



Attracting Hummingbirds to Your Garden Using Native Plants



Black-chinned Hummingbird feeding on mountain larkspur, fireweed, and wild bergamot (clockwise from top)



Hummingbird garden guide



What do hummingbirds, butterflies, and bees have in common?

They all pollinate flowering plants.

Hummingbirds are restricted to the Americas with more than 325 species of hummingbirds in North, Central, and South America.

Many of us enjoy the beauty of flowers in our backyard and community gardens. Growing native plants adds important habitat for hummingbirds and other wildlife—especially pollinators. Even small backyard gardens can make a difference.

Gardening connects us to nature and helps us better understand how nature works. This guide will help you create a hummingbird-friendly garden.



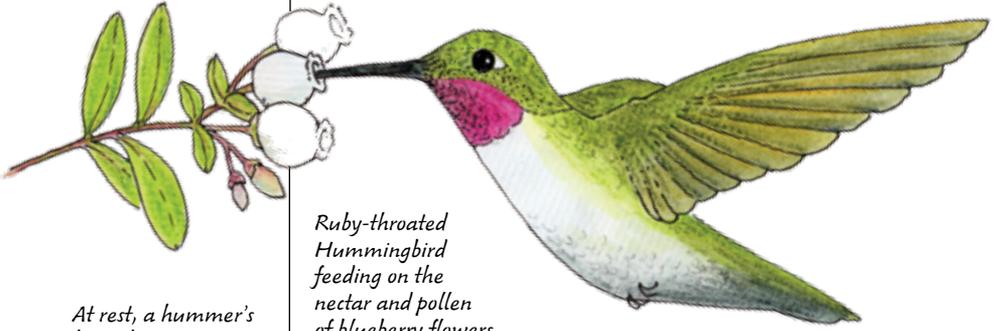
Broad-tailed Hummingbird feeding on scarlet gilia



Why use native plants in your garden?

Hummingbirds have evolved with native plants, which are best adapted to local growing seasons, climate, and soil. They prefer large, tubular flowers that are often (but not always) red in color. In this guide, we feature seven hummingbirds that breed in the United States. For each one, we also highlight two native plants found in its breeding range. These native plants are easy to grow, need little water once established, and offer hummingbirds abundant nectar.

Hummingbirds and pollination



Ruby-throated Hummingbird feeding on the nectar and pollen of blueberry flowers

At rest, a hummer's heart beats an average of 480 beats per minute. On cold nights, it goes into torpor (hibernation-like state), and its heart rate drops to 45 to 180 beats per minute.

Flowers and hummingbirds have a mutualistic relationship where both benefit. Flowers produce food in the form of nectar (sugar and water) to attract hummingbirds that, in turn, move pollen for the plant (pollination).

What is pollination?

Pollination is the process of moving pollen (male gamete) from one flower to the ovary of another flower of the same species, which produces fertile seeds. Almost all flowering plants need to be pollinated. Some plants are pollinated by wind or water, and some are even self-pollinating. However, most flowering plants depend on bees, hummingbirds, and other animals for pollination.

Keystone species

We call hummingbirds and other pollinators *keystone species* because they are a species upon which others depend. For example, when a hummingbird feeds on the nectar and pollen of blueberry flowers, it pollinates the flowers that will produce fruit eaten by songbirds, black bears, and dozens of other animals, including humans.

Pollinators are vital to maintaining healthy ecosystems. They are essential for plant reproduction and produce genetic diversity in the plants they pollinate. The more diverse plants are, the better they can adapt to changes in the environment.

Ruby-throated Hummingbird

Archilochus colubris



♂

Male:

- 3¼–3¾ inches
- ruby-red gorget
- distinctively forked tail



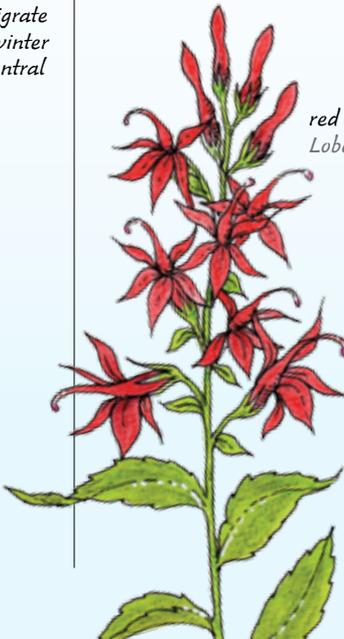
The Ruby-throated is the only hummingbird to breed east of the Mississippi River. These hummingbirds nest in deciduous woodlands adjacent to old fields, forest edges, meadows, orchards, stream borders, and backyards. In the fall, they migrate nonstop day and night over the Gulf of Mexico to winter in Central America—a 500-mile journey.



