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Buzz-wings

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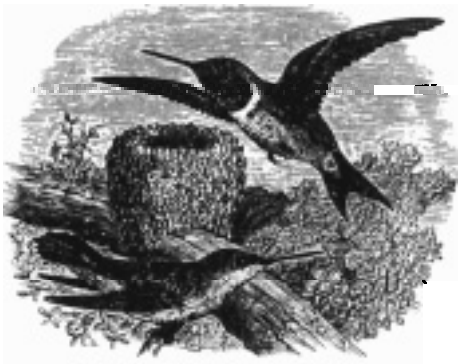

Buzz-wings

BY PAUL A. JOHNSGARD

Although only one species of hummingbird is common t~ Nebraska, three others are occasionally sighted.

IF THE AVERAGE Nebraskan were asked how many species of hummingbirds are in the state, he would likely reply that are about as much a part of the Nebraska scene as are birds of paradise. Nebraska simply lacks the combination of a large number of nectar-producing flowers and forested habitats which nearly all North American hummingbirds prefer. Thus, although one need only travel to Colorado to see an abundance of hummingbirds all summer long, Nebraskans must largely content themselves with a few fleeting weeks in spring, again in early fall, when hummingbirds are likely to appear in gardens or feeders.

Hummingbirds are limited to the western hemisphere, and the vast majority of species are found only in South America. They are not, as many imagine, birds of the dark rain forests, but are most common along forest edges and other open areas where a profusion of flowers bloom in the sunlight. They are likewise not exclusively nectar-feeders, although among the advanced types of hummingbirds having distribution patterns extending into North America, nectar probably comprises most of the diet. However, small flying insects are often captured, especially when rearing young, when the female is likely to feed her developing young on a rich mixture of insect life and sugar-rich nectar.

Hummingbirds have so many unique traits that it is tempting to make them the subjects of a "believe it or not" story. For example, together with the smallest shrews, they are the smallest of any warm-blooded vertebrates, and correspondingly have the greatest relative energy output of any animal in the world. They comprise the largest family of non-songbirds in the world, and are the second-largest family of Western Hemisphere birds, exceeded only by New World flycatchers. The smaller species have the most rapid wingbeats of all birds, and are among the most rapid flying small birds, sometimes attaining a speed of 60 miles per hour in courtship dives. They also have the largest relative heart size and brain size of all birds, and their breast muscles are relatively the largest of any bird. Their large muscles are related to their unique helicopter-like method of flying, which allows them to fly forward, backward, or hover for prolonged periods. This is an energy-demanding type of flight, and in order to conserve their precious energy supplies, the birds become torpid when they sleep, sometimes dropping their body temperature by as much as 60 degrees F. During the day they must use nearly every waking minute regaining energy burned up during nighttime hours, and will typically consume more than half their total weight in food, and up to eight times their weight in water.

If all that were not enough, hummingbirds are perhaps the most beautiful of all birds, and their plumage is highly specialized for iridescent coloration. As a result, the birds, especially the males, are a veritable rainbow, ranging from green and violet to the most brilliant red imaginable. Further, the males carry their bright colors all year long, unlike most other birds which lose their colors during the non-breeding season. The probable reason for this is that over much of their range, hummingbirds have a prolonged breeding season, and the males must be ready whenever occasion allows. All hummingbirds have a promiscuous mating system in which the male displays conspicuously in an effort to attract females to his territory. Following a short but spectacular courtship, mating occurs, after which the female leaves to build her nest and care for the eggs and young without any assistance from the male.

Like everything else that hummingbirds do, the nests of hummingbirds are miniature works of art. At least in North American species, they are typically constructed of a mixture of down or "wool" of leaves and the "silk" of willows, cottonwoods or similar plants, held together with spider webbing, and neatly camouflaged to match surrounding trees, with bits of lichen or bark artfully attached to the outer surface.

All female hummingbirds lay only two eggs (which although tiny are in a relative sense among the largest of bird eggs), which are invariably pure white. In spite of their small size, incubation lasts more than two weeks, perhaps in part because of periodic cooling of the eggs, caused by the female's need to leave the nest to feed.

Following hatching, three weeks or more are required to bring the young to fledging. Although initially much smaller than the nest cup, the two young grow at a remarkable pace, and within about two weeks outgrow the available space. As they grow, the nest is flattened by their weight until it sometimes comes to look like a thick pancake.

In Nebraska, the species of hummingbird most likely to be seen, and indeed the only one likely to be seen in the eastern half of the state, is the ruby-throated hummingbird. This is the most widely distributed of all North American hummingbirds, and its breeding range covers virtually all of eastern North America north nearly to Hudson Bay. The nesting range includes most of eastern Nebraska, but only along the Missouri River is nesting at all regular. Nests have been reported as far west as North Platte. Ruby-throats typically arrive in Nebraska in early April, with about half of the total available spring arrival records occurring between May 5 and 17. By June most of these birds will have continued northward, to return again in August during the fall migration. Typically, birds leave in mid September. In mild falls, stragglers may persist until early October.

Although ruby-throats have been reported as far west in Nebraska as Scotts Bluff County, bird watchers in the Panhandle should be on the alert for other species as well. The most likely of these is the broad-tailed, which has been observed in Dawes and Scotts Bluff counties. Broad-tails regularly nest in Colorado, and are the species most likely to be seen there in summer.

Two other species of hummingbirds have also been reported in western Nebraska. The rufous occupies a large summer range in western North America and occasionally strays into western Nebraska during fall migration.

The last and rarest species of hummingbird to occur in Nebraska is the calliope, which breeds fairly commonly in western Wyoming, and which has only been seen a few times in the state. The calliope is the smallest of the hummingbirds that visit Nebraska, but is so beautiful that even a fleeting glimpse of the stunning male is long remembered.

Author Paul A. Johnsgard is a Foundation Professor of Life Sciences at the University of Nebraska-Lincoln, and author of 19 books including ***The Platte: Channels in Time; Birds of the Great Plains: Breeding Species and Their Distribution,*** *and books of such groups as the grouse, cranes, waterfowl and shorebirds of the world. He has also written some popular books such as* ***Song of the North Wind*** *on snow geese, and* ***Those of the Gray Wind*** *about sandhill cranes.*