



PLANTS

A resilient landscape is fire-wise, water wise and promotes biodiversity by using California native plants. These gardens use sustainable practices, plant selection, and maintenance to reduce the risk of fire in the defensible space zone. Resilient gardens save water, protect us from fire and promote biodiversity.

PLANT SELECTION	WATER & IRRIGATION	NATIVE PLANTS & COMMUNITIES	INVASIVE SPECIES	IMPORTANCE OF OAK WOODLAND	P MANA
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Native Plants

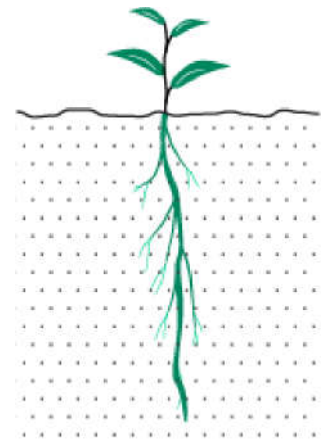
California native plants are not only beautiful, they simply provide critical supplies of food and habitat for our native pollinators and other insects and wildlife. Providing food for insects is critical, since so many birds, bats, reptiles, amphibians and other wildlife depend on them for their survival. For example, California oaks are known to support more than 5,000



yarrow (*Achillea millefolium*), photo by Jon Kanagy

species of insects and other invertebrates, far outpacing the contribution from non-native species. In addition, native plants:

- Are well adapted to the California climate, and will exhibit healthy, well-hydrated growth with less water than most non-native species
- Provide a “sense of place” connecting the home gardener to the broader California landscape
- Support local ecology. As development replaces natural habitats, planting gardens, parks, and roadsides with California native plants can help provide an important “bridge” to nearby remaining wildlands.
- Contribute beauty and delight to the community with tremendous diversity in plant form, flowers, and scents
- Require less maintenance. While no landscape is maintenance free, many gardeners find that California native plants require significantly less time and resources than common non-native garden plants. California native plants do best with some attention and care in a garden setting, but you can look forward to using less water, little to no fertilizer, little to no pesticides, less pruning, and less of your time.



Deep-root

The Native “Soil Keepers”

If you live in the Wildland Urban Interface, there is a chance you are surrounded by hills or uneven terrain. To help avoid erosion and runoff on your property, put in some native plants to stabilize the soils, control erosion and reduce your future irrigation costs. Moist and cool months are ideal to start these “soil keepers”. Once established they will require little irrigation. A mixture of plants is best, with various root depths to hold up a slope.

Many native bunchgrasses, for example, have extensive, fibrous root systems reaching many feet in depth. Additionally, many of these perennial grasses, such as

our California state grass, purple needlegrass (*Stipa pulchra*), are long-lived—up to 200 years. It's interesting to think of a stand of native grasses as having the permanence and resilience of a forest!



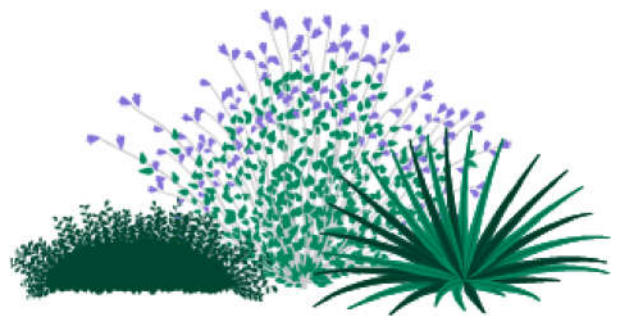
Figure by Pamela Heneks, courtesy of the California Native Grasslands Association



purple needlegrass (*Stipa pulchra*) in a home landscape, photo by Jon Kanagy

Plant Communities

It is very useful to consider local plant communities near you when selecting plants for your garden. Plant communities are groups of plants that grow together because of similar adaptations to microclimate, rainfall, soil, slope, and other factors, and knowing what grows naturally around you can give insight into plants appropriate for your home landscape. Some plant communities typically found in Sonoma County are:



- Oak woodland or savanna: An oak savanna is characterized by trees that are widely spaced, often with grassland between, while an oak woodland is characterized by trees growing closer



