



*Nurturing nature with natives.*

**Welcome to the Songbird Sanctuary Gardens!** A project of Native Songbird Care & Conservation, the evolution of our gardens began in 2002. We are passionate about native plants and their vital role in sustaining our native songbirds. Most of the plants have been selected with songbirds in mind and provide food, shelter and nesting sites.

The majority of our rustic habitat garden occupies approximately an acre of land and is mostly California native plants. The garden is drought tolerant and does not require irrigation. A small amount of supplemental water may be provided during extreme summer heat events.

The success of our efforts to provide functional habitat in the garden and what it provides to our local wildlife is measured by the response of the birds. Over 30 species of native songbirds have been recorded nesting on the property during spring and summer. The gardens provide what they need - food, water, shelter and safe places to nest and raise their young.

The Garden also provides vital habitat for migratory birds passing through as well as overwintering songbirds. In addition to the diversity and abundance of songbirds, we host a variety of other wildlife, from bobcats and brush rabbits, to Western Fence Lizards and Great Horned Owls. A large variety of native bees, butterflies and other insects also call the garden home.

Please meander down the pathways and enjoy. We are happy to answer any questions. Please remember the gardens are a sanctuary to wildlife as well as a hospital for injured and orphaned songbirds. For the well-being of the wildlife who call the gardens home and our patients recovering in the aviaries and hospital, we ask that you observe the following:

*Please stay on the paths.*

*Please don't pick plants or touch wildlife.*

*Please supervise children.*

*Please do not approach or stand near the aviaries.*

*Smoking and dogs are not permitted on the property.*

*Thank you.*

**1 Slow it. Spread it. Sink it.** As you look to your left and right, you will see that basins and swales are a prominent feature in our garden. Engineered by our friend Karmendra Rossi of Nucleus Permaculture Design, these water-collecting wonders play an important role in keeping many of the plants healthy and hydrated throughout most of the year. The basins catch the water allowing it to infiltrate the ground and prevent it from running downhill. As the water soaks into the ground it nourishes the plants in and surrounding the basin, and helps recharge the aquifer below.

**2 Structural diversity.** Great care has been taken to address the unique and diverse needs of the songbird species who live in the gardens both seasonally and year around. Each species has specific requirements for food, nesting and shelter. Structural diversity, the layers of habitat created by the plants and trees, is especially important for providing suitable nesting sites and places for shelter.

Most songbirds nest in the mid-story, the area 3-10' from the ground consisting primarily of shrub-type vegetation and forest understory. In the Songbird Sanctuary Gardens, this zone is favored by Northern Mockingbird, American Robin, House Finch, California Towhee, Swainson's Thrush, and Song Sparrow. The

upper story, the structural habitat provided by the tree canopy, is where bushtits, Hutton's Vireo, Hooded Oriole and Black-headed Grosbeak nest. Species such as Spotted Towhee, Orange-crowned Warbler, California Quail and Dark-eyed Junco, nest in the lowest portion of the habitat at ground level.

Primary cavity-nesters, such as woodpeckers, have access to snags and dead or dying limbs on select trees throughout the property and in the conservation easement along the creek at the back of the property. When the woodpeckers are done with their nest cavities, secondary cavity-nesters, such as bluebirds and titmice, will use them to raise their young.

**3 Don't be a neatnik.** Dormant plants and fallen leaves provide food and homes for an array of wild lives. Annuals and perennials that have gone to seed provide vital sources of food for wintering sparrows, juncos, towhees, finches, and quail. We generally refrain from 'dead-heading' these plants during fall and winter; but if we do, we leave the clipped material on the ground spread around the plant from which it was clipped. This leaves the food source available to the birds. It also protects any insects that are overwintering in the material.

Healthy songbird populations are dependent on healthy insect populations. Did you know that 96% of songbirds raise their young on a diet of insects? And as adults, the diet of most songbird species consists entirely or mostly of insects. Healthy insect populations are dependent on native plants, the plants with which they co-evolved. We support insects year around in the garden with our plant choices as well as the way we tend our garden. Leaf litter is an important resource for insects, which is why we '*leave the leaves*' to preserve the habitat for overwintering insects, which are a vital source of food for the birds.

**4 Pollinator Alley.** This section of the garden is vibrant with color and buzzing with pollinators from March through mid-November. As you pass through the arbor you will see Lizard's tail, manzanita, California buckwheat, sticky monkey flower, California fuchsia, seaside daisy, and Coyote Brush are prominently featured plants. The section is drought hardy and very resilient during the dry summer months.

