bedder**’. Lamiaceae. Nectar: Pipevine Swallowtail, Cabbage White, Orange Sulphur, Sleepy Orange, Monarch, Painted Lady, American Lady, Red Admiral, Variegated Fritillary, Gray Hairstreak, Silver-spotted Skipper, Sachem, Dun Skipper, Fiery Skipper, Tawny-edged Skipper (fq). Variable Reddish Pyrausta (*Pyrausta rubricalis*, Pyralidae). Scott considers it moderately popular.

Salvia grahami. Lamiaceae. Nectar: Mexican Yellow, Sleepy Orange, Gulf Fritillary. Hummingbirds.

Salvia greggii x microphylla 'Maraschino'. Nectar: Pale Swallowtail (Larry Miller photograph).

Salvia guaranitica. **Anise-scented Sage**. Lamiaceae. Nectar: Old World Swallowtail, Cloudless Sulphur, Monarch, American Snout. ‘Black-and-Blue’ is a cultivar.

Salvia greggii. **Autumn Sage**. Lamiaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Southern Dogface, Clouded Sulphur, Cloudless Sulphur, Sleepy Orange, Gulf Fritillary.

Salvia ‘**Indigo Spires**’. Lamiaceae. Nectar: Orange Sulphur, Monarch, Gulf Fritillary, Painted Lady, Funereal Duskywing, Long-tailed Skipper (fq), skippers. Rated as less than “fair” by Shady Oak Butterfly Farm though others commend it.

Salvia leucantha. **Mexican Sage**. Lamiaceae. Nectar: Sleepy Orange, Orange Sulphur, Clouded Sulphur, California Dogface, Monarch (fq), Gulf Fritillary, Painted Lady, Checkerspots, Mournful Duskywing (fq), Brazilian Skipper, Fiery Skipper, White-lined Sphinx.

Salvia lyrata. **Lyreleaf Sage**. Lamiaceae. Nectar: In Georgia, among others, attracts Pipevine Swallowtail (fq), Sleepy Orange, Cloudless Sulphur, American Lady, Variegated Fritillary, Eastern Tailed Blue, Northern Cloudywing, Silver-spotted Skipper, Dun Skipper, Eufala Skipper, and Fiery Skipper.

Salvia nemorosa. **Woodland Sage**. Lamiaceae. Nectar: Clouded Sulphur, Cloudless Sulphur, Common Buckeye, Red Admiral, Silvery Blue, Violet-clouded Skipper. Many species of butterflies. ‘Merleau Blue’, ‘May Night’.

Salvia officinalis. **Common Sage**. Lamiaceae. Nectar: Cabbage White, Silver-spotted Skipper, Sachem, Fiery Skipper.

Noctuidae: Variegated Cutworm (*Peridroma saucia*).

Salvia ‘**Phyllis Fancy**’. Lamiaceae.

Salvia melissodora. **Grape Scented Sage**. Lamiaceae.

Salvia microphylla. **Hot Lips Salvia**. Lamiaceae. Nectar: Pipevine Swallowtail, Cabbage White, California Dogface, Cloudless Sulphur. Gulf Fritillary, Variegated Fritillary, Longtailed Skipper, Woodland Skipper. Hummingbirds. Nectar flow: 10:00 a.m.

Salvia serpyllifolia. Lamiaceae. Nectar: Mexican Yellow, Sleepy Orange, Gulf Fritillary. Hummingbirds, also.

Salvia uliginosa. **Bog Sage**. Lamiaceae. Nectar: Cabbage White, Cloudless Sulphur, Monarch, West Coast Lady, Umber Skipper. Barbara Deutsch considers Bog Sage a good nectar plant for the Monarch.

Salvia ‘**Waverly**’. Lamiaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Cabbage White, California Dogface, Orange Sulphur, Common Buckeye, Painted Lady, American Lady, Variable Checkerspot, Mournful Duskywing, Propertius Duskywing, Rural Skipper, Umber Skipper, White-lined Sphinx. The Cabbage White, Common Buckeye and Umber Skipper are clearly committing “nectar theft” as butterflies often do, slipping their tongues into the nectar down the sides of the base of the flower corolla. All of these records from Marc Kummel’s garden photographs.

Sanguisorba obtusa. **Japanese Burnet**. Rosaceae. Sanguisorbeae. Nectar: Milbert’s Tortoiseshell, Gray Hairstreak, skippers (Jerry Sedenko).

Santolina chamaecyparissus ‘Nana’. **Lavender Cotton**. Asteraceae. Anthemideae. Nectar: Mylitta Crescent, Texan Crescent.

Sapiem sebiferum. **Chinese Tallow Tree**. Sapindaceae.

No Lepidoptera values.

Saponaria officinalis. **Bouncing Bet**. Caryophyllaceae. Nectar: Giant Swallowtail, Two-tailed Swallowtail, Cabbage White, Checkered White, Melissa Blue, White-lined Sphinx, Five-spotted Hawkmoth, Pink-spotted Hawkmoth, Carolina Sphinx, Great Ash Sphinx, Ello Sphinx, Banded Sphinx, Cramer’s Sphinx (*Erinnyis crameri*), Obscure Sphinx (*Erinnyis obscura*). Better for moths than butterflies.

Scabiosa spp. **Pincushions**. Dipsacaceae. Cabbage White. Shapiro: “Excellent” nectar sources.

Scabiosa anthemifolia. Dipsacaceae. Gets butterflies according to Annie’s Annuals.

Scabiosa atropurpurea. **Sweet Scabious**. Dipsacaceae. Nectar: Pale Swallowtail, Western Tiger Swallowtail, Anise Swallowtail, Old World Swallowtail, Monarch, Painted Lady, West Coast Lady, American Lady, Gulf Fritillary, Callippe Fritillary, Green Comma, Propertius Duskywing, Common Sootywing, Silver-spotted Skipper (fq), Sachem (fq), Fiery Skipper, skippers. 'Black' aka 'Ace of Spades'; 'Scarlet'; 'Snowmaiden'.

Caterpillar plant for Gray Hairstreak.

Scabiosa 'Butterfly Blue'. Nectar: Cabbage White, Painted Lady, Red Admiral.

Scabiosa caucasica. **Pincushion Flower**. Dipsacaceae. Nectar: Two-tailed Swallowtail, American Lady, Variable Checkerspot, Fiery Skipper. 'Butterfly magnet' – Annie's Annuals. 'Fama Blue', 'Perfecta Alba'.

Scabiosa columbaria. Dipsacaceae. Nectar: Black Swallowtail, Two-tailed Swallowtail, Orange Sulphur, Cabbage White, Whites, Red Admiral, West Coast Lady (fq), American Lady, Painted Lady, Common Buckeye, Gulf Fritillary, Variable Checkerspot, Silver-spotted Skipper, Fiery Skipper. 'Giant Blue'.

Scabiosa cretica. Dipsacaceae. Nectar: Variable Checkerspot, Fiery Skipper.

