

Hummers:

Fuel efficient and environmentally-friendly

Hummingbirds are one of the most welcome visitors to any garden. Their iridescent coats and hyperactive behavior provides endless entertainment for nature enthusiasts as well as vital pollination services for a variety of flowering plants.

The hummingbird family has 328 species, and ranges exclusively in the Americas, from Alaska to the south of Argentina. Of these, 19 species are endangered and 8 are critically so. Only the Ruby Throated Hummingbird occurs in the eastern states.

Hummingbirds' wings move in a figure eight pattern while in flight, and are capable of flapping an average of 55 times per second, allowing them to hover in place, fly sideways, down, backwards and even upside down. Their normal flight speed is about 25 mph with top speeds of 50 mph. Their tiny feet are used only for perching as hummingbirds much prefer to fly than walk.

Nesting and migration

A typical hummingbird's nest is about the size of a walnut, camouflaged with lichen, made up of moss, plant fibers, bud-scales and plant down all of which is held together with spider silk. They are most often located over or near water. The females build the nest, lay two eggs and incubate them for about two weeks. Chicks are fed regurgitated insects and nectar for 10 to 30 days.

Like most birds "hummers" migrate north in the spring and south in the fall, often traveling very large distances. Males



Tips on hummingbird feeders.

- Always keep feeders clean! Moldy feeders out can kill birds and their babies.
- Use only vinegar and water to clean feeders as other cleaning products can leave toxic residue.
- Multiple feeders can reduce the territorial fighting of hummingbirds.

migrate as much as three weeks earlier to scout for food plants and establish territories, which they defend vigorously, chasing away bees, large moths, other hummingbirds and even blue jays.

Feeding and pollination

As active as they are, hummingbirds have a very high metabolism. They typically feed all day every 10 minutes, and can consume up to 2/3 of their body weight in a single day. The major source of a hummingbird's energy is sugar obtained from flower nectar and tree sap. Insects and pollen provide protein and other necessary nutrients.

Hummingbirds have long, tapered and perfectly adapted bills for extracting nectar from tubular flowers, which they take up at the rate of about 13 licks per second and from up to 20 flowers per minute. They prefer red, pink orange and yellow tubular flowers. These flowers have high nectar production, and often yield twice the amount of sucrose of non-tubular flowers.

During feeding hummingbirds provide

vital pollination services. Pollen from the stamen of flowers sticks to the bird's bill and "chin" and is transferred to the pistils of other flowers. Hummingbirds enjoy feeders in equal proportion to actual flowers, and the use of a feeder does not significantly impact the pollination of local plants.

Hummingbird gardening

Here are some useful plants to help attract hummingbirds to your garden. Many of these native species also provide food and habitat for butterflies. This list is specific to west coast gardeners but can be adapted for other regions.

- Currants and Gooseberries (Ribes species)**
- Bush snapdragon (Keckiella)** – Yellow penstemon-like flowers
- Cacti (Opuntia)** – Yes, hummingbirds use cacti too
- Manzanita (Arctostaphylos)** – Look for ground cover varieties
- Monkey flower (Diplacus)** – All colors, although red is preferred
- Live Forever (Dudleya)** – Succulent naturally occurring in rock outcroppings
- Wallflowers (Erysimum species)** – Are randomly worked
- Snow berry (Symphoricarpos)** – Hummers are not crazy for these flowers but will live on them when more tasty flowers are not available
- Penstemon** – All colors, especially reds and yellows
- Indian Tobacco (Lobelia) ie. Lobelia cardinalis**
- Monkey flower (Mimulus cardinalis)** – Flowers most of the summer
- Hedge Nettle (Stachys)** – Also an excellent butterfly plant
- Thistle (Cirsium)** – Beware of weedy varieties
- Summer Holly (Comarostaphylos diversifolia)** – Good for Southern CA
- Snapdragon (Antirrhinum)**
- Columbines (Aquilegia)** – California columbines are aggressively used
- Honeysuckles (Lonicera)** – esp. Lonicera hispidula
- Salve (Salvia species)** – ie. Salvia mellifera, clevelandii, spathacea
- Lily (Lilium species)** – ie. Lilium pardalinum, humboldtii
- Fuchsia (Zauschneria)** – CA fuchsias are a hummingbird favorite

Coevolution
Institute

423 Washington Street, 4th Floor
San Francisco, CA 94111-2339
Phone: (415) 362-1137
Email: info@coevolution.org

