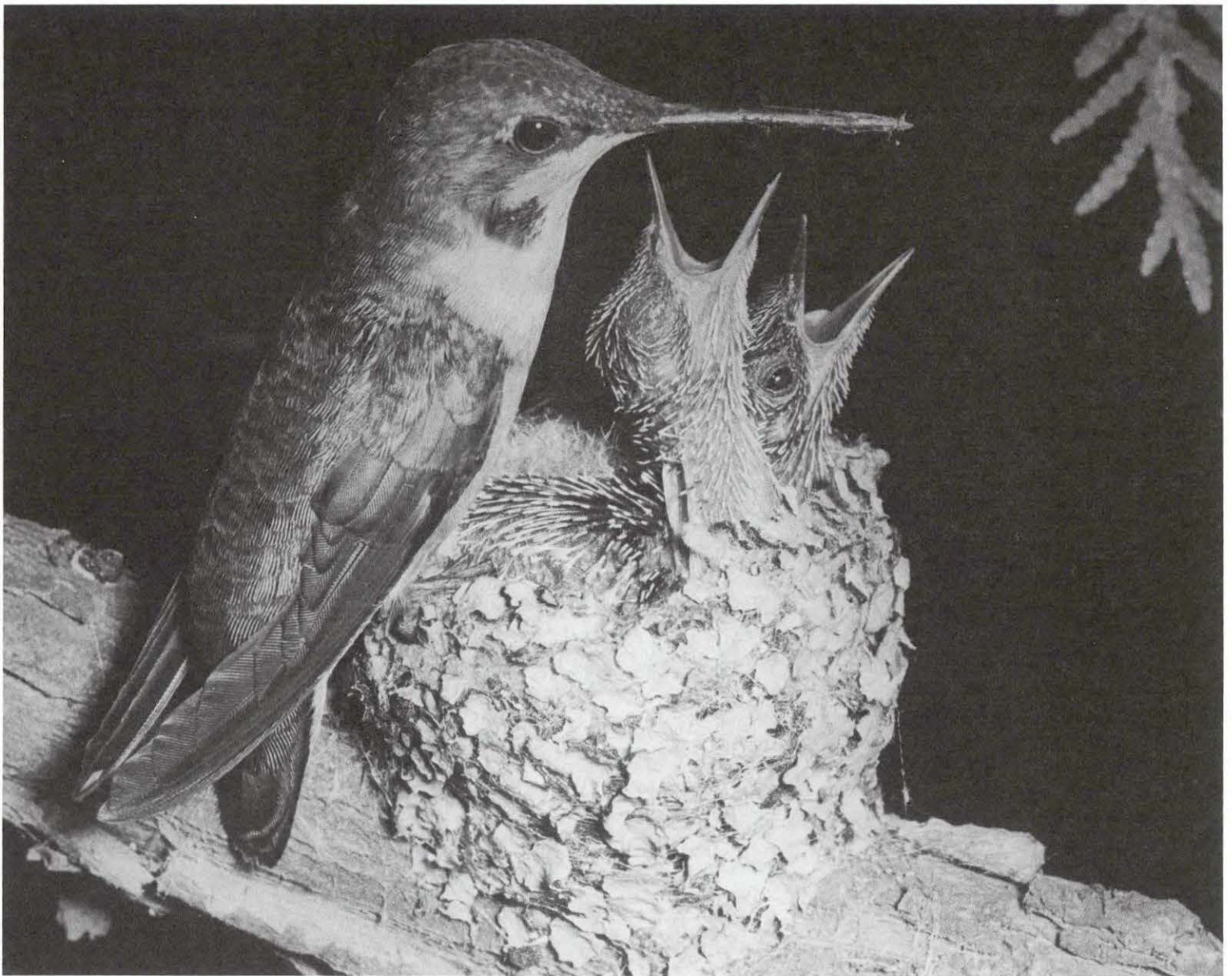


Ruby-throated Hummingbird



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The Ruby-throated Hummingbird *Archilochus colubris* is the most common and widely distributed of the hummingbirds in Canada. Its minute size, temperament, and behaviour are fascinating, and its skillful flight and migration are amazing. All these things set it apart among birds.

Appearance

From the tip of its bill to the tip of its tail the ruby-throat measures from 7.5 cm to slightly more than 9 cm. No larger than a good-sized insect, it is often confused with the northern hawk moth, especially at dusk, as the moth is similar in size, form, and flight.