Scabiosa farinosa. Dipsacaceae. Nectar: Variable Checkerspot, Fiery Skipper.

Scabiosa lachnophylla 'Blue Horizon'. Dipsacaceae. 'Butterfly and bee magnet' according to Chiltern Seeds.

Scabiosa ochroleuca. Dipsacaceae. Nectar: Variable Checkerspot, Fiery Skipper, moths. To 3' X 3'.

Scabiosa succisa. **Devil's-bit Scabious**. Dipsacaceae. 'Beloved of bees and butterflies' according to Chiltern Seeds.

Schinus molle. **California Pepper Tree**. Anacardiaceae.

Geometridae: Omnivorous Looper (*Sabulodes aegrotata*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Tortricidae: Orange Tortrix (*Argyrotaenia franciscana*).

Schinus terebinthifolius. **Brazilian Pepper**. Anacardiaceae. Nectar: Marine Blue.

Saturniidae: Neumogen's Buckmoth (*Hemileuca neumogeni*). Mendocino Saturnia Moth (*Saturnia mendocino*). Walters' Saturnia Moth (*Saturnia walterorum*).

Host for an interesting wasp, red with green eyes, *Megastigmus transvaalensis*.

Schizopetalon walkeri. Brassicaceae. Unreal almond-scented flowers, an annual from Chile.

Scorzonera hispanica. **Black Salsify**. Asteraceae. Cichorieae.

Secale cereale. **Rye**. Poaceae. Hordeae. Larval host for:

Gelechiidae: Angoumois Grain Moth (*Sitotroga cerealella*).

Noctuidae: Henry's Marsh (*Acronicta insularis*). Pale Western Cutworm (*Agrotis orthogonia*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa comosa*. Dark-sided Cutworm (*Euxoa messoria*). Dingy Cutworm (*Feltia jaculifera*). Corn Earworm (*Helicoverpa zea*). Armyworm (*Mythimna unipuncta*). Fall Armyworm (*Spodoptera frugiperda*).

Pyralidae: Indian Meal Moth (*Plodia interpunctella*).

Tineidae: European Grain Moth (*Nemapogon granella*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*).

Sedum 'Autumn Joy'. Crassulaceae. Nectar: Cabbage White, Clouded Sulphur, Monarch, American Lady, Painted Lady, Common Buckeye, Mylitta Crescent, Gray Hairstreak, Common Sootywing, Silver-spotted Skipper, Sagem, Yellow-collared Scape Moth, White-lined Sphinx.

Sedum spectabile. See Hylotelephium.

Selago serrata. Scrophulariaceae. Nectar: Western Tiger Swallowtail. "A spectacular butterfly magnet, it glimmered in June with hordes of butterflies, the likes of which we have never seen" – Annie's Annuals. 2' x 3'.

Selinum wallichianum. Apiaceae. Selineae.

Anise Swallowtail hostplant.

Senecio confusus (Senecio confusus, Pseudogynoxus confusus, or P. chenopodioides). **Mexican Flamevine**. Asteraceae. Senecioneae. Flowers particularly attractive to the Queen; also attract Black Swallowtail, Giant Swallowtail, Southern Dogface, Large Orange Sulphur, Monarch, Gulf Fritillary, Zebra Longwing, American Lady, Funereal Duskywing, Long-tailed Skipper.

Senecio petasites. **Velvet Groundsel**. Asteraceae. Senecioneae.

Senecio serpens. **Blue Chalksticks**. Asteraceae. Nectar: Gray Hairstreak (Anne Reeves).

Senna alata. **Candlestick Cassia**. Fabaceae. Cassieae.

Hostplant for Cloudless Sulphur, Sleepy Orange, Orange-barred Sulphur and Gray Hairstreak.

Tends to seed freely, can be a bit of a nuisance.

Senna nemophila (Senna artemisioides, Cassia artemisioides). **Feathery Cassia. Desert Cassia**. Fabaceae. Cassieae.

Caldwell Nursery and Botanic Gardens in Rosewell, Texas presents a photograph showing a Cloudless Sulphur caterpillar eating it. Brian Banker notes Cloudless Sulphur “loves to use it” in southern California.

Senna bicapsularis. **Christmas Cassia**. Fabaceae. Cassieae.

Hostplant for Cloudless Sulphur, Orange-barred Sulphur, Sleepy Orange.

Senna corymbosa. **Flowery Senna**. Fabaceae. Cassieae.

Hostplant for Cloudless Sulphur, Orange-barred Sulphur, Sleepy Orange.

Senna didymobotrya. **Popcorn Cassia**. Fabaceae. Cassieae.

No reported larval values.

Senna lindheimeriana. **Velvet Leaf Senna**. Fabaceae. Cassieae. Nectar: Cloudless Sulphur, Orange-barred Sulphur, Sleepy Orange, other butterflies.

Hostplant for Cloudless Sulphur, Orange-barred Sulphur, Sleepy Orange.

Senna odorata. **Southern Cassia**. Fabaceae. Cassieae.

The 1990 Season Summary reports it as a host for the Cloudless Sulphur (JFE) in Indio, Riverside County.

Sidalcea hendersonii. **Henderson’s Checker Mallow**. Malvaceae.

Easy in a container.

Silene acaulis. **Cushion Pink**. **Moss Campion**. Caryophyllaceae. Nectar: Painted Lady, Red Admiral, Police Car Moth, *Annaphila diva* (Noctuidae) (JC), moths.

Silene armeria. **Sweet William Catchfly**. Caryophyllaceae. Nectar: Pale Swallowtail, Old World Swallowtail, Cabbage White, Silver-spotted Skipper, grass skipper.

Silene dioica (*Melandrium rubrum*). **Red Campion**. Caryophyllaceae. Nectar: Cabbage White, Gray-veined White (Margined White), Umber Skipper. Attracts butterflies says Annie’s Annuals and Wikipedia.

Flies were primary visitors in a Swedish study: Westerbergh, Anna, and Anssi Saura. 1994. "Gene Flow and Pollinator Behaviour in *Silene Dioica* Populations." *Oikos* 71 (2): 215-24. doi:10.2307/3546269.

Solanum melongena. **Eggplant**. Solanaceae.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Gelechiidae: Tomato Pinworm (*Keiferia lycopersicella*). Potato Moth (*Phthorimaea operculella*).

Lyonetiidae: Sweet Potato Leafminer (*Bedellia somnulentella*).

Noctuidae: Pale-sided Cutworm (*Agrotis malefida*). Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Reported from outside the continental USA as a foodplant for populations of the Black Cutworm (*Agrotis ipsilon*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). (HOSTS).

Pyralidae: Eggplant Leafroller (*Lineodes integra*).

Sphingidae: Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Carolina Sphinx (*Manduca sexta*).

Solanum rantonnetii (*Lycianthes rantonnetii*). **Paraguay Nightshade**. Solanaceae.
No known values.

Solanum tuberosum. **Potato**. Solanaceae.

Reported as a foodplant for the Painted Lady.

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS. Yellow Woollybear (*Spilosoma virginica*).

