Bird Gardens

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NATURAL HISTORY MUSEUM Los Angeles county

LA Nature Fest 2020

Key Features of Bird Gardens

To attract birds to your garden, provide Food, Water, Shelter, and Nesting Sites. For greatest success, include:

Local Native Plants Plants for Caterpillars, Seeds, Nectar, Berries & Other Fruits Plants for Shelter & Nesting Materials Water Features

To protect birds in your garden, avoid:

Toxic Pesticides or Herbicides Letting Your Cats Outdoors – They kill billions of birds yearly Tree Pruning during Nesting Season (February–July)

Plants, animals, and topics listed in yellow are subsequently illustrated in the presentation.

What birds will we see in L.A.?

Allen's Hummingbirds American Crows American Goldfinches American Robins Black Phoebes Black-throated Gray Warblers Bushtits California Scrub-jays California Towhees Cedar Waxwings Common Yellowthroats Cooper's Hawks Dark-eyed Juncos Feral Pigeons House Finches House Sparrows Lesser Goldfinches Lincoln's Sparrows Mallards Mourning Doves Northern Mockingbirds Nutall's Woodpeckers Orange-crowned Warblers Red-tailed Hawks Ruby-crowned Kinglets White-crowned Sparrows Yellow-rumped Warblers

These birds have been spotted in the NHM Nature Gardens according to iNaturalist.org.







Bushtit and Western Sycamore (*Platanus racemosa*)



Cedar Waxwings and Western Sycamore (Platanus racemosa)





Lesser Goldfinch



Northern Mockingbird

Why Grow Native Plants?

Ecosystems are defined by plants and animals and their interactions with the physical environment. Plants and animals that evolved in a particular region depend upon one another for survival and reproduction. When native plants disappear, bird life declines. By growing natives, you can support birds and help restore damaged ecosystems.

Sustainable gardening: Plants native to your region are adapted to your local soils, temperatures, and seasonal rainfall. They offer the greatest potential for attracting native insects, which are essential in any habitat. With thoughtful placement and selection, local native plants will need less water, fertilizer, and maintenance.

Beauty: So many native plants, including local species, are attractive, colorful, fragrant, easy to grow, resilient, and versatile.

Host Plants for Caterpillars (Baby Bird Food)

Trees and Shrubs	# of Caterpillar Species
Alder (<i>Alnus</i> spp.)	202
Pine (<i>Pinus</i> spp.)	220
Cottonwood, Poplar (<i>Populus</i> spp.)	230
Cherry (<i>Prunus</i> spp.)	262
Oak (<i>Quercus</i> spp.)	275
Willow (<i>Salix</i> spp.)	328

96% of terrestrial bird species in North America feed their young with caterpillars, insects, and other arthropods. (Tallamy, p.24)

"Specify Your Location." Native Plant Finder [Beta], National Wildlife Federation, http://nwf.org/NativePlantFinder/Plants







Host Plants for Caterpillars (Baby Bird Food)

Flowers and Grasses

of Caterpillar Species

9

3

Deer Vetch, Trefoil (<i>Acmispon</i> spp., <i>Lotus</i> spp.)	
Sagebrush, Wormwood (<i>Artemisia</i> spp.)	6
Baccharis (<i>Baccharis</i> spp.)	3
Sunflower (<i>Helianthus</i> spp.)	5
Lupine (<i>Lupinus</i> spp.)	7
Goldenrod (<i>Solidago</i> spp.)	5

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Ed Gedling Lupine (Lupinus microcarpus 'Ed Gedling')

Photo: Carol Bornstein

Plants for Seed-Eating Birds

Leave the dead flowers for seeds to ripen.

Yarrow (Achillea millefolium)
Grasses (Aristida purpurea, Muhlenbergia rigens, Sporobolis airoides, Stipa cernua, Stipa pulchra, etc.)
Quail Bush (Atriplex lentiformis)
Bush Sunflower (Encelia californica)
Common Sunflower (Helianthus annuus)
Island Tree Mallow (Lavatera assurgentiflora)
Penstemon (Penstemon spp.)
Sages (Salvia spp.)