GARDENING

Trumpet honeysuckle (right) fits in any garden space; the more sun this vine gets, the more flowers it produces.

Most hummingbirds of the United States and Canada migrate south to spend winter in Mexico or Central America.



red cardinal flower
Lobelia cardinalis



trumpet honeysuckle
Lonicera sempervirens

Black-chinned Hummingbird

Archilocus alexandri



♂

Male:

- 3¼–3¾ inches
- black head and chin with band of metallic purple on bottom edge



GARDENING

Fireweed naturally colonizes disturbed areas, so it grows quickly and can spread.

No other bird can hover like a helicopter for as long as hummers do.



mountain larkspur
Delphinium glaucum

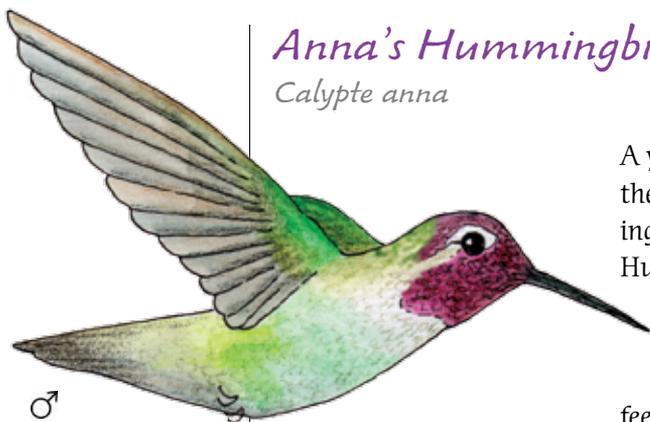
This abundant hummingbird can best be identified by the way it pumps its tail almost constantly in hovering flight while feeding. One of the most adaptable hummingbird species, the Black-chinned breeds in urban gardens and recently disturbed habitat, as well as in pristine natural canyons and riparian areas.

fireweed
Chamerion angustifolium



Anna's Hummingbird

Calypte anna



♂

Male:

- 3½–4 inches
- rose-red head and gorget
- white spot behind eye



A year-round resident along the Pacific Coast, the breeding range of the Anna's Hummingbird species has greatly expanded because the eucalyptus trees that the hummingbirds feed upon and nest in have spread north. Males have a distinctive song that is long for a hummingbird—a series of buzzes and a whistle, followed by sharp chip notes. These hummingbirds are commonly found in urban and suburban settings, as well as wilder places such as chaparral, coastal scrub, oak savannahs, and open woodland.

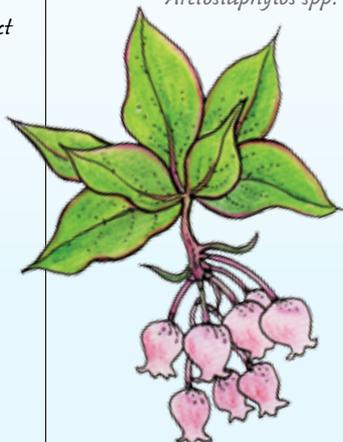


GARDENING

Drought tolerant and evergreen, manzanita always looks green and healthy, even in the hottest, driest part of the summer. Don't overwater, and be sure to plant local species.

To attract females, males conduct elaborate courtship flight displays—climb, dive, swoop, and climb again. Each hummer species has a distinct aerial display.

manzanita
Arctostaphylos spp.



hummingbird trumpet
Zauschneria californica

penstemon

Hummingbird food

Hummingbird flowers

Although hummingbirds prefer red flowers, they often feed on flowers of other colors. In fact, hummers arriving in late April in the western interior mountains must feed on flowers of many different colors since few native red flowers bloom before June. So, for your garden, choose flowers in a variety of colors and with lots of nectar.

