

Nature Buzz

by Terri Treacy, War Bluff Valley Sanctuary

Ruby-throated Hummingbird

What if I told you there was something that could fly up to 50 miles per hour, travel up to 600 miles without refueling, hover in place, fly backwards, sideways and straight up and down, and with little effort you could have one or several of these for yourself?

Sound like science fiction? In fact it's our ruby-throated hummingbird (*Arichilochus colubris*); the enchanting iridescent emerald green bird with the long spear-like bill. The throat feathers of the male appear ruby red in color.

Their name comes from the humming sound they make in flight – their tiny little wings beat up to 55 times per second while hovering, 61x/sec when moving backwards, and at least 75x/sec when moving forward.

The hummingbird family consists of at least 319 species, all of which occur in the Western Hemisphere. The ruby-throated is the only hummer that nests east of the Mississippi River. It's a neo-tropical migrant that winters in southern Mexico and Central America.

The males migrate home first, with females following about a week later. Many hummers cross the Gulf of Mexico, a 600-mile, non-stop journey to the shores of the southern United States, to arrive in late March or early April. That's quite a feat of endurance for something that tips the scales at an average 3 grams – less than the weight of a nickel.

I normally see my first hummer in mid-April. They will hover in the exact location where their favorite hummingbird feeder always hangs. I had to hurry up and get some nectar prepared for the hungry little guys.

Hummers breed in a variety of habitats from woodlands, to orchards, to towns like Golconda that offer large, mature trees. The female will return to the same spot every year to find a mate and raise a family. After the female selects a suitable building site, near the end of a downward sloping branch about 5 to 10 feet high, construction begins. The primary building materials consist of various plant parts; the nest itself is attached to the branch with spider silk. The inside is lined with soft plant down, while the outside is camouflaged with tiny bits of gray lichen. This incredible work of art is no larger than a walnut.

Two, pure-white eggs are laid about two days apart, which the female incubates for 14 to 16 days. The naked nestlings start out with a little nubbin for beak, because of course, it would be quite impossible for their characteristic long bill to fit inside an egg the size of a pea.

Over the course of the next 11 to 12 days, due to the constant attention and feeding by the female, the babies and their bills rapidly grow to nearly adult proportions. The female often raises two broods, sometimes three, in a season. There is an account of a single female feeding one young in one nest, while brooding two eggs in a second nest just four feet away. Super-moms are evidently not limited to human moms. Are you

starting to get the picture that the male has one job to do in this process, and once that's over with he's pretty much out of the picture!

Everyone knows that hummers drink flower nectar, but did you know that most of their diet consists of insects and spiders? Small beetles, weevils, flies, gnats, mosquitoes, aphids and leafhoppers are just a few examples found on the hummer's menu. These insects and spiders are conveniently attracted to the same flowers that the hummers find appealing.

Although hummers seem to have an irresistible attraction to red, they will visit flowers of just about any color to glean insects. For nectar sipping, their long bills are adapted for probing tubular shaped flowers. They are especially fond of the salvias, native red honeysuckle, native columbine, trumpet vine, lilies, hosta and bee balm.

You can attract these little jewels to your yard by providing natural food and cover and by supplementing their diet with homemade nectar served in specially designed hummingbird feeders. The recipe is 1 part white granulated sugar to 4 parts water. Until your birds are draining the feeder each day, you need to bring this mixture to a boil before serving – this prevents dangerous bacteria from forming that could harm the birds. It might take a while for your feeders to be discovered – so be sure you change the sugar water on a regular basis to keep it fresh. You must also keep your feeders clean at all times. Going over the whole feeder with plain hot water and bottle brush every single day before refilling keeps it clean and fresh.

Beside cleanliness, the other caution is to *never* substitute anything for the sugar – don't ever use honey or artificial sweeteners – the former can harbor bacteria that can kill a hummingbird, the latter has absolutely no nutritional value. You can use commercially available hummingbird nectar, but it's expensive and completely unnecessary. And finally, you don't need to color the nectar with red food dye – the red color of the feeder is plenty to attract them.

Hummers can be extraordinarily protective of their feeding area and will commonly engage in turf battles. They make squeaky, scolding noises, dive at one another, and sometimes strike bills together. I've minimized this aggressive behavior by one, always having multiple feeders available, and two, always having the feeders filled. I believe once they feel secure in knowing that food is always available they tend to share more readily. My feeders have 4 to 6 feeding ports and at times all are being used simultaneously without displays of aggressive behavior.

You derive a lot more enjoyment from your feeders if you do two things. First, early in the season, before the honey bees become abundant, I leave the bee guards off the feeder tubes. This allows other bird species to enjoy a sip of nectar. Regular visitors to my hummer feeders are indigo bunting, Baltimore and orchard orioles, goldfinch, Carolina chickadee and downy woodpecker. Second, place at least a couple feeders close to an area where you will be able to spend time watching them. Hummers, tiny and vulnerable as they are, can become quite tame and will learn to recognize you. In fact, in the morning, as I'm carrying the feeders outside, there is a male that starts feeding while I'm still holding the feeder.

Ruby-throated hummingbirds are fascinating birds that can bring hours of enjoyment to your life. To make sure we enjoy this bird for generations to come we need

to conserve its habitat both here and in the tropics and reduce our dependence on agricultural pesticides.