Theodore Payne Foundation. Native Plants for Birds. Sun Valley, USA: TPF Press, 2016.





Purple Three Awn (Aristida purpurea)

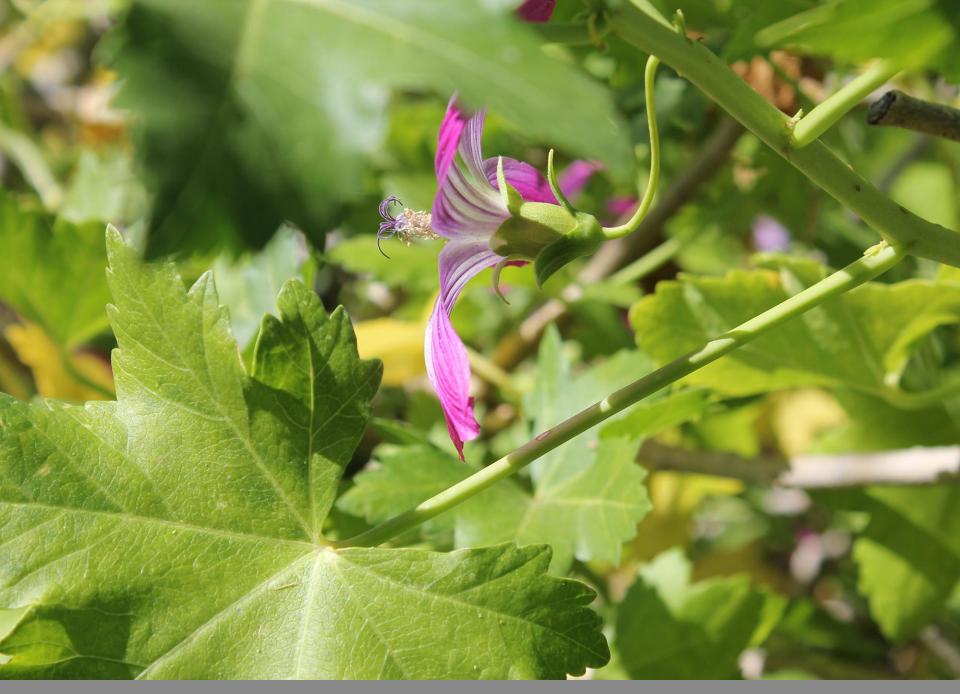
Photo: Alan Duke

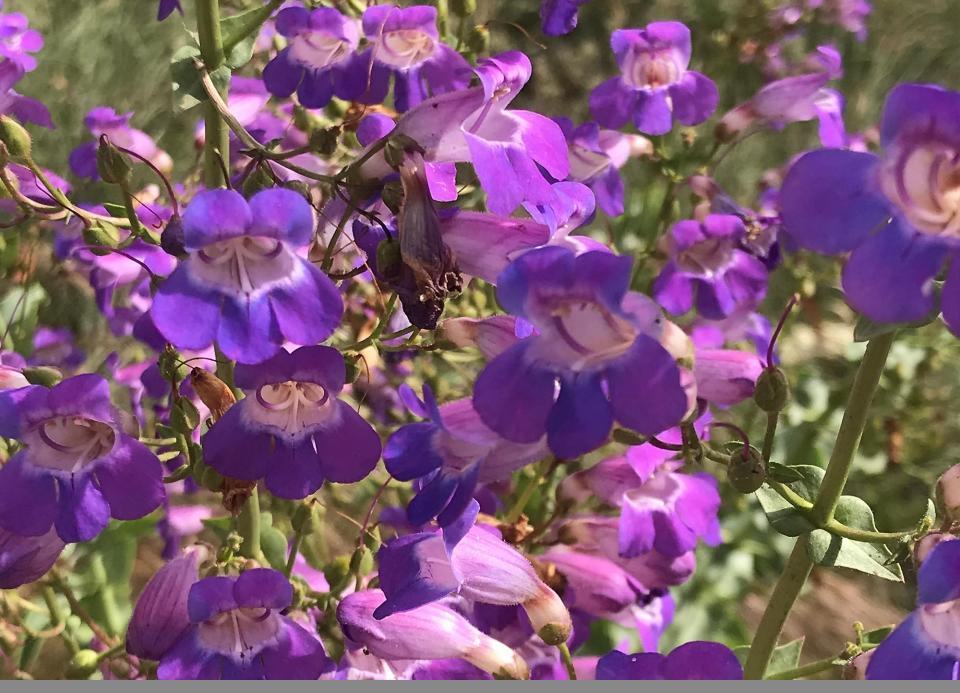


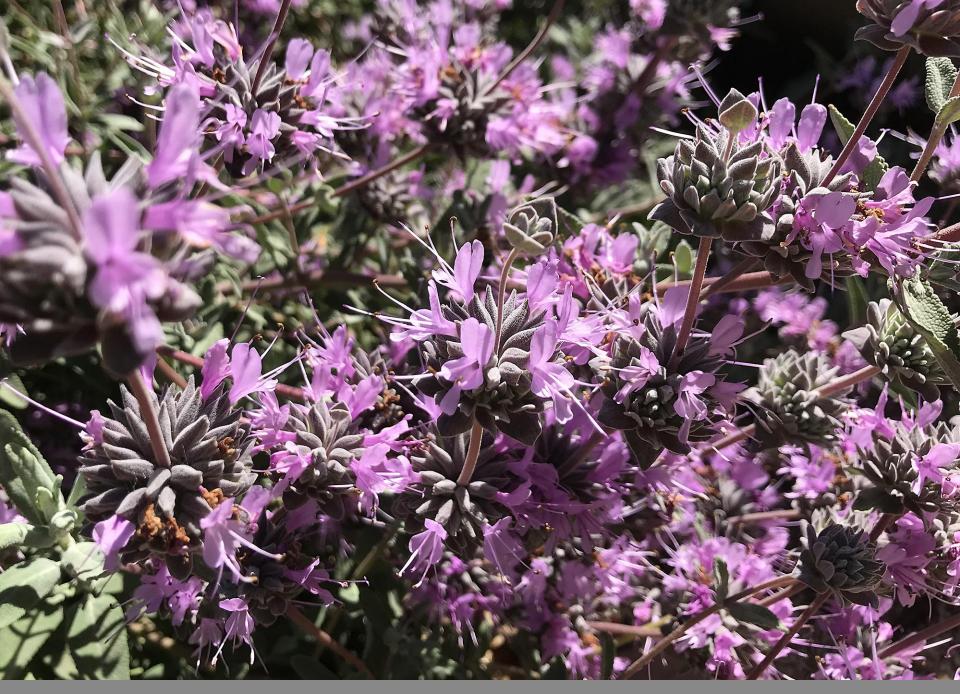














Nectar Plants for Hummingbirds

Agave (*Agave* spp.) Manzanita (*Arctostaphylos* spp.) Pink Fairy Duster (*Calliandra eriophylla*) California Lilac (*Ceanothus* spp.) Monkeyflower (*Diplacus* spp.) Dudleya (*Dudleya* spp.) California Fuchsia (*Epilobium canum*) Island Snapdragon (*Gambelia speciosa*) Coral Bells (*Heuchera* spp.) Iris (*Iris* spp.) Penstemon (*Penstemon* spp.) Sages (*Salvia* spp.)

Theodore Payne Foundation. Native Plants for Hummingbirds. Sun Valley, USA: TPF Press, 2016.



Shaw's Agave (Agave shawii)

Photo: Alan Duke









Snow Flurry California Lilac (Ceanothus 'Snow Flurry')



Jelly Bean Orange Monkeyflower (*Diplacus* 'Jelly Bean Orange')