Hummers can hover; therefore, they have little need for flattened flowers with landing platforms (sunflowers). They prefer long, tubular flowers (penstemon or honeysuckle). Flowers use scents to attract insect pollinators. Since hummingbirds don't have a good sense of smell, hummingbird flowers are often unscented.

Hummingbird feeding tips

Use hummingbird feeders that—

- are easy and quick to clean;
- have no hidden parts where mold can grow;
- have a built-in ant moat, if possible; and
- have no yellow parts (yellow attracts bees and wasps).



For the nectar solution, be sure to use a ratio of 1:4 cane sugar to water. In hot weather, clean feeders and replace nectar solution often. To support more hummers in your yard, set up several feeders rather than one large feeder. Some hummingbirds, especially Rufous and Ruby-throated, will aggressively defend a feeder from other hummers.

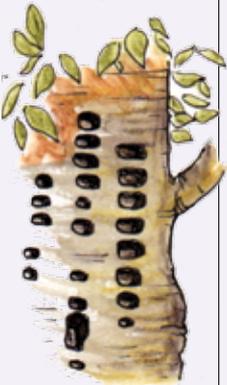
Sap wells and insects

Sap wells created by sapsuckers supply many animals with a quick energy boost. Hummingbirds need lots of insects (protein) in their diet and will nab insects stuck in sap wells.



goldenaster

Above: Hummingbirds hover and can feed easily on penstemon. Insects, such as leaf-cutter bees, prefer a landing platform.



Planning your garden— think like a hummingbird.

Think native. Hummers are best adapted to local, native plants, which often need less water than ornamentals.

Think perches. Hummingbirds spend much of their time perched on dead branches and dead tree tops—resting or surveying their territory.

Think patience. It takes time for native plants to grow and for hummers to find your garden, especially if you live far from wild lands.

Think bountiful. Plant big patches of each plant species for better foraging efficiency.



Think water. Hummingbirds will bathe in dripping water, shallow creeks, and even garden sprinklers.

Think tall. Hummingbirds nest on the branches of tall shrubs and trees, which provide cover and escape from predators.

Think diverse. Plant a diversity of flowering species with abundant pollen and nectar.

Think chemical free. Pesticides and insecticides kill insect pollinators and can harm hummingbirds.

Think friendly. Create hummingbird-friendly gardens at home, at schools, and in public parks. Help people learn more about hummingbirds and native plants.

Think aware. Observe hummingbirds when you walk outside in nature. Notice which flowers attract them.

Think showy. Flowers should bloom in your garden throughout the growing season. Plant willow, currant, and columbine for spring, and aster, salvia, and goldenrod for fall flowers.

Think a little messy. Most insects nest underground or in leafy debris so avoid using weed cloth or heavy mulch. More insects mean more food for hummingbirds.

Think safe harbor. Domestic cats can kill hummingbirds. Please keep them indoors.





Costa's Hummingbird

Calypte costae

This tiny, desert hummingbird lives in the Sonoran and Mojave deserts of Arizona and California. Costa's Hummingbirds breed in rocky, thorny shrublands and cactus-covered hillsides along desert washes of Arizona and in the chaparral and coastal scrub of California.

♂

Male:

- 3–3½ inches
- violet-purple crown and gorget
- short tail



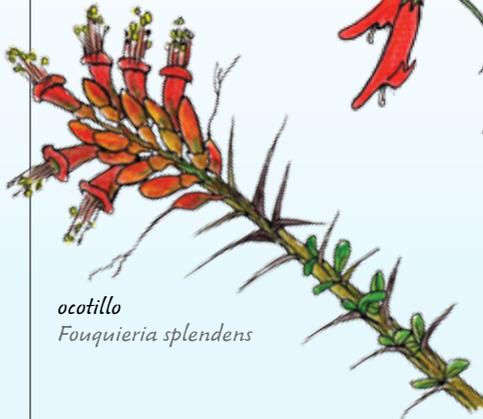
GARDENING

These beautiful plants (right) are a little finicky, but well worth the effort. All penstemon species attract hummingbirds.

Hummers can consume more than half their weight in nectar each day, plus insects.