Gelechiidae: Tomato Pinworm (*Keiferia lycopersicella*). Potato Moth (*Phthorimaea operculella*). Andean Potato Tuber Moth (*Symmetrischema tangolias*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Pale-sided Cutworm (*Agrotis malefida*). Pale Western Cutworm (*Agrotis orthogonia*). Alfalfa Semilooper (*Autographa californica*). Soybean Looper (*Chrysodeixis includens*). *Euxoa albipennis*. Army Cutworm (*Euxoa auxiliaris*). Clear Dart (*Euxoa declarata*). Dark-sided Cutworm (*Euxoa messoria*). Red-backed Cutworm (*Euxoa ochrogaster*). Striped Cutworm (*Euxoa tessellata*). Dingy Cutworm (*Feltia jaculifera*). Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Speckled Cutworm (*Lacanobia subjuncta*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Large Yellow Underwing (*Noctua pronuba*). Variegated Cutworm (*Peridroma saucia*). Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Beet Webworm (*Loxostege strictalis*). False Greenhouse Leaf-tier (*Udea profundalis*).

Sphingidae: Five-spotted Hawkmoth (*Manduca quinquemaculatus*). Carolina Sphinx (*Manduca sexta*).

Tineidae: Banana Moth (*Opogona sacchari*).

Soleirolia soleirolii. **Baby's Tears**. Urticaceae.

Larval host for the Red Admiral.

Noctuidae: Stephen's Gem (*Megalographa biloba*).

Sorbus acuparia. **European Mountain Ash**. Rosaceae. Maleae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae).

Geometridae: Welsh Wave (*Venusia cambrica*).

Lasiocampidae: Western Tent Caterpillar (*Malacosoma californica*).

Pyralidae: American Plum Borer (*Euzophera semifuneralis*).

Sesiidae: Ash Borer (*Podosesia syringae*).

Tortricidae: Three-lined Leafroller (*Pandemis limitata*).

Sphaeralcea sulphurea. **Guadalupe Island Globe Mallow**. Malvaceae.

Northern White-Skipper oviposited on a specimen in the garden of Hartmut Wisch.

Spinacia oleracea. **Spinach**. Amaranthaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*).

Noctuidae: Black Cutworm (*Agrotis ipsilon*). Old Man Dart (*Agrotis vetusta*). Yellow-headed Cutworm (*Apamea amputatrix*). Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Nutmeg (*Anarta trifolii*). Corn Earworm (*Helicoverpa zea*). Zebra Caterpillar (*Melanchra picta*). Variegated Cutworm (*Peridroma saucia*). Fall Armyworm (*Spodoptera frugiperda*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Beet Webworm (*Loxostege stricticalis*). Spinach Moth (*Spoladea recurvalis*).

Populations of some other common widespread Lepidoptera use it outside of North America (HOSTS).

Spiraea japonica 'Bumalda'. Rosaceae. Spiraeaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, et. al., 1991).

Spiraea thunbergii. Rosaceae. Spiraeaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, et. al., 1991).

Spiraea x vanhouttei. **Bridal Wreath Spiraea**. Rosaceae. Spiraeaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, et. al., 1991).

Stokesia laevis. **Stoke's Aster**. Asteraceae. Senecioneae. Nectar: Pipevine Swallowtail (fq), Southern Dogface, Gulf Fritillary, Zebra Longwing, Painted Lady, American Lady (fq), Milbert's Tortoiseshell, Dun Skipper (photograph shows one apparently at nectar on 'Purple Parasols'), Eufala Skipper, Fiery Skipper. 'Blue Danube' 'Peachie's Pick' are said to be good cultivars for butterflies.

Symphotrichum ericoides formerly *Aster ericoides*. **Heath Aster**. Asteraceae. Astereae. Nectar: Cabbage White (fq), Checkered White (fq), Western White, Dainty Sulphur, Orange Sulphur, Painted Lady, West Coast Lady, Common Buckeye (fq), Field Crescent (fq), Pearl Crescent, Common Wood-Nymph, Gray Hairstreak, Purplish Copper, Melissa Blue, Common Checkered-Skipper (fq), SACHEM, Sandhill Skipper (fq), Uncas Skipper, Woodland Skipper, Snapdragon Plume Moth (*Amblyptilia pica*, Pterophoridae). Perhaps one of the less valuable Aster species for Lepidoptera.

Syringa meyeri. **Dwarf Korean Lilac**. Oleaceae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Monarch (fq), American Lady (fq).

Syringa pubescens subsp. *microphylla* [*'Syringa microphylla'*]. **Littleleaf Lilac**. Oleaceae. Nectar: Western Tiger Swallowtail (Travis Owens).

Syringa vulgaris. **Common Lilac**. Oleaceae. Nectar: Pipevine Swallowtail (fq), Giant Swallowtail, Western Tiger Swallowtail (fq), Pale Swallowtail, Two-tailed Swallowtail, Anise Swallowtail, Old World Swallowtail, Indra Swallowtail, Cabbage White (fq), Orange Sulphur, California Dogface, Monarch, Mourning Cloak, Milbert's Tortoiseshell, Green Comma, Painted Lady (fq), Red Admiral (fq), Gray Hairstreak, Spring Azure, Sleepy Duskywing, Propertius Duskywing, Silver-spotted Skipper, Juba Skipper, Western Snowberry Clearwing (*Hemaris thetis*, Sphingidae), White-lined Sphinx (*Hyles lineata*), Clark's Day Sphinx (*Proserpinus clarkiae*) (Marilyn Lemmon), Ipsilon Dart, Armyworm, nocturnal moths. Fragrant ones are best.

Common Lilac reported as a larval host for the Western Tiger Swallowtail.

Sphingidae: Rustic Sphinx (*Manduca rustica*). Small-eyed Sphinx (*Paonias myops*). Great Ash Sphinx (*Sphinx chersis*). Wild Cherry Sphinx (*Sphinx drupiferarum*). Elegant Sphinx (*Sphinx perelegans*).

Saturniidae: Ceanothus Silkmoth (*Hyalophora euryalus*).

Arctiidae: Banded Woollybear (*Pyrrharctia isabella*). Yellow Woollybear (*Spilosoma virginica*).
Drepanidae: Lettered Habrosyne (*Habrosyne scripta*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*).

Sesiidae: Ash Borer (*Podosesia syringae*).

Tortricidae: Oblique-banded Leafroller (*Choristoneura rosaceana*).

Syringa 'Matthews Purple'. **Lilac**. Oleaceae. This selection works as a nectar plant in Riverside.

Tagetes. **Marigold**. Asteraceae. Tageteae. Nectar: Cabbage White, Clouded Sulphur, Orange Sulphur, Dainty Sulphur, Sleepy Orange, Monarch, Variegated Fritillary, American Lady, Painted Lady, Red Admiral, Common Checkered-Skipper, Sachem, Fiery Skipper, Yellow-collared Scape Moth.

