



Hummingbird garden guide

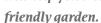




Many of us enjoy the beauty of flowers in our backyard and community gardens. Growing native plants adds important habitat for hummingbirds and other wildlife – especially pollinators. Even small backyard gardens can make a difference.

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

Broad-tailed





What do hummingbirds, butterflies and bees how in common?

They all pollinate flowering plants.

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



Hummingbirds and pollination



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

What is pollination?

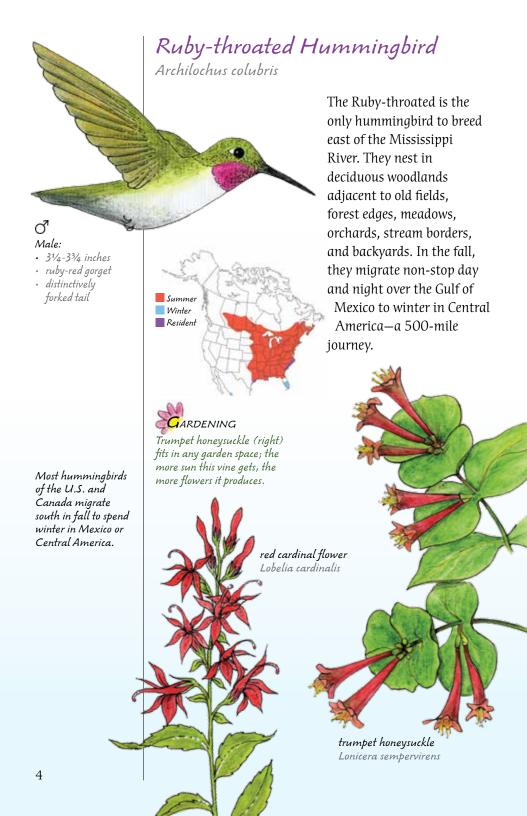
Pollination is the process of moving pollen (male gamete) from one flower to the ovary of another flower of the same species, which produces fertile seeds. Almost all flowering plants need to be pollinated. Some plants are pollinated by wind or water, and some are even self-pollinating. However, most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

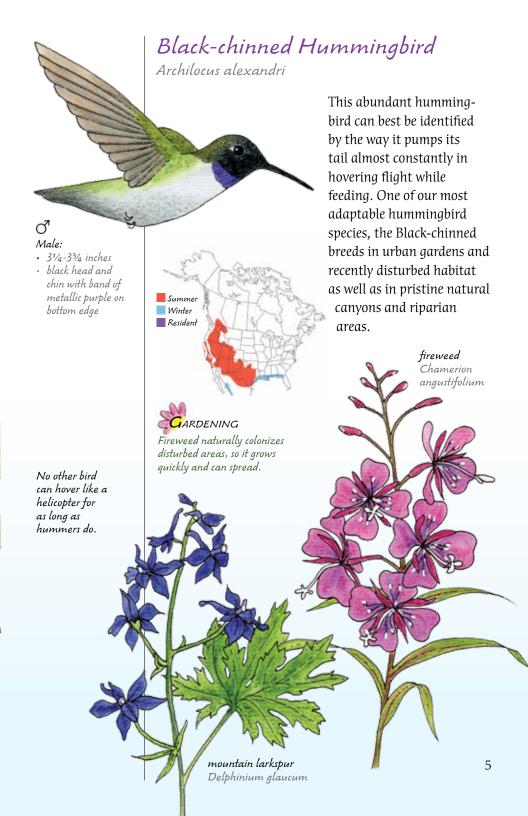
Keystone species

We call hummingbirds, and other pollinators, *keystone species* because they are species upon which others depend. For example, when a hummingbird feeds on the nectar and pollen of blueberry flowers, it pollinates the flowers, which 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.

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





Anna's Hummingbird Calypte anna A year-round resident Male: · 31/2-4 inches

Summer

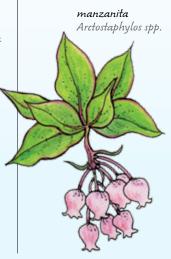
Winter Resident along the Pacific Coast, the breeding range of Anna's Hummingbird has greatly expanded because eucalyptus trees they feed upon and nest in have spread north. Males have a distinctive song that is long for a hummingbird— a series of buzzes, a whistle, followed by sharp chip notes. They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

- rose-red head and gorget
- · white spot behind eye

ARDENING

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.





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.

goldenaster

penstemon

Above:

Hummingbirds hover and can feed easily on penstemon. Insects, such as leafcutter bees prefer a landing platform.



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;
- 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. It's best to set up several feeders rather than one large feeder to support more hummers in your yard. Some hummingbirds, especially Rufous and Ruby-throated, will aggressively defend a feeder from other hummers.



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.





Planning your garden think like a hummingbird.

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

wild lands.

Think perches. Hummingbirds spend much of their time perched on dead branches and dead tree topsresting 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 Think bountiful. Plant big patches of each plant species for better foraging efficiency.

