

The vegetation in our cities and towns is remarkably diverse, and from the point of view of some animals, we've been spectacularly successful in creating habitat. The once-migratory Anna's hummingbird has become a year-round resident in coastal California, largely because of the abundance of food sources (both feeders and flowering plants) that humans have made available.

Our residential environments are essentially an open woodland growing over scattered impervious surfaces. This architecture favors certain species, including many of the perching birds, who like shrubs and edges and can easily move between patches of habitat. Terrestrial species have a harder time making a go of it in suburbia, but many persist and, along with their winged brethren, they will gladly make use of your yard if given a little incentive.

Gardening for Wildlife

Many organizations promote gardening for wildlife, and their recommendations have much in common with Bay-Friendly Gardening. They exhort the gardener to (among other things) quit pesticides, embrace bugs, lose the lawn, and use native plants. Most recommend an architecture of low, medium, and high plantings, and most follow tenets set down by the National Wildlife Federation: food, water, places to hide, and places to raise young are what makes wildlife at home in that habitat also known as the backyard, apartment balcony, or patio.



At its root, gardening for wildlife is an attempt to provide for the needs of wildlife. This can be as simple as hanging a bird feeder or as complex as overhauling an entire yard. For most people, the pursuit lies somewhere in between, and typically it involves learning something about the wild flora as well as fauna. To get started, try the following steps.

Take notice of the wildlife that's already present. Butterflies and birds are often more easily viewed from inside the house — and through binoculars. Situate your furnishings so that where ever you spend time regularly, you're next to a window. That makes observation easy and an enjoyable respite from whatever else may occupy you. Also be sure to go outside and play! When you're in the yard, give yourself the time to sit and watch or turn over rocks and investigate.

Use field guides and natural histories to learn more about what you're seeing. Opening these texts is like peeking into some wizard's book of mysteries — the secrets of the world are laid bare, in a language of beauty and poetry. But far from being hidden or arcane, these magical volumes are available to anyone who cares to look. Enjoy them. Make use of them.

Consider the surrounding environment. Your success as a wildlife gardener will be influenced by the lands around you. Creeks or other water bodies, and areas of open space (including vacant lots), will bring more wildlife to your area. Sometimes even a

single tree in the neighborhood, such as a willow or an oak, can support a host of species, from humble bugs to haughty raptors.

Consider the needs of wildlife. Food, water, shelter, and places to raise young are the essential elements of wildlife habitat.

Food means all things plant-related: pollen, nectar, berries, seeds, stems, and leaves. It also means bugs; they're the food for other bugs, for birds, for mammals, reptiles, and amphibians.

Moving water attracts more species than still water, but even a shallow basin on the ground, kept clean and refilled regularly, will offer birds a place to drink and bathe. It can also offer frogs and salamanders a place to lay eggs.



To provide shelter for the greatest number of species, diversify the architecture of the garden — that is, select plants that will stand at different heights when mature. Plant different kinds of plants as well — use herbaceous perennials as well as woody ones, plant bulbs, grow grasses, and so on.

Places to raise young means different things to different species. Anna's hummingbirds will use a variety of trees to anchor their tiny nests of spider web strands and lichen. Skipper butterflies lay eggs on blades of grass. Diverse plantings will provide reproductive space for more species. Leave leaf litter in place, use mulch, and allow some open ground.



Use a few extra native plants. Natives provide some of the best food sources for wildlife, particularly at the lower end of the food chain. Some native plants, such as coyote bush, coffeeberry, and oaks, are host to hundreds of species of insects which in turn provide important food sources for other insects, reptiles, amphibians, birds, and mammals.

Grow a diversity of plants. Wildlife gardeners have one advantage over Mother Nature — they can create a super abundance of food sources such as would never occur in the wild. Grow plants with different flowering times, shapes, and sizes. Include plants and shrubs that provide berries. Avoid, however, the one-of-everything approach; many kinds of wildlife, especially pollinators, prefer mass plantings of their favorite food sources.