Tagetes erecta. **African Marigold**. Asteraceae. Tageteae. Nectar: Cabbage White, Painted Lady, West Coast Lady, Tropical Buckeye, Gulf Fritillary, Common Checkered-Skipper, Sachem (fq).

Suitable lab host for Dainty Sulphur: Douglas, Matthew M., and John W. Grula. 1978. "Thermoregulatory Adaptations Allowing Ecological Range Expansion by the Pierid Butterfly, *Nathalis iole* Boisduval." *Evolution* 32 (4): 776-83. doi:10.2307/2407493.

Tagetes lemmonii. **Mexican Marigold**. Asteraceae. Tageteae. Nectar: Western Tiger Swallowtail, Monarch (fq), Painted Lady, Texan Crescent, Fatal Metalmark, Common Checkered-Skipper, Veined Ctenucha (*Ctenucha venosa*, Arctiidae).

Tagetes patula 'Naughty Marietta'. **French Marigold**. Asteraceae. Tageteae. Nectar: Checkered White, Orange Sulphur, Clouded Sulphur, Monarch, Common Buckeye, Painted Lady (fq), American Lady, Red Admiral, Atlantis Fritillary, Variegated Fritillary, Milbert's Tortoiseshell, Mourning Cloak, Reakirt's Blue, Arizona Powdered-Skipper, Common Checkered-Skipper, Small Checkered-Skipper, Erichson's White-Skipper, Northern White-Skipper, Sachem (fq), Tawny-edged Skipper, Woodland Skipper.

Tanacetum vulgare. **Tansy**. Asteraceae. Anthemideae. Nectar: Clouded Sulphur, Mylitta Crescent, Common Wood-Nymph, Mormon Metalmark, Gray Hairstreak, Sachem, Woodland Skipper, and Tawny-edged Skipper.

Tecoma capensis. **Cape Honeysuckle**. Bignoniaceae. Nectar: Cloudless Sulphur (fq), Orange-barred Sulphur, Monarch. Mostly hummingbirds!

Tecoma stans. **Esperanza. Yellow Bells**. Bignoniaceae. Nectar: Ello Sphinx, White-lined Sphinx (fq).

Teucrium fruticans. **Bush Germander**. Lamiaceae. Nectar: Orange Sulphur.

Teucrium x lucidrys (*T. chamaedrys*). Cabbage White, Sachem. Scott thinks somewhat popular.

Thunbergia alata. **Black-eyed Susan Vine**. Acanthaceae. Nectar: Cloudless Sulphur, Orange-barred Sulphur (Fernandez-Hernandez).

Thymophylla tenuiloba. **Tiny Tim**. Asteraceae.

Hostplant for Dainty Sulphur (David T. Dauphin).

Thymus serpyllum 'Pink Chintz'. **Pink Chintz Thyme**. Lamiaceae. Dainty Sulphur, Mylitta Crescent.

Thymus pseudolanguinosus. **Woolly Thyme**. Lamiaceae. 'Beloved' of butterflies, according to Claire Hagen-Dole.

Tilia americana. **American Linden**. Malvaceae. Nectar: Western Tiger Swallowtail, Two-tailed Swallowtail, Painted Lady, Red Admiral, Mourning Cloak, Hackberry Emperor, Silver-spotted Skipper, Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (fq) (Wynne, 1991), moths.

Larval host for Mourning Cloak.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*, Canada).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Pale Beauty (*Campaea perlata*, Canada). Maple Spanworm (*Ennomos magnaria*, Canada). Linden Looper (*Erannis tiliaria*). Speckled Granite (*Macaria exauspicata*, Canada). Spring Cankerworm (*Paleacrita vernata*). Friendly Proboscis (*Probole amicaria*, Canada).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Limacodidae: Saddleback Caterpillar (*Acharia stimulea*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Copper Underwing (*Amphipyra pyramidoides*). Three-spotted Sallow (*Eupsilia tristigmata*, Canada). Nameless Pinion (*Lithophane innominata*). Wanton Pinion (*Lithophane petulca*). Speckled Green Cutworm (*Orthosia hibisci*). Colorful Zale (*Zale minerea*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*).

Pyalidae: American Plum Borer (*Euzophera semifuneralis*). Bold-feathered Grass Moth (*Herpetogramma pertextalis*, Canada). *Oreana unicolorella*.

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Tortricidae: Fruit-tree Leafroller (*Archips argyrospila*, Canada). Ugly-nest Caterpillar (*Archips cerasivorana*, Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*). *Oreana unicolorella* (BugGuide for “basswood”). Three-lined Leafroller (*Pandemis limitata*, Canada).

Tithonia fruticosa. **Bush Mexican Sunflower**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail (fq).

Tithonia rotundifolia. **Mexican Sunflower**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail (fq), Western Tiger Swallowtail, Pale Swallowtail, Anise Swallowtail, Giant Swallowtail. Cabbage White, Clouded Sulphur, Cloudless Sulphur, Orange Sulphur, California Dogface (fq), Boisduval’s Yellow. Monarch (fq), Queen, Gulf Fritillary, Zebra Longwing, Variegated Fritillary, West Coast Lady, Painted Lady, American Lady, Common Buckeye, Mourning Cloak. Juniper Hairstreak, Gray Hairstreak. Northern White-Skipper, Long-tailed Skipper, Funereal Duskywing, Fiery Skipper, Sachem. Soybean Looper (*Chrysodeixis includens*, Noctuidae). Anna’s Hummingbird. A top draw for Monarch in early October, and, regarding California Dogface, “for gardeners who wish to attract it, I would emphasize *Tithonia* as a lure: two years ago it came to our garden repeatedly for *Tithonia* -- and *Tithonia* only; visiting each flower of each plant, and nothing else; it came again for *Tithonia* this year” ... Barbara Deutsch.

Hostplant for Bordered Patch (photograph on The Nest Box web site and in Robert Behrstock’s garden).

Trachelium caeruleum. **Blue Throatwort**. Campanulaceae. Nectar: Western Tiger Swallowtail, Cabbage White, likely others.

‘Hamer Pandora’ is a fine variety.

Trifolium incarnatum. **Crimson Clover**. Fabaceae. Trifolieae. Nectar: Cloudless Sulphur, Orange Sulphur, Monarch, American Lady, Painted Lady, Eastern Tailed Blue, Corn Earworm.

Caterpillar host for Gray Hairstreak.

Trifolium pratense. **Red Clover**. Fabaceae. Trifolieae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Black Swallowtail, Old World Swallowtail. Checkered White, Cabbage White, Clouded Sulphur,

Cloudless Sulphur, Orange Sulphur, Sleepy Orange. Monarch (fq), Red Admiral, Painted Lady, American Lady (fq), Common Buckeye, Great Spangled Fritillary, Gulf Fritillary, Variegated Fritillary, Pearl Crescent, Common Wood-Nymph. Gray Hairstreak, Eastern Tailed Blue, Acmon Blue and other Blues. Common Sootywing, Northern Cloudywing, Silver-spotted Skipper (fq), Checkered-Skippers, Fiery Skipper, Woodland Skipper (fq), European Skipper, Field Skipper aka Sachem, Tawny-edged Skipper. Snowberry Clearwing, White-lined Sphinx, Ipsilon Dart, Armyworm.

