## **Amazing Hummingbirds**

When it comes to summer guests in cottage country, very few are more engaging than the ruby-throated hummingbird. Its tiny size, agility of flight, pugnacious behaviour and iridescent colours are only a few of the characteristics that make this tropical migrant so special.

The ruby-throat, eastern North America's only hummingbird species, glows with iridescence. The male's throat can appear red, purple, orange or even jet-black, depending on the angle of view. Weighing only half as much as a loonie, the ruby-throat is so small and light that it sometimes meets its demise in spider webs. At first glance, people will even mistake hawk-moths for hummingbirds. Hawk-moths are nectar feeding moths that hover hummingbird-like at flowers.

However, it is the ruby-throat's prodigious flying abilities that are most impressive. With an average of 40 to 80 wingbeats per second, some incredible aerial maneuvers are possible. In addition to being able to hover, hummingbirds can fly sideways, up, down, forward, and even backwards. This level of flight dexterity enables the bird to position itself at flowers and use its long bill to extract nectar.

Surprisingly, about a quarter of a hummingbird's diet consists of insects. Flies, bees, wasps, and spiders are taken at flowers, gleaned off bark or even caught in the air. However, sugar from nectar, tree sap or feeders provides the bulk of the hummer's food. Sugar supplies quick energy to power the hyper-busy wing muscles. When the birds first arrive in early May before most flowers are in bloom, tree sap constitutes the main source of food. The hummingbirds are attracted to the small holes drilled by yellow-bellied sapsuckers, a type of woodpecker. The sap which oozes from these holes also attracts small insects which the hummers gobble up, as well. A few weeks later, the birds turn to the nectar of plants such as lilacs and wild columbine. It's also important in May to have your feeder up early. Bird-banding studies have shown that hummingbirds return to the very same summer territory each year, so a bird returning in the spring will look for the same feeder where it fed the previous summer. Even if you live in the city, migrating birds will often stop at a feeder for a day or so before continuing north. Use a solution of one part sugar to four parts water. The mixture should be changed at least once a week.

Hummingbirds are most readily attracted to tubular flowers, particularly red and orange. In addition to those already mentioned, some of the most popular are honeysuckle, day lilies, bee balm, salvia, jewelweed and cardinal flower. When a hummingbird dips its head deep into a blossom, pollen often adheres to the bird's head and ends up being transferred to the stigma of another flower. In this way, hummingbirds play an important role as pollinators and have even influenced the evolution of as many as 19 species of plants in the eastern U. S. and Canada.

Hummingbirds have enormous appetites and need to refill their stomachs about every seven to 12 minutes. This means consuming food equal to about half their body weight each day. As Doug Bennet and Tim Tiner explain in their recent book "Wild City", in order to sustain the metabolic rate of a hummingbird, "a 176-pound man would have to pack away 100 pounds of Smarties a day and drink five cases of beer to keep his skin from catching fire."

With all this frenzied feeding activity, you may wonder then why the birds spend so much time sitting quietly on a perch, seemingly doing nothing. They are in fact going through the process of emptying their crops. The crop is the part of a bird's digestive system that stores food immediately after it is taken in. Before being able to feed again, the hummingbird has to wait for its

crop to become about half empty, as sugar water or nectar is passed into the rest of the digestive system.

Hummingbirds aggressively defend their food supply against intruders, including other hummingbirds. I once saw a particularly pugnacious male go after a broad-winged hawk that was simply flying over the garden where the hummer was feeding. Hummingbirds often employ special flight patterns in these displays of aggression. In one such display, the bird describes a horizontal U, going back and forth and passing close to the intruder's ears. Both males and females engage in this sort of behaviour.

The number of hummingbirds coming to feeders usually increases in July, when fledged young begin to accompany the female on feeding excursions. With their green back and gray-white belly, they are almost identical to their mother. Finally, the hard-working female has some time to catch her breath, having built the nest, incubated the eggs and taken full responsibility for feeding the nestlings - all without any help from the male. The male's role in producing a new generation is limited to performing a courtship flight followed by a few seconds of mating. To his credit, however, the courtship dance is impressive. He dives down towards the female and, in the manner of a swinging pendulum, passes by her, back and forth, climbing about six feet in the air each time. As he flies by his sweetheart, his wings hum the loudest. The display ends abruptly, only to be continued at another location.

The two-inch, lichen-covered nest is placed on the top of a branch, usually in a deciduous tree. The same nest is sometimes used again the following year. To the casual observer, it looks like nothing more than a small bump. Two pea-sized eggs are laid. The female feeds the bee-sized babies a regurgitated mixture of nectar and insects. The young leave the nest after about three weeks.

We have about one more month to enjoy these amazing birds before they head south to Central America. Most of them will have left by mid-September. Storms, untimely cold spells and cats are three of the many dangers they face during migration. Although most ruby-throats migrate south through Texas and northern Mexico, at least part of the population manages to cross an 800 km expanse of the Gulf of Mexico between Florida and the Yucatan Peninsula. No small accomplishment for such a tiny bird!

Finally, it's not a bad idea to leave your feeder up until the end of October. It might provide much-needed food for a late ruby-throat or even attract a completely different hummingbird species. Western birds such as the rufous hummingbird sometimes get lost during migration, possibly as a result of storms, and can end up just about anywhere. In October of 1989, a broad-billed hummingbird turned up at a feeder near Buckhorn. This species is native to Arizona and had never been recorded in Canada before. Anything is possible.

## What to watch for this week:

August 12 is the peak of the annual Perseid meteor shower, but viewing can also be good for a night or two before and after. A meteor shower occurs when the Earth passes through a stream of debris left behind by a comet. Particles the size of grains of sand burn up and emit light as they pass through our atmosphere. For the best view, choose as dark a location as possible and lie on your back so you can see the entire sky. Up to 50 meteors per hour are possible, with even more after midnight.

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