



Hummingbirds in Your Garden

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Knowing some facts about these unique birds helps me, and may help you, appreciate them even more and why they could use some help from us.

- Although there are over 300 species of hummingbirds in the world, only about 16 migrate each year to North America, and only one-- the Ruby-throated-- nests east of the Mississippi River.
- Rubythroats overwinter in Mexico and Central America, beginning their migration north in late winter. They fly alone, during the day, males and females separately, the males arriving a week or two before the females.
- As with many birds, the males are the more showy, having ruby red throats. Young males don't have this red, nor do the females which they resemble.
- Although they fly on average about 50 miles per hour (compared to 20 miles per hour for barn swallows), they fly faster with the wind, and when migrating.
- When in flight, males beat their wings about 70 times per second, females about 53 times per second (compared to 4.3 times per second for starlings).
- Due to their wing structure, these are the only birds that can fly in any direction, even backwards!
- Rubythroats are about three and one half inches long, and weigh about a tenth of an ounce-- less than a penny.
- Their breast muscles make up 25% of their body weight (compared to 5% for humans).
- Their little hearts (although largest proportionately to their body of any bird) beat 600 times per minute, and up to 1200 times during exertion (compared to 200 for most birds, and 72 for humans).
- As you might imagine from all this exertion they need lots of energy, and in fact must feed all day, at least every 10 minutes. Each feeding is only a half to full minute, licking not sucking nectar from flowers. Their grooved tongue is forked and licks about three times per second. They also eat insects, which provide a source of protein and fat.
- If severe weather or a food shortage, they can enter a state of "torpor" in which their heart rate drops drastically, as well as breathing and body temperature, in order to conserve energy. They can only stay in this state for 8 to 14 hours.
- Hummingbirds basically live alone, the males and females only being together during courtship and mating.
- Males are aggressive in protecting about one quarter acre containing nectar sources. As the sources change with the seasons, so may their territory change.
- We often see unusual flight patterns between two hummingbirds, such as both birds going up and down alternately. Or more common is one bird making a U-shaped arc back and forth. Such patterns can be aggression, protecting territory, or courtship, often depending on whether the birds are both male or male and female.
- The female makes a nest the size of a large thimble, starting with scales protecting tree buds, covering the outsides with lichens and the insides with plant fluff such as from leaves and seeds.
- Females only lay two or three eggs, which take about two weeks to incubate, and then the fledglings are in the nest from two to four weeks.
- Hummingbirds begin their migration back south sometime in September, earlier in colder areas.
- Although hummingbirds may live 12 years, the average life is three to five years. Although the greatest losses are from their long migration, the biggest threat to them is loss of habitat, either in their overwintering or summer areas.

Hummingbirds don't just come to gardens on their own, and stay around, without the proper habitat and certain needs being met. Knowing these can help you have them through the summer, and help prevent one of their biggest threats—loss of summer habitat due to development.

Select plants attractive to hummingbirds. These are ones with tubular, odorless, nodding and brightly colored flowers. Many of such flowers are “ornithophilous”, which means they have evolved to be pollinated by birds (such as hummingbirds) rather than by insects. The tubular flower is adapted to the long hummingbird beak, with pollen getting on it and transferred to other flowers.

Hummingbirds are attracted by sight, not smell or fragrance as are insect pollinators. This way they don't have to compete for the same flowers. Nodding flowers are also harder for insects to pollinate compared to the hovering hummingbirds. Being attracted by sight, hummingbirds see the bright flowers first. The color red often means “food” to them, but color really doesn't matter as long as the flowers have nectar they can get to.

Some of the best perennials and biennials to attract hummingbirds include hollyhock, columbine, delphinium, foxglove, daylily, coral bells, hosta, blazing star, bee balm, and garden phlox. Some good annuals include flowering tobacco, scarlet runner bean, salvia, and even single petunia. Whether annual or perennial, avoid the double flowers as they are difficult for hummingbirds and insects alike to pollinate. Choose a selection to provide color through the season, a succession of flowering times.

Plant large clumps or drifts of flowers as you might see in nature. Yet keep spaced enough so the hummingbirds can maneuver among the stems and plants. You might consider planting a wildflower bed, or encouraging wildflowers already there or nearby. Hanging baskets are excellent as they provide color and flowers through the season. Being near homes they also afford closer viewing of hummingbirds. Good choices for these might be fuchsia, trailing petunias, or nasturtium.

Providing flowers is the best food for hummingbirds instead of nectar feeders. These can supplement a range of flowers, but should not be used exclusively. They don't provide a balanced diet as does flower nectar. If not cleaned every two or three days the feeder food ferments. Ingested, this fermented nectar enlarges their livers and can kill them. Mold and bacteria can also grow in such feeders if not cleaned, also harming them. Since hummingbirds are quite territorial and aggressive, competition at such feeders can be quite extreme and stressful. Keep such feeders out of reach of local cats as well. If using nectar feeders, make sure they are up and regularly cleaned especially when these birds arrive in early May, and prior to their leaving in early September. Don't use honey or artificial sweeteners in such feeder nectar, nor red food color, all of which can cause health problems.

In addition to food, hummingbirds need water. Most of what they drink may come from flower nectar. Bathing at least daily is quite crucial to them in order to keep their rapidly moving wings cleaned. You can help provide such places with birdbaths, or any rough-surfaced and shallow container. They also like waterfalls as in a water feature, or even just water on leaves which they fly through for a quick shower. You also can provide a hose sprinkler on a timer that they can fly through when on.

Provide large shrubs or small trees for them to perch on and rest, preen, and for protection. One of the best is the common evergreen white cedar, with some branches thinned out so they can fly among them better. Other perches might be as simple as a fence or clothesline. Avoid using insecticides if possible. These can directly harm or kill hummingbirds. They can indirectly harm them as well through poisoning the insects they eat, either passing along such poison or killing this food source they rely on for fat and protein.