Hostplant for Queen Alexandra's Sulphur, Orange Sulphur, Clouded Sulphur, Eastern Tailed-Blue, Northern Cloudywing. Todd Stout finds it and other Trifolium species suitable lab hosts for California Dogface.

Noctuidae: Fingered Dagger (*Acronicta dactylina*). Alfalfa Semilooper (*Autographa californica*). Olive Green Cutworm (*Dargida procinctus*). Corn Earworm (*Helicoverpa zea*). Hop Vine Borer (*Hydraecia immanis*). Common Hyppa (*Hyppa xylinoides*). Bertha Armyworm (*Mamestra configurata*). Fall Armyworm (*Spodoptera frugiperda*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyalidae: Lucerne Moth (*Nomophila nearctica*).

Tortricidae: Black-marked Ancyli (*Ancyli metamelana*). Oblique-banded Leafroller (*Choristoneura rosaceana*). *Grapholita conversana*. Divided Olethreutes (*Olethreutes bipartitana*). *Sparganothis tunicana*.

Trifolium repens. **White Clover**. Fabaceae. Trifolieae. Nectar: Pipevine Swallowtail. Sleepy Orange, Clouded Sulphur, Orange Sulphur, Dainty Sulphur, Checkered White, Cabbage White. Monarch, Variegated Fritillary, American Lady, Common Buckeye (fq), Pearl Crescent. Gray Hairstreak, Juniper Hairstreak, American Copper, Spring Azure, Marine Blue, Reakirt's Blue, Eastern Tailed Blue (fq), Greenish Blue. Common Sootywing, Northern Cloudywing, Silver-spotted Skipper, Common Checkered-Skipper (fq), Common Roadside-Skipper, Tawny-edged Skipper (fq), Dun Skipper, Fiery Skipper (fq), Sachem. White Lined Sphinx. Celery Moth. Shapiro: "Good all-around nectar source."

White Clover listed as a hostplant for Queen Alexandra's Sulphur, Orange Sulphur, Clouded Sulphur, Gray Hairstreak, Eastern Tailed Blue, Reakirt's Blue, Greenish Blue and Northern Cloudywing.

Coleophoridae: Metallic Coleophora (*Coleophora mayrella*).

Gelechiidae: *Chionodes lugubrella*. *Mirificarma eburnella*.

Noctuidae: Venerable Dart (*Agrotis venerabilis*). Alfalfa Semilooper (*Autographa californica*). Olive Green Cutworm (*Dargida procinctus*). Olive Arches (*Lacinipolia olivacea*). Fall Armyworm (*Spodoptera frugiperda*).

Tortricidae: Black-marked Ancyli (*Ancyli metamelana*).

Triticum aestivum. **Wheat**. Poaceae. Hordeae.

Reported as a foodplant for Variegated Fritillary in Brazil (?).

Arctiidae: Blake's Tiger Moth (*Grammia blakei*).

Noctuidae: Pale Western Cutworm (*Agrotis orthogonia*). Vancouver Dart (*Agrotis vancouverensis*), Yellow-headed Cutworm (*Apamea amputatrix*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Apamea sordens*). Olive Green Cutworm (*Dargida procinctus*). Army Cutworm (*Euxoa auxiliaris*). *Euxoa catenula*. Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa pallipennis*. *Euxoa quadridentata*. Early Cutworm (*Euxoa tristicula*). Dinky Cutworm (*Feltia jaculifera*). Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Bertha Armyworm (*Mamestra configurata*). Armyworm (*Mythimna unipuncta*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Pyralidae: Lesser Cornstalk Borer (*Elasmopalpus lignosellus*).

Tropaeolum majus. **Garden Nasturtium**.
Foodplant for Cabbage White.

Geometridae: Sharp-angled Carpet (*Euphyia intermediata*).

Noctuidae: Gray Looper (*Rachiplusia ou*).

Tulbaghia violacea. **Society Garlic**. Amaryllidaceae. Nectar: Woodland Skipper, Umber Skipper (Todd Plummer).

Tulipa sp. **Tulip**. Liliaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, 1991).
Ugnadia speciosa. **Mexican Buckeye**. Sapindaceae. Nectar: American Snout, Gray Hairstreak, 'Siva' Juniper Hairstreak.

Ulmus sp. **Elm**. Ulmaceae.

Tortricidae: *Oreana unicolorella* (BugGuide).

Ulmus americana. **American Elm**. Ulmaceae.

Hostplant for Mourning Cloak, Green Comma, Oreas Comma, Gray Comma, and even listed for the Painted Lady.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Yellow-spotted Tiger Moth (*Lophocampa maculata*).
Banded Woollybear (*Pyrrharctia isabella*).

Cossidae: Locust Borer (*Prionoxystus robiniae*).

Drepanidae: Two-lined Hooktip (*Drepana bilineata*).

Geometridae: Fall Cankerworm (*Alsophila pometaria*). Common Gray (*Anavitrinella pampinaria*, Canada). Peppered Moth (*Biston betularia*). Pale Beauty (*Campaea perlata*). Small Engrailed (*Ectropis crepuscularia*, Canada). Maple Spanworm (*Ennomos magnaria*). Linden Looper (*Erannis tiliaria*). Johnson's Euchlaena (*Euchlaena johnsonaria*). July Highflier (*Hydriomena furcata*, Canada). Mournful Thorn (*Lambdina fiscellaria*). Twilight Moth (*Lycia rachelae*). Speckled Granite (*Macaria exauspicata*). Bruce Spanworm (*Operophtera bruceata*). Spring Cankerworm (*Paleacrita vernata*). Friendly Probosc (*Probole amicaria*, Canada).

Lasiocampidae: Forest Tent Caterpillar (*Malacosoma disstria*).

Lymantriidae: Variable Tussock Moth (*Dasychira vagans*). European Gypsy Moth (*Lymantria dispar*). Antique Tussock Moth (*Orgyia antiqua*, Canada). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Yellow-haired Dagger (*Acronicta impleta*). Interrupted Dagger (*Acronicta interrupta*). Copper Underwing (*Amphipyra pyramidoides*). Wanton Pinion (*Lithophane petulca*). Hitched Arches (*Melanchra adjuncta*). Speckled Green Cutworm (*Orthosia hibisci*). Variegated Cutworm (*Peridroma saucia*). Colorful Zale (*Zale minerea*).

Notodontidae: Yellow-necked Caterpillar (*Datana ministra*). Red-humped Caterpillar (*Schizura concinna*). Morning-glory Prominent (*Schizura ipomoeae*). Unicorn Caterpillar (*Schizura unicornis*).
Pylalidae: Bold-feathered Grass Moth (*Herpetogramma pertextalis*, Canada). *Oreana unicolorella* (Canada).

