

The Ruby-throated Hummingbird:

by Karen Rowe



Three hundred and forty hummingbird species are found worldwide, but only one, the ruby-throated hummingbird, (*Archilochus colubris*) nests in Arkansas.

Description

Weighing as much as a penny, the male ruby-throated hummingbird is identified by his fiery red throat, iridescent green back and forked tail. The female looks rather dull in comparison. She lacks the red throat and has a blunt tail with white spots. Immature ruby-throated hummingbirds resemble the adult female, however, immature males feature a small red dot on the throat.

Distribution

Ruby-throated hummingbirds usually return to Arkansas in mid-April, just as nectar-bearing flowers begin to bloom. They are found statewide until early October, when they journey across the Gulf of Mexico where they winter from north-central Mexico to Costa Rica.

Habitat

Ruby-throated hummingbirds are most commonly found where there are abundant nectar-producing flowers and a good water supply. They prefer nesting in wetlands, moist ravines and along wooded streams. While often seen feeding at backyard sugar-water feeders, hummingbirds are also found in cypress swamps feeding from buttonbush flowers.

Habits

The hummingbird's aeronautical abilities are amazing. Like helicopters they can hover, move forward, backward, or sideways at will. Their wings beat 55 times per second while hovering in front of a flower and up to 200 beats per second in quick maneuvers during courtship flights. They have been clocked at speeds of 60 m.p.h.

These feats are possible, because hummingbirds have a different body structure than other birds. All birds' wings, except swifts, articulate freely at the shoulder, elbow and wrist. Hummingbird wings, though, rotate mainly at the shoulder, giving them a long, paddle-like wing. Unlike most other birds, they maintain power on the upstroke, as well as the downstroke, even when the bird is upside-down. This gives the bird explosive acceleration.

Hummingbirds expend enormous amounts of energy and must refuel almost continuously. Sugar is their energy source, because it delivers fresh fuel to muscles in the shortest time period. A hummingbird takes in more than half its weight in nectar to get this sugar by visiting 1,000 to 2,000 flowers daily. Hummingbirds can't survive on nectar alone, so they supplement their diet with minute spiders, aphids and other tiny insects to get proteins and vitamins. To store enough fuel to travel nonstop across the Gulf of Mexico, hummingbirds double their weight just before migration.

A hummingbird's tiny body loses heat rapidly. On cool nights, or in cool weather, it's difficult for the bird to maintain its active body temperature. When this occurs, the hummingbird goes into a kind of dormancy called torpor. In this unconscious, coma-like state, the hummingbird's body temperature drops, breathing and heart rates are reduced, and the bird can't move. During torpor, the bird's body uses only 1/20th the amount of energy needed during normal sleep. When the air temperature rises, the hummingbird wakes up. They also go into torpor if forced to sleep without sufficient nourishment.

Hummingbirds are territorial, ready to battle any others nearby. Despite their size, rubythroats aggressively defend their territory, and their high-pitched battle cry is often heard as one "hummer" pursues another in a dogfight over rights to a sugar-water feeder.

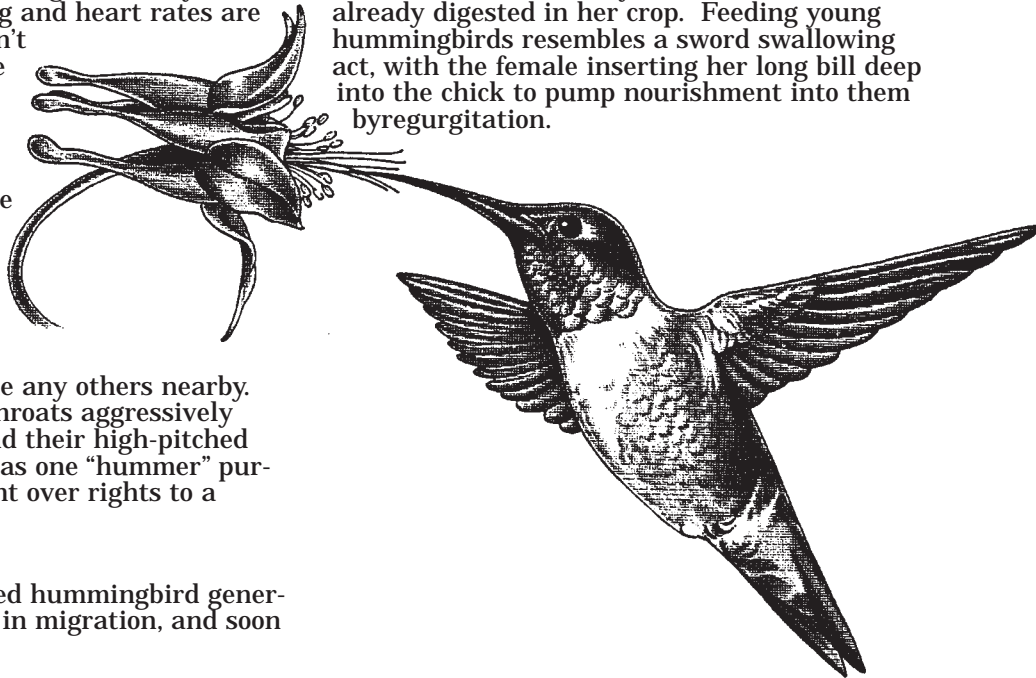
Reproduction

The male ruby-throated hummingbird generally precedes the female in migration, and soon

after she arrives in spring, courtship begins. In his impressive courtship flight, the male rises high in the air, swoops past the female within inches, rising high again on the other side. He positions himself, so the sun catches his bright iridescence as he swings back and forth like a jeweled pendulum. After mating, the male flies off, often to mate with another female. His mate is left with the sole responsibility of making a nest and raising the hummingbird chicks.

The rubythroat's nest is about the size of a walnut and is often located on a downward sloping limb, near or over water. The nest is made of moss, plant fibers, and bud scales, lined with fine plant down and camouflaged with lichens. The nest is woven together and anchored to the branch with spider's silk. Sheltered above by leaves and open to the ground below, it's easily hidden, because it looks like a knot on a branch.

The female lays two tiny pure white eggs and incubates them for about two weeks. She often raises two broods and may even lay her second egg clutch before the first brood is fully fledged from the nest. Hummingbird chicks are born black, blind and no bigger than bumblebees. They stay in the nest for 10 to 30 days, depending on the frequency of feeding. The female feeds her chicks entirely on insects she has already digested in her crop. Feeding young hummingbirds resembles a sword swallowing act, with the female inserting her long bill deep into the chick to pump nourishment into them by regurgitation.



Importance

Hummingbirds are a unique part of Arkansas's fauna, providing enjoyment to thousands who hang sugar-water feeders. Not only are hummingbirds an important part of our backyard bird watching, they are a necessary part of the life cycle of many flowering plants. More than 160 native North American plants depend exclusively on hummingbirds for pollination. These flowers have pollination mechanisms specifically to attract hummingbirds. Long floral tubes with nectaries at the end can't be reached by most insects, limiting access to only the hummingbird's slender bill and tongue.

Management

Because rubythroats nest near or over water, protection of wetlands and other water habitats is essential.

Hummingbirds can be attracted to backyards and apartment balconies by providing them with red nectar-rich flowers and sugar-water feeders. Gardens and planters filled with fuchsia, sages, bee balm, impatiens, cypress vine, trumpet creeper, Rose of Sharon shrubs, mimosa trees and other plants can feed hummingbirds long after sugar-water feeders are emptied. Minimize pesticide use around these plants.



Arkansas Game & Fish Commission

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