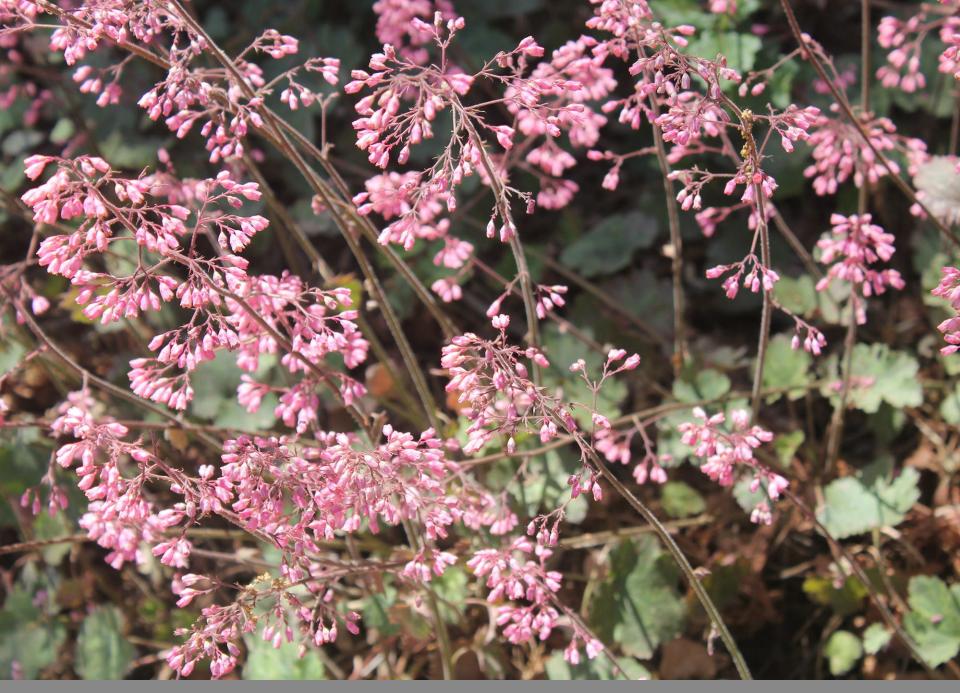
Photo: Carol Bornstein



Britton Dudleya (Dudleya brittonii)











Hummingbird Sage (Salvia spathacea)

Plants for Berries & Other Fruits

Manzanita (*Arctostaphylos* spp.) Barberry (*Berberis* spp.) Coffeeberry (*Frangula californica*) Toyon (*Heteromeles arbutifolia*) Honeysuckle (*Lonicera* spp.) Laurel Sumac (*Malosma laurina*) Cherry (*Prunus* spp.) Redberry (*Rhamnus* spp.)

Lemonadeberry, Sugar Bush (*Rhus* spp.) Currants, Gooseberries (*Ribes* spp.) Wild Rose (*Rosa* spp.) California Blackberry (*Rubus ursinus*) Elderberry (*Sambucus* spp.) Snowberry (*Symphoricarpos mollis*) Wild Grape (*Vitis* spp.)

Theodore Payne Foundation. Native Plants for Birds. Sun Valley, USA: TPF Press, 2016.