Saturniidae: Polyphemus Moth (*Antheraea polyphemus*).

Tortricidae: Western Avocado Leafroller (*Amorbia cuneanum*). Fruit-tree Leafroller (*Archips argyrospila*, Canada). Oblique-banded Leafroller (*Choristoneura rosaceana*). Three-lined Leafroller (*Pandemis limitata*).

Ulmus parvifolia. **Chinese Evergreen Elm**. Ulmaceae.

Mourning Cloak drawn to sap from sapsucker wounds.

Reported as a foodplant for the Mourning Cloak.

Geometridae: Citrus Looper (*Iridopsis fragilaria*).

Ulmus pumila. **Siberian Elm**. Ulmaceae.

The 1992 Season Summary reports it a favored hostplant for Mourning Cloak in Arizona.

Valeriana officinalis. **Valerian**. Valerianaceae. Nectar: Cabbage White, Monarch, Red Admiral, Painted Lady. Valerian attracts “all” southern California butterflies according to Gale Cunningham.

Vauquelinia californica. **Arizona Rosewood**. Rosaceae. Maleae.

Arizona Rosewood is a larval host for the Two-tailed Swallowtail.

Verbena bipinnatifida is now *Glandularia bipinnatifida*. **Purple Prairie Verbena**.

Verbena bonariense. **Brazilian Verbena**. Verbenaceae. Nectar: Pipevine Swallowtail (fq), Anise Swallowtail, Desert Black Swallowtail. Cabbage White (fq), Pine White, Sleepy Orange (fq), Orange Sulphur, Clouded Sulphur, Cloudless Sulphur (fq), California Dogface (fq). American Snout. Painted Lady, American Lady (fq), Red Admiral, Common Buckeye (fq), Milbert’s Tortoiseshell, Mourning Cloak (fq), Variegated Fritillary (fq), Great Spangled Fritillary, Gulf Fritillary (fq), Zebra Longwing, Viceroy, Monarch (fq), Pearl Crescent (fq). Gray Hairstreak, Juniper Hairstreak, Eastern Tailed Blue, Silver-spotted Skipper (fq), Long-tailed Skipper, Common Checkered-Skipper, Common Sootywing,

Mournful Duskywing, Long-tailed Skipper, Woodland Skipper, Dun Skipper, Eufala Skipper, Fiery Skipper (fq), Sachem, Tawny-edged Skipper. Snowberry Clearwing, a sphinx moth and doubtless others. Flowers heavily visited by a great variety of butterflies.

Richard James, of Long Beach, in SoWestLep #5893: “You can feed the Mourning Cloaks (*Nymphalis antiopa*) all the rotting fruit you want, or just plant *Verbena bonariense*. They break the rules and nectar for hours on it, just like everything else that flies by. I rate it as the top butterfly nectar source from my experience.”

Commonly naturalized in Central Valley wetlands (Shapiro). ‘Little One’ is a dwarf selection, as is ‘Lollipop’.

Verbena pulchella. **Moss Verbena**. Verbenaceae. Nectar: Nearly all butterflies. Clavipes Sphinx, Bilobed Looper (*Megalographa biloba*).

Verbena stricta. **Hoary Vervain**. Verbenaceae. Nectar: Old World Swallowtail, Cabbage White, Checkered White, Mexican Yellow, Clouded Sulphur, Monarch, American Lady, Coronis Fritillary, Gulf Fritillary, Variegated Fritillary, Common Wood-Nymph, Gray Hairstreak, Eastern Tailed Blue, Marine Blue, Melissa Blue, Reakirt’s Blue, Silver-spotted Skipper, Northern Cloudywing, Common Checkered-Skipper (fq), Common Sootywing, Afranius Duskywing, Common Roadside-Skipper, Dun Skipper (fq), Pahaska Skipper (fq) (Johnson & Nixon, 1967), Fiery Skipper, Sachem (fq).

Vernonia altissima aka *Vernonia gigantea*. **Tall Ironweed**. Asteraceae. Vernonieae. Nectar: Pipevine Swallowtail. ‘Major butterfly magnet’ – Annie’s Annuals. A couple of *Vernonia* species are important nectar plants for Zebra Longwing in the wild.

Vernonia fasciculata. **Ironweed**. Asteraceae. Vernonieae. Nectar: Giant Swallowtail, Western Tiger Swallowtail, Clouded Sulphur, Cloudless Sulphur, Cabbage White, Monarch, Gray Hairstreak, Silver-spotted Skipper, Fiery Skipper, Dun Skipper, Tawny-edged Skipper.

Veronica longifolia and cultivar ‘Alba’. Plantaginaceae.

Veronica spicata. **Spike Speedwell**. Plantaginaceae. ‘**Sunny Border Blue**’. Gray Hairstreak. ‘**Goodness Grows**’. Cabbage White. ‘**Royal Candles**’. Silver-spotted Skipper.

Viburnum spp. Adoxaceae.

Arctiidae: Fall Webworm (*Hyphantria cunea*). Banded Woollybear (*Pyrrharctia isabella*).

Geometridae: Common Gray (*Anavitrinella pampinaria*). Linden Looper (*Erannis tiliaria*). Satyr Pug (*Eupithecia satyrata*). White-spotted Pug (*Eupithecia tripunctaria*).

Lymantriidae: White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: *Acerra normalis*. Copper Underwing (*Amphipyra pyramidoides*). Celery Moth (*Anagrapha falcifera*). Large Looper (*Autographa ampla*). American Angle Shades (*Euplexia benesimilis*). *Eurois stricta*. Brown Angle Shades (*Phlogophora periculosa*). Purple Arches (*Polia purpurissata*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Sphingidae: Blinded Sphinx (*Paonias excaecata*).

Tortricidae: Allen's Tortrix (*Aphelia alleniana*). Fruit-tree Leafroller (*Archips argyrospila*). Oblique-banded Leafroller (*Choristoneura rosaceana*). Dusky Leafroller (*Orthotaenia undulana*). Three-lined Leafroller (*Pandemis limitata*).

Viburnum davidii. **David Viburnum**. Adoxaceae. Flowers visited by Juniper Hairstreak (Bill Yake).

Viburnum lantana. **Wayfaring Tree**. Adoxaceae.

Noctuidae: *Acerra normalis*.

Viburnum suspensum. **Sandankwa Viburnum**. Adoxaceae.

No larval values.

Viburnum tinus 'Spirit'. **Compact Laurustinus**. Adoxaceae.

No larval values.

Vicia cracca. **Bird Vetch**. Fabaceae. Fabeae. Nectar: Swallowtails, Sulphurs, Blues, Fritillaries and Skippers in Maine. Nectar plant for Fender's Blue (Oregon). Red Admiral, Painted Lady, European Skipper (fq). Noted as a good butterfly plant by the Xerces Society. Works well as a butterfly plant in its native Europe.

Hostplant for Orange Sulphur, Clouded Sulphur, Eastern Tailed Blue, and Silvery Blue.

Noctuidae: Dappled Dart (*Anaplectoides pressus*).