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Flowering Periods of Selected Beneficial Insect Plants	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Salix sp. (Willow sp.)												
Ceanothus sp.												
Baccharis viminea (Mule Fat)												
Achillea sp. (Yarrow sp.)												
Rhamnus californica (Coffeeberry)												
Prunus ilicifolia (Holly-Leaf Cherry)												
Eriogonum sp. (Buckwheat sp.)												
Sambucus sp. (Elderberry sp.)												
Heteromeles arbutifolia (Toyon)												
Myoporum parvifolium (Creeping Boobialla)												
Asclepias fascicularis (Narrowleaf Milkweed)												
Baccharis pilularis (Coyote Brush)												

Urban Habitats: Gardening for Wildlife

Charlotte Torgovitsky is a nature-lover and it shows in her garden in Novato which is teeming with wildlife. She reports regularly seeing 36 different species of birds and 18 species of butterflies, tree frogs, lizards, skinks, and snakes, plus ring-neck & sharp-tailed coyotes, gray fox and bobcats. When asked how she created her wildlife garden she answers, “I always plant for the insects first — big drifts of flowering plants that provide nectar and pollen. Once the insects arrive, birds will surely follow.”

Birds are a big priority for Charlotte and she has noticed first hand that providing appropriate nesting boxes really works. “I’ve put up lots of nesting boxes — adding to the selection when I see a new bird species foraging in my garden.” For example, when she noticed ash-throated flycatchers in the woodlands next to her house she put up an appropriate box and they started breeding in her garden. She knows of several other species that are breeding on her lot including barn owls, western bluebirds, Bewick’s Wren, tree swallows, and California towhees.

Her lot is right next to 60 acres of open space and is also very close to the wetlands surrounding Novato Creek. She takes inspiration from these nearby open spaces to create plant communities in her garden. “California native plants generally are most attractive to insects — my garden is about 70% native. I also plant other Mediterranean

species, and wildflowers to make sure that something is in bloom the whole year.”

Most Bay Area residents don’t live next to large open spaces, but even in dense urban areas gardeners can provide for the needs of wildlife. Jon and Janet Gibbens have created an oasis for wildlife in the middle of San Jose. The front

yard is shaded by an English walnut tree, under which is a series of small berms that are covered with apricot mallow, manzanita, California primrose, and hummingbird sage. This diverse garden structure of low and high plantings creates layers of cover and shelter, and includes plants with different flowering times to provide a year-round supply of food.

The Gibbens keep four fountains and a large bird bath. “There is A LOT of bird bathing going on, even in the winter,” says Janet. Water is the single most important element of a wildlife garden — it alone will bring new creatures into the yard and help sustain the ones already there.

When asked how her neighbor’s like

her garden, Janet replied, “Everyone loves it. Whenever our neighbors have visitors from out of town they make sure to show them our garden, and when we give them the tour there are a lot of *oohs* and *aahs*.”



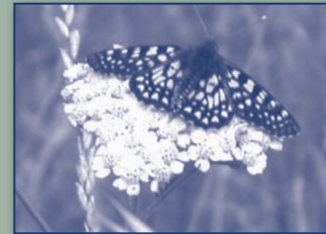
PHOTOS: TOP: JON & JANET'S GARDEN, SAN JOSE. BOTTOM: CHARLOTTE'S GARDEN, NOVATO.

If You Plant it, They Will Come

To help build diversity in her yard, Fremont gardener Kathleen McCabe-Martin grows herbaceous perennials — plants that live for more than a single growing season but aren’t woody. McCabe-Martin grows one such plant, cow parsnip, at the edge of a wildflower meadow in her backyard. Reaching heights of more than six feet in a single season, cow parsnip dies back by the end of summer, then sprouts again in the spring. It blooms annually, putting forth broad platforms of small flowers that attract a host of beneficial insects.