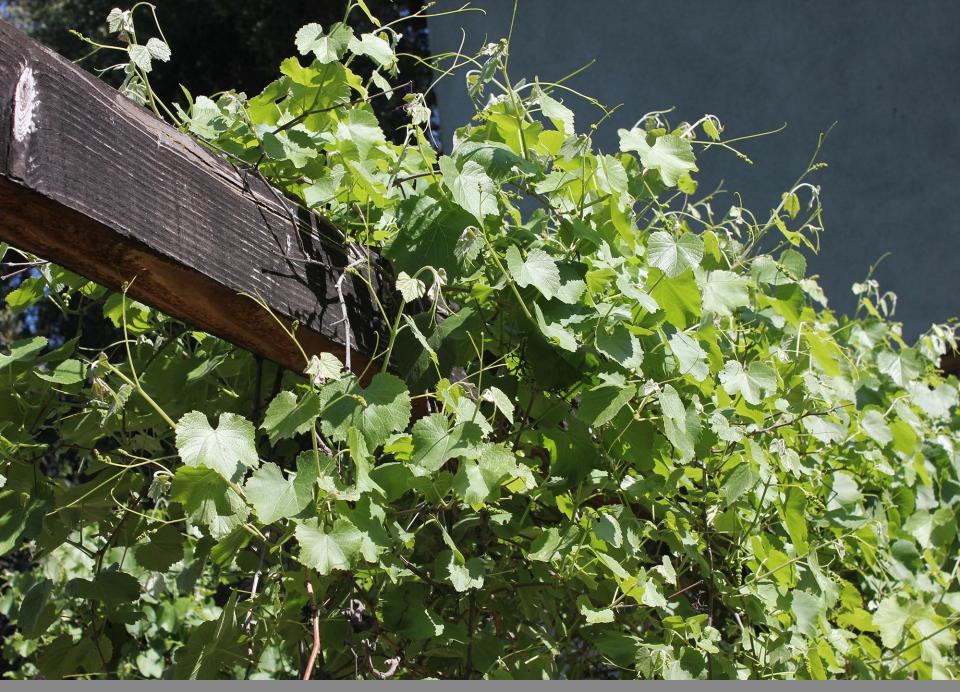




Sugar Bush (*Rhus ovata*)



Western Elderberry (*Sambucus nigra* ssp. *mexicana*)



Plants for Shelter & Nesting Materials

Allow a little messiness. Birds use fallen leaves, dead twigs, and dried flowers for nesting material. If safe, retain dead branches for cavity-nesting birds.

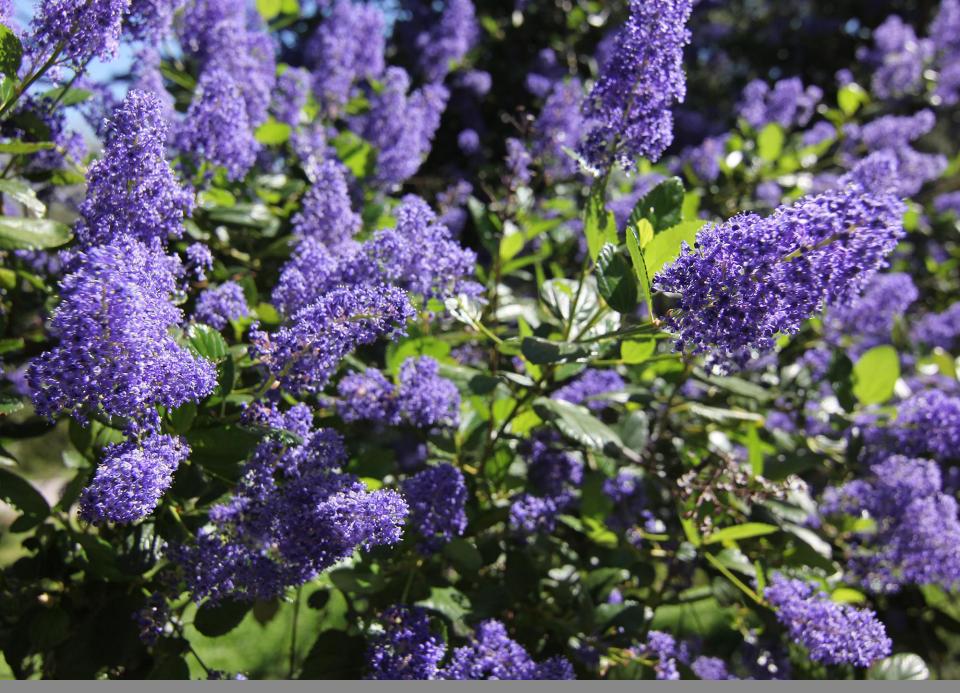
Barberry (*Berberis* spp.) Coyote Brush, Mulefat (*Baccharis* spp.) California Lilac (*Ceanothus* spp.) White Alder (*Alnus rhombifolia*) Southern California Black Walnut (*Juglans californica*) Western Sycamore (*Platanus racemosa*) Fremont Cottonwood (*Populus fremontii*) Oaks (*Quercus* spp.) Willows (*Salix* spp.)

Theodore Payne Foundation. Native Plants for Birds. Sun Valley, USA: TPF Press, 2016.



Oregon Grape (*Berberis aquifolium*) and hummingbird nest.