Gelechiidae: *Chionodes lugubrella*.

Vigna unguiculata. **Cow Pea**. Fabaceae. Phaseoleae. Nectar: Corn Earworm (*Helicoverpa zea*, Noctuidae).

Foodplant for the Variegated Fritillary, Long-tailed Skipper.

Sphingidae: Carolina Sphinx (*Manduca sexta*).

Arctiidae: Salt Marsh Moth (*Estigmene acrea*) HOSTS.

Noctuidae: Old Man Dart (*Agrotis vetusta*). Golden Looper (*Argyrogramma verruca*). Soybean Looper (*Chrysodeixis includens*). Corn Earworm (*Helicoverpa zea*). Fall Armyworm (*Spodoptera frugiperda*). Velvet Armyworm (*Spodoptera latifascia*). Western Yellowstriped Armyworm (*Spodoptera praefica*). Cabbage Looper (*Trichoplusia ni*).

Pyralidae: Garden Webworm (*Achyra rantalis*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). Limbean Pod Borer (*Etiella zinckenella*).

Some other common moths eat it abroad but not reported as using it in North America (HOSTS).

Viola hederacea. **Australian Violet**. Violaceae.

Host for the Variegated Fritillary, according to Shady Oaks Butterfly Farm.

Viola odorata. **Garden Violet**. Violaceae.

Foodplant for Variegated Fritillary, at least in the Neotropics (HOSTS).

Viola tricolor. **Johnny Jump Up**. Violaceae.

Likely to work as a lab host for fritillaries (Todd Stout).

Vitex agnus-castus. **Chaste Tree**. Lamiaceae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Western Tiger Swallowtail. Cloudless Sulphur. California Dogface, Monarch (fq). Queen (Anne Reeves), Gulf Fritillary (fq), American Lady, Painted Lady (fq) (Ian Watkinson), Red Admiral, Common Buckeye, Tropical Buckeye, Pearl Crescent. Great Purple Hairstreak, American Copper, Eastern Tailed Blue, Marine Blue. Mournful Duskywing, Silver-spotted Skipper, Dun Skipper. Woodland Skipper, Snowberry Clearwing. Bumblebees. Its flowers are notably attractive to the Monarch.

No reported larval host values.

‘Abbeville Blue’ is an excellent cultivar for butterflies.

Vitis. **Grapes**. Vitaceae.

Noctuidae: *Euxoa atomaris*. Red-backed Cutworm (*Euxoa ochrogaster*).

Sphingidae: Achemon Sphinx (*Eumorpha achemon*). Banded Sphinx (*Eumorpha fasciatus*).

Vitis vinifera. **Grape**. Vitaceae.

Arctiidae: Yellow Woollybear (*Spilosoma virginica*).

Geometridae: Lesser Grapevine Looper (*Eulithis diversilineata*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*).

Noctuidae: *Abagrotis orbis*. Black Cutworm (*Agrotis ipsilon*). Eight-spotted Forester (*Alypia octomaculata*). Copper Underwing (*Amphipyra pyramidoides*). Mouse Moth (*Amphipyra tragopoginis*). Dark-sided Cutworm (*Euxoa messoria*). Striped Cutworm (*Euxoa tessellata*). Large Yellow Underwing (*Noctua pronuba*). Variegated Cutworm (*Peridroma saucia*). Fall Armyworm (*Spodoptera frugiperda*). Western Yellowstriped Armyworm (*Spodoptera praefica*).

Pterophoridae: *Oxyptilus delawaricus*.

Pyralidae: Raisin Moth. Grape Leafroller (*Desmia funeralis*). Dusky Raisin Moth (*Ephesiodes gilvescentella*). Indian Meal Moth. Beehive Honey Moth (*Vitula serratilineella*).

Sesiidae: Currant Clearwing (*Synanthedon tipuliformis*). *Vitacea cupressi*.

Sphingidae: Achemon Sphinx (*Eumorpha achemon*). White-lined Sphinx (*Hyles lineata*).

Tortricidae: Omnivorous Leafroller (*Platynota stultana*).

Zygaenidae: Western Grapeleaf Skeletonizer (*Harrisina brillians*, a wasp mimic moth found on flowers in the daytime).

Wedelia texana formerly Zexmenia hispida. **Orange Zexmenia**. Asteraceae. Heliantheae. Nectar: Bordered Patch, Texan Crescent, Fatal Metalmark, Common Sootywing, Orange Skipperling, Dun Skipper.

Weigela florida. **Weigela**. Caprifoliaceae. Nectar: Ipsilon Dart (*Agrotis ipsilon*, Noctuidae) (Wynne, 1991).

Wisteria floribunda. **Japanese Wisteria**. Fabaceae. Millettiae. Nectar: Sleepy Orange.

Wisteria frutescens. **American Wisteria**. Fabaceae. Millettiae. Nectar: Silver-spotted Skipper.

Hostplant for Silver-spotted Skipper, Long-tailed Skipper.

Wisteria sinensis. **Chinese Wisteria**. Fabaceae. Millettiae. Nectar: Pipevine Swallowtail, Western Tiger Swallowtail, Marine Blue, Silver-spotted Skipper, Northern Cloudywing.

Hostplant for Marine Blue, Silver-spotted Skipper, and Long-tailed Skipper.

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*). White-marked Tussock Moth (*Orgyia leucostigma*).

Notodontidae: Red-humped Caterpillar (*Schizura concinna*).

Sphingidae: Blinded Sphinx (*Eumorpha fasciatus*).

Xerochrysum bracteatum was Helichrysum bracteatum. **Golden Everlasting**. **Strawflower**. Asteraceae. Gnaphalieae. Nectar: Milbert's Tortoiseshell, Mourning Cloak, Red Admiral, Painted Lady.

Zea mays. **Corn**. Poaceae. Andropogoneae.

Hostplant: Recorded for Variegated Fritillary. One of the hosts for the polyphagous Gray Hairstreak; the only grass listed for it. Eufala Skipper.

Arctiidae: Yellow-collared Scape Moth (*Cisseps fulvicollis*). Salt Marsh Moth (*Estigmene acrea*) HOSTS. Fall Webworm (*Hyphantria cunea*). Banded Woollybear (*Pyrrharctia isabella*), Yellow Woollybear (*Spilosoma virginica*).

Cosmopterigidae: Florida Pink Scavenger (*Anatrachyntis badia*).

Crambidae: Mexican Rice Borer (*Eoreuma loftini*).

Gelechiidae: Potato Moth (*Phthorimaea operculella*). Angoumois Grain Moth (*Sitotroga cerealella*).

Lymantriidae: European Gypsy Moth (*Lymantria dispar*). White-marked Tussock Moth (*Orgyia leucostigma*).