Like many herbaceous perennials, cow parsnip relies on underground structures—in this case, a sturdy taproot — to remain alive all year. Plants that have varied ways of living help vary a garden’s structure, both above and below ground, and they provide varied resources for animals in the garden.

Whether it is for a seasonal stopover or setting up house, including plants in your garden that provide food, shelter and places to raise young will entice wildlife visitors. Consider who you are most interested in providing habitat for and then learn more about their habits and needs. For those captivated by Bay Area butterflies, the plant list on this page provides a selection of host and nectar plants.



Butterfly Attracting Plants

<i>Antirrhinum majus</i>	Snapdragon
<i>Asclepias</i> sp.	Milkweed
<i>Aster chilensis</i>	California aster
<i>Carex tumicola</i> and others	Carex
<i>Ceanothus</i> spp.	California lilac
<i>Erigeron</i> spp.	Fleabane
<i>Eriogonum</i> spp.	Native buckwheats
<i>Festuca californica</i> , <i>Melica californica</i> and others	Grasses
<i>Lantana</i>	Lantana
<i>Lupinus</i> sp.	Lupines
<i>Malacothamnus</i> sp.	Mallow
<i>Monardella villosa</i>	Coyote mint
<i>Nepeta</i> spp.	Catmint
<i>Penstemon</i> spp.	Penstemon
<i>Phacelia</i> spp.	Phacelia
<i>Rhamnus californica</i>	Coffeeferry
<i>Rudbeckia</i> spp.	Rudbeckia
<i>Salvia</i> spp.	Sages
<i>Sedum</i> spp.	Stonecrop
<i>Sidalcea malviflora</i>	Checkerbloom
<i>Solidago californica</i>	Goldenrod
<i>Tagetes lemmonii</i>	Mexican Bush Marigold

Build a diversity of layers. Intentionally build edges — areas of transition from plants of one height or type to another — into your garden’s architecture. In wild nature, edges are where the greatest diversity of wildlife is found. The structure of most wildlife gardens attempts, on a small scale, to mimic this effect, right down to the herb layer and ground level.

Provide water. The single most important element of any homemade habitat is water. A large ceramic jar tilted on its side, dug into the ground slightly, and filled with water can host damselflies and Pacific tree frogs; moving water attracts all manner of birds. Whether it’s a birdbath or a six-by-six pond with a small waterfall, a consistent source of water will invite and help many kinds of wildlife to survive in your yard.



Get down to specifics. Who have you gotten to know in your yard and who are you hoping to attract? Put in what they need and like. Pineapple sage or California fuchsia for Anna’s hummingbirds. Buckwheats for the acmon blue. Downed wood and moist soil for the slender salamander. If you create habitat, be assured, they will come.



Dealing with Unwanted Wildlife (Including Mosquitoes)

Some people are concerned that if we garden for wildlife, we may attract animals we don’t want in our yards. In addition, with the arrival of West Nile Virus in California, many gardeners worry that water features will attract mosquitoes. According to the National Wildlife Federation, “having a Backyard Wildlife Habitat site does not put you at a higher risk of catching West Nile virus if you follow these basic suggestions:

- Protect yourself by taking simple precautionary measures, such as avoiding peak times of mosquito activity, using insect repellent, and wearing long pants and sleeves.”
- Help control sources of mosquito breeding by cleaning gutters each year and regularly draining flower pots, wading pools, and other objects that collect water in your back yard. Change the water in bird baths, wildlife water sources, and pet dishes frequently.”
- Where mosquito outbreaks are not controllable, careful management of mosquito breeding sites through limited use of natural larvicides should be considered. Adulticides should not be used.”

As far as other animals are concerned, few if any will become a nuisance. If they do, it’s because your yard or home has got something they want — a warm dry place to raise young, perhaps, or an easy source of food. To deal with such problems, use basic principles of Integrated Pest Management. Identify what’s attracting them and remove it or address the issue.