The male ruby-throat is shiny metallic green above and greyish white below and has a forked tail. He wears on his throat a splendid gorget of silky, ruby red feathers, which, depending on how the light strikes it, looks sometimes orange, sometimes jet black. The female is similar but has a greyish white throat patch. Her tail is rounded, and some of the outer tail feathers are marked with white spots. These she often displays when posturing and in flight. The ruby-throat's bill is long, straight, and almost as slender as a darning needle.

Distribution

Canada has five species of hummingbirds. Of these, only the ruby-throat is found in the east. It inhabits Nova Scotia, New Brunswick, Cape Breton, Prince Edward Island, southern Quebec, and Ontario north to Lake Nipigon and Lake of the Woods. It ranges westward through southern Manitoba, central Saskatchewan, and central and southeastern Alberta.

The other species are found in the west. Most common is the Rufous Hummingbird *Selasphorus rufus*. It breeds in British Columbia north through the Queen Charlotte Islands and northwest to the Alaska border, and east to southwestern Alberta. It ranges, rarely, as far north as southwestern Yukon and as far east as southwestern Saskatchewan. The cinnamon-red male has a shiny green patch on top of the head and a scarlet gorget that sometimes appears black. The female is bronze-green above,

with reddish brown areas on flanks and tail and sometimes a small red and green spot on the throat.

The Calliope Hummingbird *Stellula calliope* is the smallest bird in Canada. It breeds in the interior of British Columbia, east into the mountains of southwestern Alberta, and wanders rarely into southwestern Saskatchewan. The male is shiny green above with a purplish streaky-looking gorget. The female is bronze-green above and has a few dusky streaks on the throat and buffy brown sides.

The Black-chinned Hummingbird *Archilochus alexandri* is a scarce breeder in the southern interior of British Columbia. It resembles the Ruby-throated Hummingbird, but the male's gorget is deep violet changing to black.

Anna's Hummingbird *Calypte anna* is the largest hummer in Canada. The purplish-red throat patch of the male extends down the sides of the neck as well as onto the crown of the head. The rest of the body is greenish. It is a rare breeder in southern coastal British Columbia.

Flight

The most remarkable feature about the hummingbird is its flight. It manoeuvres at incredible speed, rapidly changing direction in the air and darting away like a tiny green arrow. Unlike other birds, it can hover in place in the air. Its pointed wings appear to be a blur in flight. Scientists have been able to establish the rate of the wingbeats, by means of high speed photography, at about 55 to 75 beats a second.

The rapid wing motion produces a distinct hum, hence the bird's name, rising and falling according to the wing speed. At great accelerations the hum sometimes turns into a continuous high note, similar to that produced by arrows or bullets in flight.

Migration

In earlier times people did not believe that a bird so small and fragile could fly thousands of kilometres from its breeding range to its wintering grounds. This gave rise to the legend that the tiny birds travelled as passengers on bigger birds, such as the Canada Goose.

Now we know that ruby-throats fly south in the fall and north in the spring. Observers have seen spectacular flights of these tiny birds flashing by overhead in great numbers at such places as Point Pelee and Port Stanley on the Great Lakes, especially in the fall. It has also been established that hummingbirds actually cross the 800-km expanse of the Gulf of Mexico on their way to and from their wintering grounds in Central America.

The ruby-throats leave their northern breeding grounds during the second half of August and the first week of September. The males migrate first, followed by the females and the juveniles. They return in the same order in spring, during the last two weeks of May. Banded birds have returned to the very same place the next spring.

Behaviour

When the male hummingbird arrives in the spring, he establishes a territory containing several

Distribution of the Ruby-throated Hummingbird

■ Breeding range
▨ Wintering range





sources of food. Because these sources of food are of great importance, the area may be shared by other males as well as females.

Both the males and the females aggressively defend their food supply and its surroundings against intruders. These encounters lead to persistent swift pursuits that sometimes develop into fighting. The tiny bird uses speed and the hum of its wings to intimidate intruders. It employs certain flight patterns in these aggressive displays. In one, the bird makes a speedy dash, describing a horizontal U, from side to side around the intruder's ears. In another, the bird swings vertically up and down like a pendulum. Both flight patterns are accompanied by high squeaky notes, and the bird's wings hum like an angry bumblebee. The ruby-throat is persistent and continues to worry the intruder until it has had enough and flees.

