

# 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)

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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

Nuttall's Woodpeckers

Orange-crowned Warblers

Red-tailed Hawks

Ruby-crowned Kinglets

White-crowned Sparrows

Yellow-rumped Warblers

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





Allen's Hummingbird

Photo: Carol Bornstein





Black Phoebe

Photo: Kimball Garrett



Bushtit and Western Sycamore (*Platanus racemosa*)

Photo: Kimball Garrett





Cedar Waxwings and Western Sycamore (*Platanus racemosa*)

Photo: Kimball Garrett





Lesser Goldfinch and Yarrow (*Achillea millefolium*)

Photo: Kimball Garrett





Lesser Goldfinch

Photo: Kimball Garrett





Northern Mockingbird

Photo: Kimball Garrett



# 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                      |

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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>





Holly-Leaf Cherry (*Prunus ilicifolia*)

Photo: Carol Bornstein





Coast Live Oak (*Quercus agrifolia*)

Photo: Carol Bornstein





Arroyo Willow (*Salix lasiolepis*)

Photo: Carol Bornstein



# Host Plants for Caterpillars (Baby Bird Food)

## Flowers and Grasses

## # of Caterpillar Species

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|  |    |
|--|----|
| Deer Vetch, Trefoil ( <i>Acmispon</i> spp., <i>Lotus</i> spp.) | 54 |
| Sagebrush, Wormwood ( <i>Artemisia</i> spp.)                   | 68 |
| Baccharis ( <i>Baccharis</i> spp.)                             | 39 |
| Sunflower ( <i>Helianthus</i> spp.)                            | 58 |
| Lupine ( <i>Lupinus</i> spp.)                                  | 74 |
| Goldenrod ( <i>Solidago</i> spp.)                              | 53 |

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California Sagebrush (*Artemisia californica*)

Photo: Alan Duke





Common Sunflower (*Helianthus annuus*)

Photo: Daniel Feldman





Lupine (*Lupinus* spp.)

Photo: Alan Duke





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*, *Sporobolus 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.)





Yarrow (*Achillea millefolium*)

Photo: Alan Duke





Purple Three Awn (*Aristida purpurea*)

Photo: Alan Duke





Quail Bush (*Atriplex lentiformis*)

Photo: Alan Duke





Quail Bush (*Atriplex lentiformis*) seed heads.

Photo: Carol Bornstein





Bush Sunflower (*Encelia californica*)

Photo: Carol Bornstein





Common Sunflower (*Helianthus annuus*)

Photo: Alan Duke





Island Tree Mallow (*Lavatera assurgentiflora*)

Photo: Alan Duke





Showy Penstemon (*Penstemon spectabilis*)

Photo: Alan Duke





Love Child Sage (*Salvia* 'Love Child')

Photo: Alan Duke





Black Sage (*Salvia mellifera*)

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.)





Shaw's Agave (*Agave shawii*)

Photo: Alan Duke





Manzanita (*Arctostaphylos* spp.)

Photo: Carol Bornstein





Pink Fairy Duster (*Calliandra eriophylla*)

Photo: Carol Bornstein





California Lilac (*Ceanothus* spp.)

Photo: Alan Duke





Snow Flurry California Lilac (*Ceanothus* 'Snow Flurry')

Photo: Alan Duke





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

Photo: Carol Bornstein





Britton Dudleya (*Dudleya brittonii*)

Photo: Alan Duke





California Fuchsia (*Epilobium canum*)

Photo: Carol Bornstein





Island Snapdragon (*Gambelia speciosa*)

Photo: Alan Duke





Wendy Coral Bells (*Heuchera* 'Wendy')

Photo: Alan Duke





Canyon Snow Iris (*Iris* 'Canyon Snow')

Photo: Alan Duke





Hummingbird Sage (*Salvia spathacea*)

Photo: Alan Duke



# 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.)





Manzanita (*Arctostaphylos* spp.)

Photo: Carol Bornstein





Nevin's Barberry (*Berberis nevinii*)

Photo: Alan Duke





Nevin's Barberry (*Berberis nevinii*)

Photo: Alan Duke





Toyon (*Heteromeles arbutifolia*)

Photo: Carol Bornstein





Sugar Bush (*Rhus ovata*)

Photo: Alan Duke





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

Photo: Alan Duke





Roger's Red Wild Grape (*Vitis* 'Roger's Red')

Photo: Alan Duke



# 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.)





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

Photo: Carol Bornstein





Ray Hartman California Lilac (*Ceanothus* 'Ray Hartman')

Photo: Alan Duke





Siemre Blue California Lilac (*Ceanothus* 'Siemre Blue')

Photo: Alan Duke





Southern California Black Walnut (*Juglans californica*)

Photo: Carol Bornstein





Western Sycamore (*Platanus racemosa*)

Photo: Carol Bornstein





Western Sycamore (*Platanus racemosa*)

Photo: Alan Duke





Coast Live Oak (*Quercus agrifolia*)

Photo: Alan Duke



# 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.





# 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

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These animals have been spotted in the NHM Nature Gardens according to [iNaturalist.org](https://www.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.



# 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.**



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# Thanks!



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