Further down the path are more great pollinator plants – yarrow, pearly everlasting, goldenrod, ceanothus, native salvias, coastal buckwheat, aster, and coyote mint. Plants that are good for pollinators and other insects are also good for the birds. Remember: native plants = insects = equals happy bird populations and biodiversity!

**5 The Seasonal Pantry.** Our selection of native plants in the garden provide food for the birds year around. Fruiting shrubs in spring and summer include red and blue elderberry, gooseberry, woodland strawberry, and golden currant; in summer and fall the huckleberry, wild grape, Catalina cherry and coffee berry are ripe; and in winter the toyon berries sustain fruit-eating birds such as Cedar Waxwing, Hermit Thrush and American Robin.

Sources of nectar include all native perennial flowering plants such as monkey flower, seaside daisy and penstemon during spring and summer, assorted salvia and mallow from spring through early fall, California fuchsia during late summer through late fall, and ribes and manzanita during winter through spring.

**6 Meadow.** This area has been left open as a micro meadow habitat. Eventually, when the weeds are mostly eradicated, it will be seeded with native wildflowers to support pollinators. In the meantime, this is a good hunting spot for insectivorous Western Bluebirds and the resident Black Phoebe. The bare ground is an important resource for ground nesting bees. Seeds from native bunch grasses provide a winter food source for Dark-eyed Juncos, towhees and wintering sparrow species. And the Red-shouldered Hawk also benefits from this open patch to hunt gophers.

**7 A world without insects is a world without biodiversity.** Most of the plants in the garden fulfill multiple functions in the environment: carbon sequestration, water preservation, shelter and nesting sites for birds and insects, and a range of food sources for birds and other wildlife. Sustaining the native insect population is one of the most important functions the plants and trees serve in the garden.

As you look around, you will see many mature Coast Live Oaks and lush islands of Coyote Brush. Live oak and coyote brush are heavy hitter habitat heroes in the Songbird Sanctuary Gardens. Native oaks host over 500 species of insects; Coyote Brush hosts over 200. At any time of the year, songbirds are found hunting and gleaning insects from these power-packed stalwarts of the garden. They are also evergreen and provide cover throughout the year for roosting, nesting, naps, and to hide from predators.

**8 Homes and other amenities for other wildlife.** Logs lining the pathways are an excellent way to make use of the branches trimmed from our trees during fall and winter. The branches provide areas for lizards to bask in the sun, birds to perch on and forage around, insects to dwell in, and salamanders and centipedes to live under. Fungus eventually moves in and decomposes the wood, which returns it to the earth and nourishes the soil. We have also placed logs at the edge of the pond for the phoebe and dragonflies to hunt from.

You will see various rock installations throughout the garden. Crevices around the rocks offer homes to insects, reptiles and amphibians. Brush piles at the back of the property provide homes for insects and other life, but also provide a great source of cover for birds such as sparrows, towhees, wrens and quail.

Nest boxes scattered around the property are occupied by Western Bluebirds, White-breasted Nuthatch and other cavity-nesting songbirds. Nesting platforms in the Nesting Pavilion (the structure just after stop #9) and on other structures are occupied by Pacific-slope Flycatchers, American Robins and House Finches during the breeding season.

**9 Water is life.** We have several water features in the garden, everything from plant saucers and bird baths to the pond system here on the west side of the garden. The pond was created in 2002 and is a magnet for all manner of wildlife. Birds bathe in the stream between the upper and lower pond, a bobcat drinks from the shore in the early morning, bats skim over water's surface in the early evening, and raccoons do what they do in the middle of the night around the pond's edge. There is even a male Western Pond Turtle who discovered the pond two summers ago and has made his home here.

The pond is a self-sustaining system and does not require biological bacteria to manage mosquitos or chemicals to retain water clarity. A robust population of predatory insects eliminate mosquito larvae. Native bulrush and cattails are efficient filters; and the stream keeps the water oxygenated. Pacific Chorus Frog and a variety of dragonflies also use the pond to lay their eggs and bring their next generation into the world.

**10 Eliminate threats and hazards.** Songbird populations are in rapid decline due to a wide range of negative human-caused impacts. We have a responsibility to reduce our impact by safely containing cats, preventing window collisions, reducing or eliminating light pollution, ceasing the use of pesticides and chemical fertilizers, not using sticky fly or rodent traps, and using native plants in our gardens to provide functional habitat for songbirds and other wildlife. There are simple solutions to help songbirds around our homes and gardens. Please see our outreach materials for more information about these critical issues affecting our songbirds and what you can do to help.