ILLINOIS Extension college of agricultural, consumer & environmental sciences

Hummingbirds

Jennifer Schultz Nelson Extension Educator, Horticulture

For me, a sure sign that spring has truly arrived and summer is not far behind is the return of the hummingbirds. Their rapid, darting flight is unlike any other animal in the garden. Many people want to attract hummingbirds to their garden, and luckily, it's a relatively easy thing to do.



Hummingbirds are uniquely an "American" bird. They are found only in the Western Hemisphere, in North and South America. There are between 325 and 340 species of hummingbirds in the world, depending on how the birds are taxonomically classified.

Most of these nearly 340 species live in the tropics. Seventeen species regularly nest in the United States. Near the U.S.-Mexico border there may be a few additional species that visit the U.S., but do not nest. Most regions of the U.S. have only one or two nesting species. East of the Mississippi River, it has been observed that the Ruby-throated Hummingbird is the only nesting species.

Although in our area only the Ruby-throated Hummingbird is usually seen, there have been confirmed sightings of other species such as Rufous, Broad-billed, and Allen's Hummingbird.

The Ruby-throated hummingbird has a green back and light belly. The male has a bright red patch on his neck and throat called the gorget. These stiff feathers are highly reflective and typically bright in color. They will look dark and dull until they catch the light just right and their metallic beauty is revealed.

Scientists are concerned about increased sightings of hummingbirds outside of their normal range. Are changes in weather altering their typical migration paths and winter or summer homes? This remains to be seen. If you see a hummingbird hanging around your garden that does not look like our familiar resident the Ruby-throated Hummingbird, please contact your local Extension office or Audubon Society so that the bird can be properly identified.

Hummingbirds are truly remarkable creatures. Consider the following:

- The Bee Hummingbird, a resident of Cuba, is the tiniest known bird and smallest warm-blooded vertebrate. An adult male weighs in at only 1.95g-- less than 2 paper clips! Its nest is only 3 cm across!
- Hummingbird eggs are the smallest of all the bird eggs. A Ruby-throated Hummingbird typically lays one or two pea-sized eggs. Although the eggs themselves are tiny, they are fairly large compared to the size of the adult bird.
- Hummingbird nests are made of bits of plant material encircled with pieces of spider web. The spider web allows the tiny nest to expand with the growing young.
- Hummingbirds are the only vertebrates capable of sustained hovering flight, like a helicopter. They can also fly backwards and upside down!
- A hummingbird's wings will beat about 70 times per minute during direct flight and up to 200 times per minute during dives.
- A Ruby-throated Hummingbird's heart beats 225 beats per minute at rest and up to 1,200 times per minute while flying.
- Hummingbirds' flight speed has been documented at up to 30 miles per hour during typical flights and up to 45 miles per hour during courtship.

Hummingbirds have extremely fast metabolisms, necessary to power the rapid beating of their wings. Combined with their tiny size, this means they must eat nearly constantly. They consume most of their calories from sugary nectar produced in flowers using their specialized beaks. Their beaks are narrow enough to get to the bottom of flowers where nectar is produced, and their grooved tongue laps up the nectar. A hummingbird will typically consume more than their body's weight in nectar each day. They will also eat the occasional insect or spider to take in additional nutrients, especially when feeding young.

It has been said that hummingbirds are always within a few hours of starving to death. They typically have only enough energy stored in their body to get them through the night. If the temperature dips unexpectedly at night, or there is some other demand on energy at night, hummingbirds may slip into 'torpor'. Torpor is a very deep sleep-like state in which the bird's metabolism slows down and their body temperature drops. If this state lasted longer than one night, it could be called hibernation.

The one time of year that hummingbirds do store up more than a night's worth of energy is migration. When the Ruby-throated Hummingbird migrates to Mexico each fall, it crosses the Gulf of Mexico on a non-stop flight of 18 to 20 hours!

Hummingbirds are typically not very social birds. This is thought to be at least partly because of competition for food. Flowers produce nectar relatively slowly, so individual hummingbirds tend to stake claims and defend 'their' favorite flowers.

Flowers that attract hummingbirds tend to be red or orange in color and tubular shaped. They may also point downward, making it easy for a hovering hummingbird to gain access.

A few suggested flowers to attract hummingbirds:

- Bee Balm, Monarda didyma
- Cardinal Flower, Lobelia cardinalis
- Trumpet Creeper, Campsis radicans
- Columbine, Aquilegia sp.
- Hummingbird or Cypress Vine, Ipomoea quamoclit
- Sage, Salvia sp.

Another option for attracting hummingbirds is to use a feeder filled with sugar water to mimic nectar. There are many styles available, made of glass or plastic. Invest in one that is easy to fill and clean. Keeping feeders clean is essential in keeping mold from growing, which can sicken or even kill hummingbirds. Change the nectar solution every three to five days to prevent mold growth and fermentation.

There are many instant nectar products available for use in hummingbird feeders. However, many bird experts would argue that the best ingredients are probably in your kitchen right now: sugar and water.

To make nectar, add one cup of sugar to four cups of boiling water. Stir until sugar dissolves, cool the solution, and fill your feeders. Refrigerate any leftovers for up to one week. Red food coloring is not necessary and may harm hummingbirds.

I've found that once I start feeding the hummingbirds, they get pretty demanding. I have been dive-bombed more than once while retrieving an empty feeder and returning with it filled. Maybe they are defending their nectar source, but I like to think it's like they're saying "It's about time!"

Enjoy hummingbirds while they are here this summer. Before we know it, summer will fade and they will begin their long migration to Mexico.