Noctuidae: Henry's Marsh (*Acronicta insularis*). Black Cutworm (*Agrotis ipsilon*). Pale-sided Cutworm (*Agrotis malefida*). Pale Western Cutworm (*Agrotis orthogonia*). Venerable Dart (*Agrotis venerabilis*). Old Man Dart (*Agrotis vetusta*). American Ear Moth (*Amphipoea americana*). Yellow-headed Cutworm (*Apamea amputatrix*). Glassy Cutworm (*Apamea devastator*). Rusty Shoulder Knot (*Apamea sordens*). Golden Looper (*Argyrogramma verruca*). Alfalfa Semilooper (*Autographa californica*). *Euxoa albipennis*. Army Cutworm (*Euxoa auxiliaris*). Clear Dart (*Euxoa declarata*). Dark-sided Cutworm (*Euxoa messoria*). Red-backed Cutworm (*Euxoa ochrogaster*). *Euxoa olivia*. Striped Cutworm (*Euxoa tessellata*). Subterranean Dart (*Feltia subterranea*). Corn Earworm (*Helicoverpa zea*). Hop Vine Borer (*Hydraecia immanis*). Speckled Cutworm (*Lacanobia subjuncta*). Bertha Armyworm (*Mamestra configurata*). Zebra Caterpillar (*Melanchra picta*). Broken-lined Brocade (*Mesapamea fractilinea*). Armyworm (*Mythimna unipuncta*). Figwort Stem Borer (*Papaipema sauzalitae*). Variegated Cutworm (*Peridroma saucia*). Clandestine Dart (*Spaelotis clandestina*). *Spiramater lutra*. Beet Armyworm (*Spodoptera exigua*). Fall Armyworm (*Spodoptera frugiperda*). Yellowstriped Armyworm (*Spodoptera ornithogalli*). Cabbage Looper (*Trichoplusia ni*). Setaceous Hebrew Character (*Xestia c-nigrum*).

Oecophoridae: Brown House Moth (*Hofmannophila pseudospretella*).

Pyalidae: Garden Webworm (*Achyra rantalis*). Tropical Warehouse Moth (*Cadra cautella*). Lesser Cornstalk Borer (*Elasmopalpus lignosellus*). American Plum Borer (*Euzophera semifuneralis*). Cabbage Webworm (*Hellula rogatalis*). Beet Webworm (*Loxostege strictalis*). Large Sod Webworm (*Pediasia trisecta*). Indian Meal Moth (*Plodia interpunctella*).

Tineidae: Banana Moth (*Opogona sacchari*).

Tortricidae: Omnivorous Leaf-tier (*Cnephasia longana*). Omnivorous Leafroller (*Platynota stultana*).

Yponomeutidae: Diamondback Moth (*Plutella xylostella*).

Zelkova serrata. **Sawleaf Zelkova**. Ulmaceae.

No value for Californian Lepidoptera.

Zinnia. Asteraceae. Heliantheae. Includes many good or better nectar plants.

Noctuidae: Bertha Armyworm (*Mamestra configurata*).

Zinnia acerosa. **Desert Zinnia**. Asteraceae. Heliantheae. Nectar: Giant Swallowtail (The Firefly Forest), Mojave Sootywing.

Zinnia angustifolia. **Creeping Zinnia**. Asteraceae. Heliantheae. Nectar: Cabbage White (Kummel), California Dogface (Kummel), West Coast Lady, Common Buckeye, Bordered Patch (fq), Common Checkered-Skipper, Northern Cloudywing, Fiery Skipper. Seems not as popular as other zinnias.

Zinnia elegans. **Zinnia**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail, Giant Swallowtail, Western Tiger Swallowtail, Two-tailed Swallowtail, Anise Swallowtail. Cabbage White, Checkered White, California Dogface, Southern Dogface, Sleepy Orange, Cloudless Sulphur, Clouded Sulphur, Orange Sulphur, Mexican Yellow. Monarch, Queen, Great Spangled Fritillary, Gulf Fritillary, Variegated Fritillary, Mexican Fritillary, West Coast Lady, American Lady, Painted Lady (fq), Common Buckeye, Pearl Crescent, Common Wood-Nymph, Mourning Cloak. Gray Hairstreak, American Copper, Eastern Tailed Blue. Northern Cloudywing, Common Sootywing, Northern White-Skipper, Silver-spotted Skipper(fq), Common Checkered-Skipper (fq), Fiery Skipper, Pahaska Skipper, Sachem(fq), Woodland Skipper (fq), Tawny-edged Skipper (fq), Common Roadside-Skipper. White-lined Sphinx.

Varieties: ‘**California Giant**’ ‘**Lilliput**’ ‘**Profusion**’, ‘**Tall State Fair**’, ‘**Zowie Yellow Flame**’.
Zinnia grandiflora. Asteraceae. Heliantheae. Scott notes visits by Tropical Buckeye, Painted Lady, American Lady, Variegated Fritillary, and Funereal Duskywing.

Zinnia grandiflora. Rocky Mountain Zinnia. Asteraceae. Heliantheae. Nectar: Sleepy Orange (Liz Makings).

Zinnia peruviana. **Peruvian Zinnia**. Asteraceae. Heliantheae. Nectar: Pipevine Swallowtail, Large Orange Sulphur, Mallow Scrub-Hairstreak.

Air Pollution and Pollinators:

A sidebar article by Laura Shin, in Audubon magazine, May-June 2009 notes air pollutants can destroy floral scents:

“University of Virginia atmospheric scientist Jose Fuentes and colleagues have shown in a computer simulation that through chemical reactions, pollutants like smog can destroy floral scents. Under pre-industrial conditions, more than 80 percent of a snapdragon’s scent was detectable 3,280 feet away. At that distance today in an urban setting, less than 60 percent is measurable, and in highly polluted areas, only 30 percent of the aroma remains. This reduction could confuse pollinators like bees, which might suffer from longer searches for food, thereby impeding their ability to pollinate crops, says Fuentes.”

Moths collected at flowers in nectaring activity (Wisconsin study):

Arctiidae: Yellow-collared Scape Moth (*Cisseps fulvicollis*). Isabella Tiger Moth (*Pyrrharctia isabella*).

Drepanidae: Arched Hooktip (*Drepana arcuata*). Two-lined Hooktip (*Drepana bilineata*).

Geometridae: Pale Beauty (*Campaea perlata*).

Lasiocampidae: Lappet Moth (*Phyllodesma americana*).

Lymantriidae: Antique Tussock Moth (*Orgyia antiqua*).

Noctuidae: Impressed Dagger (*Acronicta impressa*). Ipsilon Dart (*Agrotis ipsilon*). Venerable Dart (*Agrotis venerabilis*). Alfalfa Semilooper (*Autographa californica*). Iliia Underwing (*Catocala ilia*). Common Hyppa (*Hyppa xylinoides*). American Snout (*Idia americalis*). Olive Arches (*Lacinipolia*

olivacea). Nameless Pinion (*Lithophane innominata*). Speckled Green Cutworm (*Orthosia hibisci*). Inscribed Looper (*Syngrapha epigaea*). Moon Umber (*Zale lunata*).

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Butterflies and Moths of Southern Vancouver Island by Jeremy B. Tatum:
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