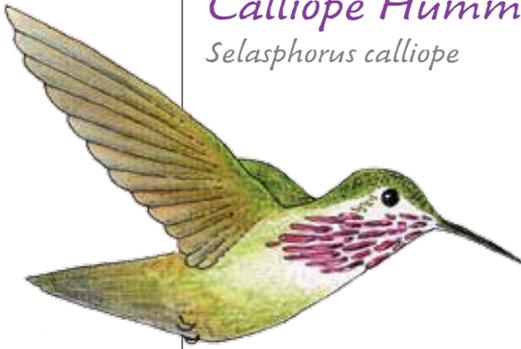
bearded penstemon
Penstemon barbatus



ocotillo
Fouquieria splendens

Calliope Hummingbird

Selasphorus calliope



The smallest bird in the United States, the Calliope weighs only as much as two paper clips, yet migrates annually between Canada and Mexico. Calliope males make a bumble bee-like buzz when courting females or displaying at other animals that invade their territory. These hummingbirds breed in mixed coniferous and deciduous forests near streams and in shrub-sapling forests with openings caused by timber harvest or fire.



Male:

- 2¾–3¼ inches
- iridescent reddish-purple gorget, which he can display outward like "calliope pipes"



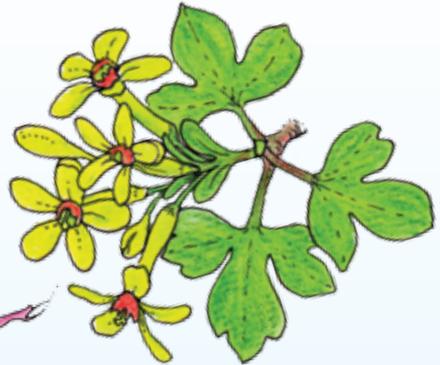
actual size

Hummers lay the smallest eggs of any birds.



GARDENING

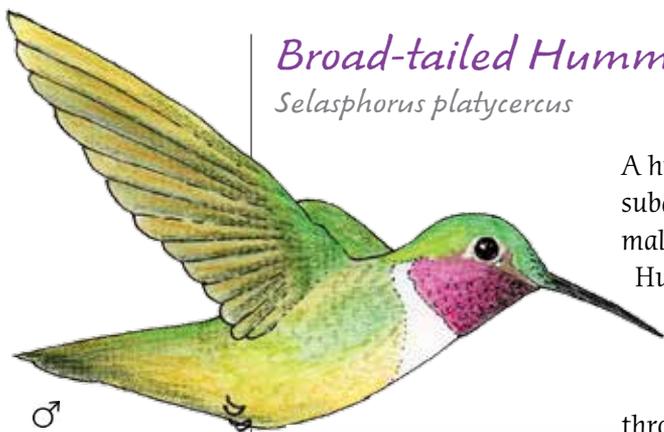
One of the first plants to flower in the spring in the Rockies, golden currant (right) attracts lots of pollinators, including hummingbirds and native bees.



golden currant
Ribes aureum



wild bergamot
Monarda fistulosa



Broad-tailed Hummingbird

Selasphorus platycercus

A hummingbird of subalpine meadows, the male Broad-tailed

Hummingbird is often heard before he's seen.

He makes a buzzing whistle as air rushes through his outer primary wing feathers. Broad-tailed Hummingbirds breed at high elevations in subalpine meadows and shrubby areas with nearby forests of pine, fir, or spruce in the southern and central Rocky Mountains.

♂

Male:

- 3¾–4¼ inches
- rosy-red gorget



■ Summer
■ Resident



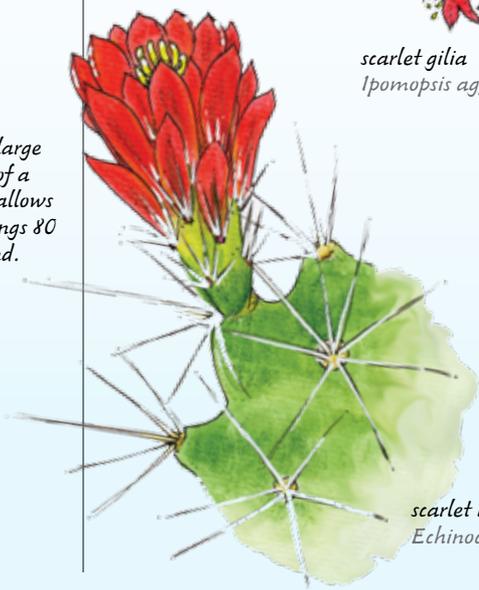
GARDENING

Hummingbirds do love cactus flowers. Scarlet hedgehog cactus needs full sun and little water.