Oak woodland, photo by Jon Kanagy

together with canopies often touching. Coast live oak (*Quercus agrifolia*), blue oak (*Quercus douglasii*) and black oak (*Quercus kelloggii*) are dominant species in Sonoma County. The understory can be sparse or more dense with a diversity of shrubs, depending on how much shade the oaks provide. Some oak woodland understory plants are: blue wildrye (*Elymus glaucus*), California honeysuckle (*Lonicera hispidula*), iris (*Iris douglasiana*), California Melic (*Melica torreyana*), and wooly sunflower (*Eriophyllum lanatum*). Northern oak woodlands are occupied by many birds but most conspicuously by the [acorn woodpecker](#). A very gregarious bird, the acorn woodpecker lives in large, extended, talkative families collecting and storing acorns.

- Grassland plant community: this plant community is composed of perennial bunch [grasses](#), annual grasses, sedges and rushes as well as legumes, like lupine, and other wildflowers. These plants also occur in oak woodlands in open areas among trees.



Grassland, photo by Jon Kanagy

- Chaparral or coastal sage scrub: Chaparral often occurs on west-facing slopes which typically are hotter and drier, and feature few trees, but exhibit very drought tolerant shrubs with hard waxy evergreen leaves or needles. It is a myth that chaparral is “born to burn”, and its natural fire return interval is, in fact, 30 to 150 years. Coastal sage scrub, found on the cooler, moister coastal climates, features soft-leaved, summer-dormant shrubs. Coyote bush (*Baccharis pilularis*) is a common component of both chaparral and coastal sage scrub, and is a very important habitat plant. Dwarf varieties of coyote bush make an excellent groundcover in the landscape.



Chaparral, photo by Ellie Insley

- Riparian Woodland: The riparian plant community is found along streams. Common plants include spicebush (*Calycanthus occidentalis*), willow (*Salix* species), dogwood (*Cornus sericea*), white alder (*Alnus rhombifolia*), big leaf maple (*Acer macrophyllum*), box elder (*Acer negundo*), Oregon ash (*Fraxinus latifolia*), valley oak (*Quercus lobata*), black walnut (*Juglans nigra*) and cottonwood (*Populus fremontii*). Riparian plants are generally more water-loving than those of the other California plant communities. Riparian habitat runs through other plant communities, as water flows through the watershed.
- Redwood forest: This plant community is found along the ocean side of the coast ranges of Northern California. Common species include coast redwood (*Sequoia sempervirens*), Douglas fir (*Pseudotsuga menziesii*), California rose-bay (*Rhododendron macrophyllum*), Western azalea, (*Rhododendron occidentale*) and tanbark oak (*Notholithocarpus densiflorus*). The keystone species of the redwood forest, the coast redwood tree (*Sequoia sempervirens*), can live for more than a thousand years.

- Mixed evergreen forest: This plant community is found mostly in the northern coastal mountains of California, and usually occupies the cooler, damper north-east facing slopes. Some of the component species include tanbark oak (*Notholithocarpus densiflorus*), madrone (*Arbutus menziesii*), Douglas fir (*Pseudotsuga menziesii*), California bay (*Umbellularia californica*), bigleaf maple (*Acer macrophyllum*), [canyon live oak \(*Quercus chrysolepis*\)](#), [black oak \(*Quercus kelloggii*\)](#), [coast live oak \(*Quercus agrifolia*\)](#), and [California hazelnut \(*Corylus californica*\)](#). This forest is filled with leafy trees and fewer conifers.



Mixed evergreen forest, photo by Ellie Insley

We appreciate the contributors to this section:

[California Flora Nursery](#)

[alscape.org](#)

Sources:

[C Master Gardener Program of Sonoma County, California Natives](#)
[arin Chapter, California Native Plant Society Plant Replacement List](#)

[California Flora Nursery](#)

[alscane](#) a native plant database from the California Native Plant Society



Sonoma Ecology Center works to address challenges related to water supply and quality, open space, rural character, biodiversity, energy, climate change, and a better quality of life for all residents.

<https://sonomaecologycenter.org/>



The UC Master Gardener Program of Sonoma County has been extending educational outreach and providing technical assistance to home gardeners since 1981.

<https://sonomamg.ucanr.edu/>



The mission of the Habitat Corridor Project is to create and promote California native plant restoration gardens in the urban environment.

<http://habitatcorridorproject.org/>



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