A spectacular feature of the ruby-throat's courtship behaviour is the male's famous pendulum display, an elaboration of the aggressive flight display. The male dives down towards the resting or feeding female. Like a pendulum he sweeps past her and up to a point 2–3 m in the air, then back along the same path in reverse. He repeats this swinging display time and again, all the while uttering squeaky notes. As he dives past the female his wings hum the loudest; as he swings closer to the female his hum becomes more intense and his speed increases. Abruptly, the display ends; both dart off together, to start again elsewhere.

After the pair has mated, the male takes no part in raising the young. He spends his time darting from flower to flower sipping nectar, or sitting for hours atop a selected lookout watching for small insects.

Nesting

The female builds the nest without help. She usually saddles it on a limb of a deciduous tree or shrub 3–10 m above ground. She is a master builder and uses cobweb and plant down, such as the fluff from catkins and cattails, as nesting materials. Working with her bill, she cements these materials together and lashes the structure securely to the branch with sticky spider silk. She picks bits of lichen and sticks them on to the outside walls. This gives the nest the appearance of a natural knob. With her body she moulds the inside of the cup and then draws loose ends over the edge and smooths it all out with her bill.

The Ruby-throated Hummingbird lays two white eggs, the size of large peas. The female spends long sessions incubating, sheltered from rain and sun by the umbrella of green leaves under which she has placed her nest. She leaves to feed only briefly, and her trips from and to the nest are cautious and stealthy and by selected routes.

The nestlings hatch after 11–14 days. No longer than honeybees, they are almost naked. Their eyes are closed at hatching and their bills are short. After five days their eyes begin to open and their feathers start to develop. Later, the nestling can utter longdrawn *peeps*. The female broods them and feeds them from her bill with food regurgitated from her throat. She picks up the

droppings and carries them away; one female trimmed the nest branch with droppings placed in a neat row.

The young birds leave the nest after 14–28 days, but may continue to be fed by their mother for several weeks. Now she passes the food directly in an extraordinary performance of chases and hoverings ending with a quick perching manoeuvre in which she squirts nectar from her bill into the chick's mouth.

At this time the fledglings look like the female, except that the young male's throat is streaked with dusky and, occasionally, red colour. In the spring before migrating north, both adults and juveniles go through a complete moult from which the young birds emerge in their full adult plumage.

Food and feeding

The ruby-throat's principal food consists of small insects and the nectar of flowers. The insects are caught on the wing from lookout perches or in and around the flowers. To lap up the honey, the bird inserts its long extensible tubular tongue deep into the honey wells of the flower, preferring tubed flowers, such as bee balm and columbines. When feeding from a larger flower with a very deep honey well, such as a tiger lily, it pierces the calyx, or neck, with its bill and by this shortcut extracts the drop of honey.

Bright-coloured flowers that contrast sharply with the background attract the hummingbird. It favours red flowers, followed by orange, which show up well in dark shady places, and visits green flowers only when the background foliage is another colour. The hummingbird, like the bee, contributes to cross-pollination. As it visits one flower it is dusted with pollen, which it carries to another flower of the same species.

Yellow-bellied Sapsucker borings that release the sap of trees are also important food sources. The ruby-throat is often seen gently buzzing a sapsucker in the expectation of being led to another food source.

Hummingbirds are easily attracted to feeders containing a solution of one part sugar to four parts water. This should be boiled to forestall fermentation, and the mixture should be changed at least once a week.

The hummingbird is a curious creature. Some birds take to a feeder at once; others learn to associate the strange contraption with sweet food only with difficulty, and a dash of red or orange paint applied to a new feeder helps. But once a feeder is found, neither its form nor its colour is of any account, as long as it is hanging in the same place. A hummingbird returning in spring always looks for the feeder where it last fed from it eight months before.

The hummingbird also drinks water. Flying across open water, it may descend like a swallow to the surface, touching it with the bill and leaving widening rings on the water to mark the site of the drink.

Enemies

Inclement weather, such as storms and untimely frost, is one of the most serious threats to the

hummingbird's life. It is vulnerable to insect-eating hawks and other predators, as it looks so much like an insect. There is one instance on record of a hummingbird flying over a pool being caught and swallowed by a fish. Accidents also appear to play a significant role. Hummingbirds are sometimes caught in spider's webs, or otherwise entangled and unable to extricate themselves, or are impaled on a thorn or other sharp object.

The delicately changeable colours of their plumages, their diminutive sizes in combination with temper and spirit, and their agility and endurance in flight are the principal characteristics that have given Ruby-throated Hummingbirds their place of distinction among birds.

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The Canadian Wildlife Service

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