scarlet gilia
Ipomopsis aggregata

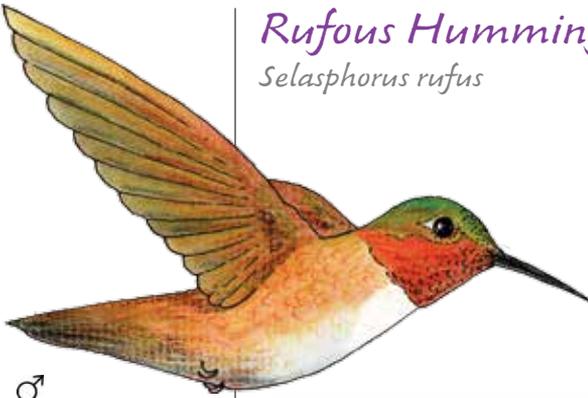
The small size and relatively large flight muscles of a hummingbird allows it to beat its wings 80 times per second.



scarlet hedgehog cactus
Echinocereus coccineus

Rufous Hummingbird

Selasphorus rufus



♂

Male:

- 3½–4 inches
- reddish orange iridescent gorget
- orange back and belly



Pugnacious and fiercely territorial, the Rufous Hummingbird male takes on hummingbirds or other birds twice its size. These hummingbirds have the longest migration route of any hummingbird in the United States. Some migrate more than 2,000 miles every year—from Alaska to Mexico. They breed in open, shrubby areas, forest openings after severe fire, and willow flats from sea level to about 6,000 feet.



GARDENING

Easy to grow, lovely columbine (right) likes shade and water.

Tiny hummer nests contain lichen, feathers, bark, leaves, moss, and plant pieces glued together with spider webs.



Columbia lily
Lilium columbianum



western columbine
Aquilegia formosa

Why hummingbirds need our help...

Hummingbird hurdles

Migration is risky business. Most hummingbirds that breed in the United States migrate to Mexico (Ruby-throated migrate to Central America) to winter—an amazing and dangerous journey.

Biologists also worry that the populations of some hummingbird species are declining—Rufous, Calliope, and Costa’s in particular. Other pollinators, such as bumble bees and honey bees, are in trouble too. It appears that habitat loss, invasive species, and pesticide poisoning account for many of the declines.

Yet, perhaps the greatest threat to hummingbird survival is the effect of changing climates on flowering phenology (when flowers bloom) because even minor changes in climate can produce large changes in nectar availability and in blooming dates.

Helping hummingbirds

You can help hummingbirds by participating in citizen-science efforts like *Project Budburst*, *Hummingbirds at Home*, and *Journey North*—programs that depend on you to record your observations. Scientists can then analyze this data to better understand the needs of hummingbirds and other wildlife.

For more information, check out these Web sites:

- <http://www.budburst.org>
- <http://www.hummingbirdsathome.org>
- <http://www.learner.org/jnorth>
- <http://www.pollinator.org>
- <http://www.westernhummingbird.org>



lobelia

How do I find hummingbird-friendly native plants for my garden?

Gardening for hummingbirds

Best of all, we can do our part to support hummingbirds by creating beautiful hummingbird-friendly gardens, by providing safe havens for migrating birds, and by protecting wildlife habitat.

The *Pollinator Partnership* offers 31 different planting guides tailored to specific ecoregions in the United States. Each guide is chock-full of native plant and pollinator information.

To get the guide specific to your ecoregion:

1. Visit the Pollinator Partnership Web site: <http://www.pollinator.org>.
2. Click on *Planting Guides*.
3. Enter your 5-digit zip code.



POLLINATOR PARTNERSHIP



Your Source for Pollinator Action and Information.

You'll find the *Selecting Plants for Pollinators* guide that fits your region. Check out the charts that list which native plants grow best in your area so that you can attract more hummingbirds to your garden.



*Calliope Hummingbird
feeding on scarlet paintbrush*

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