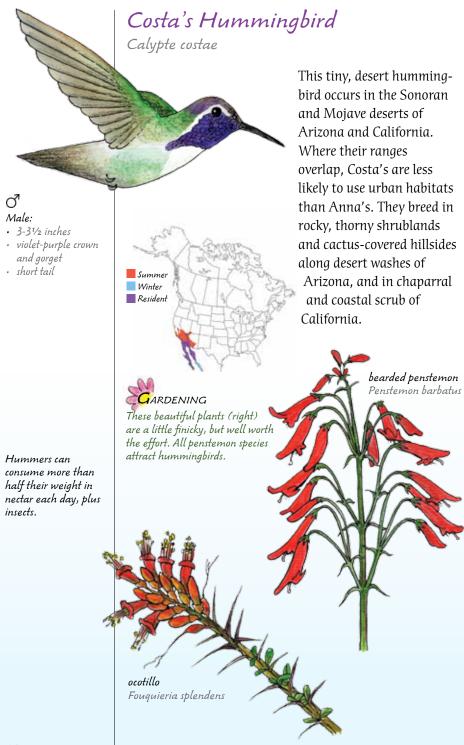
> Think water. Hummingbirds will bathe in dripping water, shallow creeks and even garden sprinklers.

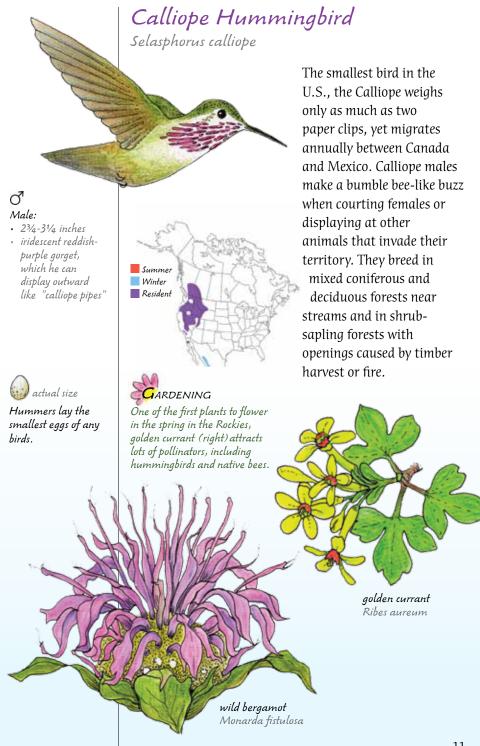


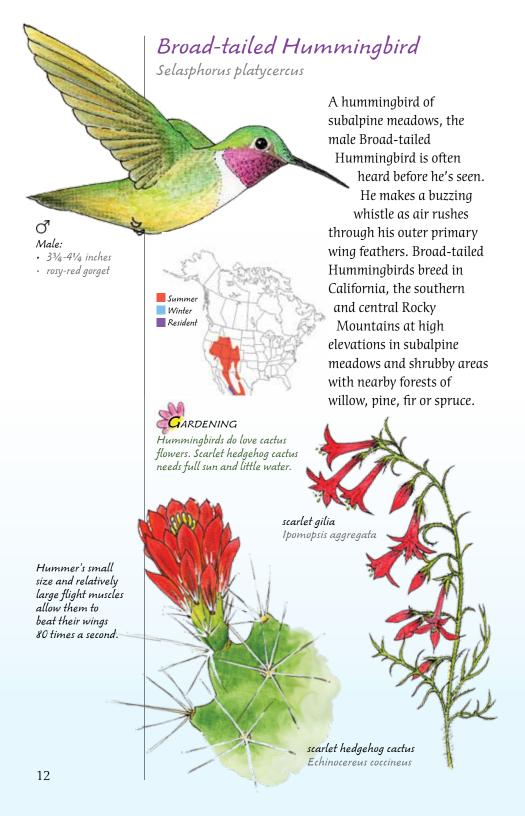
Think a little messy.

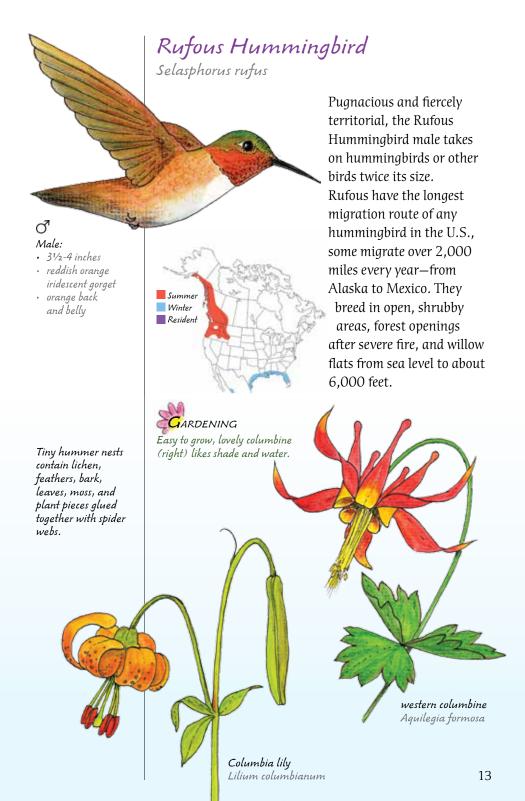
Most insects nest underground or in leafy debris so avoid using weed cloth or heavy mulch. More insects mean more food for hummingbirds.

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









Why hummingbirds need our help...

Hummingbird hurdles

Migration is risky business. Most hummingbirds that breed in the U.S. 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 websites:

- budburst.org
- hummingbirdsathome.org
- learner.org/jnorth
- pollinator.org
- 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 website: www.pollinator.org
- **2.** Click on *Planting Guides*.
- **3.** Enter your 5-digit zip code.

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.



U.S. Forest Service 1400 Independence Avenue, S.W. Washington, DC 20250

Text: Susan Reel • Design and Illustrations: Nancy Seiler

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all of part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large prints, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

Printed on recycled paper.