Photo: Carol Bornstein



Ray Hartman California Lilac (Ceanothus 'Ray Hartman')





Southern California Black Walnut (Juglans californica)

Photo: Carol Bornstein







Water Features

Birdbaths, fountains, misters, streams, and ponds – there are many options for providing clean, fresh water for birds.

The water's surface should be moving continuously and any basins and tubs should be emptied and cleaned every 3-4 days to minimize mosquitoes and algal growth.

A water feature will likely attract more birds to your garden than anything else. When word gets out, the visitors will be constant.



Mayntz, Melissa. "Attracting Birds With Water." The Spruce, The Spruce Team, https://www.thespruce.com/attracting-birds-with-water-386417

Who else will we see in our gardens?

By welcoming birds, you are inviting other wildlife into your garden.

Black-Fronted Forktails Bold Jumping Spiders Bumble Bees Cabbage Whites Carpenter Bees Cloudless Sulphurs Common Pill Woodlouses Eufala Skippers European Paper Wasps Fiery Skippers Flame Skimmers Fox Squirrels Gray Bird Grasshoppers Gray Hairstreaks Green Peach Beetles Guinea Paper Wasps Gulf Fritillaries Hover Flies Lady Beetles Large Milkweed Bugs Ligated Furrow Bees Marine Blues Milky Slugs Monarchs

Mourning Cloaks Oblique Stripetails Painted Ladies Red Admirals Southern Alligator Lizards Sweat Bees Umber Skippers Virginia Opossums Western Fence Lizards Western Honey Bees Western Tiger Swallowtails White-Lined Sphinx Moths

These animals have been spotted in the NHM Nature Gardens according to iNaturalist.org.

The Bad News...

Bird species are in dramatic global decline. A 2019 study reported that, since 1970, North American bird populations have dropped 29% or around 3 billion birds. (Rosenberg)

Habitat loss, much of it human-driven, is largely responsible. Many grasslands have either been replaced by cities and industrial farms or been radically altered by cattle ranching. Pesticide use has further affected habitat. Logging, wildfires, and industrial development have fragmented forests and boreal regions too.

Climate change is further shrinking and shifting important areas that migratory species use for food and nesting, putting their patterns out of sync with warming and changing conditions.

Rosenberg, Kenneth V., et al. "Decline of the North American avifauna." Science, American Association for the Advancement of Science, https://science.sciencemag.org/content/366/6461/120

The Good News!

We know what to do. "Much of our wildlife will not be able to survive unless food, shelter, and nest sites can be found in suburban habitats." (Tallamy, p.25) We can prevent local extinctions by using our private gardens and public spaces to create habitat that supports biodiversity.

We know how to do it. "The number of species in a given area depends on the size of the area." (Tallamy, p.28) By including ecologically productive plants in our landscaping, we will deter the effects of habitat fragmentation and increase species resiliency. If these restored spaces can be linked together into larger continuous areas, then we will all get to have more species. (Tallamy, p.31)

If we want to see and support a higher diversity of birds, we can do so by adding more local, native plants to our gardens.

Tallamy, Douglas. Bringing Nature Home. Portland, USA: Timber, 2015.

Reference List

- 1. Garrett, K. L., Dunn, J. L., & Small, B. E. Birds of Southern California. Olympia, USA: R.W. Morse, 2012.
- 2. Mayntz, Melissa. "Attracting Birds With Water." The Spruce, The Spruce Team, https://www.thespruce.com/attracting-birds-with-water-386417
- 3. "Observations." iNaturalist, iNaturalist Network, https://www.inaturalist.org/observations
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- 5. "Specify Your Location." Native Plant Finder [Beta], National Wildlife Federation, http://nwf.org/NativePlantFinder/Plants
- 6. Tallamy, Douglas. Bringing Nature Home. Portland, USA: Timber, 2015.
- 7. Theodore Payne Foundation. Native Plants for Birds. Sun Valley, USA: TPF Press, 2016.
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Thanks!

NATURAL HISTORY MUSEUM LOS ANGELES COUNTY

Allen's Hummingbird

Photo: Kimball Garrett