Tiny, feisty hummingbirds arrive for a visit

If you feed them nectar, they will probably come. And if you are like many—if not most—of us, you will be enchanted by the antics of the tiniest of birds. Hummingbirds have been buzzing around St. Louis during the past month.

The ruby-throated hummingbird is the only hummer that nests in Missouri. It is neither the biggest nor smallest of these American natives. But considering that it weighs in at about 3 grams (1/10 of an ounce), and is about the length of a finger, you won't easily spot one unless it is sipping nectar from something close to you.

You can't beat that

Their wings beat about 60 times per second. That rate translates to 3600 beats per minute, allowing them to fly up to 60 mph. And they can fly backwards. In fact, they have few predators due to their maneuverability.

To support their amount of activity, hummingbirds eat a lot. The nectar from flowers or from your feeder just gives them a jolt of energy to hunt for the small, soft insects like gnats that are their real food. A ruby-throat consumes 100-200 insects every day. When they thrust their beaks into the nectary at the back of flowers, they are also looking for any live protein that's visiting the same flower.

Male ruby-throated hummingbird



Sometimes large moths, such as sphinx or hawk moths, are mistaken for hummingbirds. Birds do not, however, have antennae.

Photo by Margy Terpstra

They may be tiny, but they are "feisty," according to Vicki Flier, Audubon Society outreach teacher. The male is fiercely territorial, and will defend his territory not only against other hummingbirds, but against many birds. (The territory may be a feeder, or a patch of flowers just come into bloom.) He will sit on a high perch and dive bomb an intruder. Anne McCormack of the Webster Groves Nature Study Society has seen a hummer chase a bluebird down the block.

If you see a hummingbird through your window, and it seems to be looking at you, it is probably just flexing its muscles at its reflection. Males will flash that ruby patch on the throat, lining it up so the sun catches it. The feathers are not pigmented. They are iridescent, and the bird controls how light strikes them.

The Long Migration

Ruby-throated hummingbirds winter in Mexico and Central America. Beginning in February, those who have come up the east coast fly nonstop from the Yucatan across 500 miles of the Gulf of Mexico to the Gulf Coast. The trip takes more than 20 hours. A bird can lose half its weight during the journey. To prepare for this ordeal, the bird will gorge to double its normal weight.

The hummers don't land on the beach, but have to fly inland another mile to find food. Then they begin to move north to their breeding grounds. Ruby-throated hummingbirds nest from Florida to as far north as Alberta, Canada.

The first ruby-throats are spotted in the St. Louis area mid-April, but most of them arrive here in early May. They tend to return to the site where they were hatched. The males migrate first. They fly solo as fast as they can, presumably to get to the best territory. Sometimes the speedsters outrun spring, and find themselves with no flowers and totally dependent upon the kind feeders of strangers.

Females arrive a week or two later and look for good breeding ground. They want trees for nesting and plenty of insects for themselves and their chicks. They also tend to return to the area where they hatched.

Deadbeat dads

The male's sole function in breeding is passing on his genetic material. After he has impressed a female enough to be allowed to mate with her, he is out of there. The female builds the nest, incubates the eggs, and feeds the hatchlings until they can fly off on their own. Eggs hatch after about 14 days, and the chicks fledge 18-20 days later.

The chicks are the reason people see a lot more hummers at their feeders in the late summer.

The hummingbird nest is tiny—about the size of a walnut. It sits on the end of a high branch under a canopy of leaves. The nest itself is soft sided and made for expansion. Mom makes it of fluffy plant materials like thistle down and lichens, and binds it with spider webs. She adds material as the chicks grow, because they don't leave the nest until they are ready to fly off.

For excellent phtos incuding a nest visit: http://mdc4.mdc.mo.gov/Documents/8177.pdf

The science of the migration

How do naturalists know that hummingbirds return to the site where they hatched? How do they know how long they live? (Answer, an average of 4 years.)

"To study a species, you have to study individuals," says hummingbird bander Lanny Chambers of Fenton. He has put tiny metal bands on about 2200 hummingbirds in 10 years. About 10-15%



Lanny Chambers traps a hummingbird for banding. The bird will be weighed and measured, and fitted with a tiny numbered anklet.

Photo by Margy Terpstra

of his banded birds have been recaptured, and all but two were recaptured in the place where they were first banded. One of those two was recaptured 15 miles away, but the other was found in east Texas.

One cannot just take up banding as a hobby. It is illegal to band any wild bird without a permit from the US Geological Survey. After an apprenticeship of at least a year, a prospective bander may apply by submitting a research plan and promising to submit all data in a timely fashion to the USGS Bird-Banding lab.

There are about 200 active hummingbird banders on the continent, but most are in the US and Canada. Questions like "Do birds that nest in Canada migrate only to northern Mexico?" have not yet been answered. The answers await enrolling more south of-the-border banders to help track individual birds.

Chambers maintains a hummingbird website at http://www.hummingbirds.net/index.html. One of its main features is a map giving the date of the first hummingbird sighting all over the country and Canada.

Bringing hummers to your backyard

You can attract hummingbirds with feeders. Be sure to change the nectar of 1 part sugar to 4 parts water every three or four days.

You can also plant a hummingbird garden.

Any flower that is trumpet-shaped with little or no aroma will be attractive, ccording to Anne McCormack of the Webster Groves Nature Study Society. Birds have little sense of smell, but hummingbirds respond to visual stimuli.

For a garden that will have flowers to attract hummers all summer, she recommends you plant some or all from this list.

- Lady in Red salvia
- Big blue sage or anise sage
- Purple coneflower
- Butterfly bush
- Cardinal flower



Trumpet honeysuckle, *Lonicera* sempervirens. This honeysuckle is native to southeast Missouri and is non-invasive.

Photo by Anne McCormack

- Coral bells
- Trumpet creeper
- Trumpet honeysuckle

Hummingbirds will return to a favorite site next year, so you may enjoy annual guests.

St. Louis Community College at Meramec is offering a workshop on hummingbirds. A lecture on Wednesday, July 22 will be followed with a field trip on July 25. Open to all, it is also part of the Master Naturalist certification. Call Meramec at 314-984-7777.