

"A SALUTE to the HUMMINGBIRD"

By Larry Waltz

Of all the birds one might enjoy watching, the one hands down intriguing for most of us is the hummingbird, and particularly, our Ruby-throated. It raises those mysterious and tantalizing questions: how can they fly so fast and stop on a dime? What about surviving storms? Their nests are so tiny, how can babies survive the squeeze as they grow? So, let's take a deeper dive.

SOME RUBY-THROATED HUMMINGBIRD TIDBITS:

- Winters: southern tip of FL, central Mexico to Costa Rica.
- Weight: 0.11 oz. (it would take 25 Ruby-throats to equal one Robin).
- Number of Feathers: about 1,000.
- Wings Beat: a true hoverer, and as needed, 55 to 80 beats per second.
- Flight Muscles: 30% of hummer body weight.
- Diet: nectar, tree sap from woodpecker drilling, insects, and spiders.
- Male Displaying: wings pendulumlike before female.
- Female Only: nest site choice and creation, incubation, feeding young!
- Long-lived: surprisingly, some are known to live nine years at least.

MIGRATION and IMPRINTING:

Researchers are amazed: a Ruby-throat with a full fat load can fly about 600 miles nonstop in 18-24 hours. All things being equal, good weather and available food, it means in the spring they can reach North Carolina from the Gulf. From north-central PA in the fall, these birds can be in northern Georgia a day later. In addition, some cross the Gulf of Mexico twice a year.

Over the last 20 years of journaling, I have marked "FOY" (birder acronym, first-of-the-year) for earliest seasonal appearances. Ruby throats' average arrival time here in Old Lycoming Township is the first of May. Monitoring the PA Society for Ornithological (PSO) listserv postings, we look for southern PA counties to announce first arrivals and forthwith make sure that our feeders are ready.

Like when you travel and stop, remembering that favorite hotel and eatery, hummers are migration specialists imprinting on and returning to previous years' rest stops. If you predictably put feeders out, you are on their radar screen. Rebecca and I have two feeding stations, two feeders on the back deck, a most convenient viewing spot, and one feeder on the front porch for evenings. (BTW our nectar formula: initially 3-to-1, water to sugar; thereafter 4-to-1). Interestingly, one year, hummers in their usual August feeding frenzy neglected the back feeding station and flew to the house front, hovering for nectar at the previous years' site! We hadn't put out a feeder there that year.... a learning point for us.

GENDER ROLES:

Males arrive first, either passing through or settling in. They need to find a territory where they can collect a balanced diet of nectar sugar (40%) and insect protein (60%).

All that gyrating fussiness establishes sky/observation/food ownership. This busyness attracts females. But hummers, like some bird species, do not pair up for the season. Males have no part in choosing and creating the nest or feeding young. Males do not necessarily know where the nest site is!

Meanwhile, female nest creativity is simply amazing. She raises a brood in such a small saucer, on a small downward sloping limb, usually in a deciduous tree. The nest is made of bud scales and lichen, bound together with spider's silk. With this web elasticity, the nest expands as the young grow.

FEEDING HUMMINGBIRDS:

I remember a birding trip with Pete Dunne, birder extraordinaire, founder of the Cape May Birding Observatory, responding to that classic question: "Is it necessary to feed birds?" With patient grace he responded, "no, birds are professionals". Meaning, of course, for millennia they have and will continue to survive under natural circumstances. But, he continued, "there is value in feeding, not so much for the birds, but for you!". In his wisdom he knew that birds were the real pedagogues, we are the teachable ones, especially as we can get up close and personal.

Another saint of avian ecology is writer, lecturer, and researcher, Scott Weidensaul. In a posting on the PSO listserv some time ago he counseled us about feeders:

If the feeder hangs in the sun, and in hot midsummer weather, change the nectar every few days, washing the feeder with hot water and a brush; be sure your feeder comes apart, so you can reach all the hidden nooks and crannies with the bottle brush. Once every week or two, disinfect it with a 1:9 bleach/water solution and let it dry before you refill (no need to wash the bleach solution away -- it's the same one restaurant use on the glasses we drink from). Most experts recommend you avoid using soap, however, when cleaning feeders.

It's also worth mentioning, for new hummingbird enthusiasts, that the golden ratio for nectar is always one part plain white table sugar to four parts water. No need to buy fancy nectar mixes, and there is certainly no reason to add red coloring. I bring the nectar to a covered boil on the stove, let it cool, and store the extra in the fridge. No substitutions for the table sugar, please; it closely matches the natural sugars in flower nectar, and the birds get all the other nutrients they need from the copious numbers of invertebrates they also eat. Do not use honey ... or artificial sweeteners.

FEEDING BEHAVIORS:

As you spend time watching the feeding activity of hummers, you will see they are busy, averaging 15 rounds per hour. But at times the bird seems to be "resting, doing nothing". Research has shown that though nectar passes through the digestive system rather quickly, in less than an hour 97% of sugars are extracted. There is an activity pause, waiting until their crop is half empty before foraging again, thus maintaining a near-full capacity. The bird is preserving energy. They are not just sitting around.

Hummers vocalize, but like many other birds, have found other ways of generating signals with rattling and buzzing sounds. In fact, the name "hummingbird" was acquired from early English colonists who knew only the Ruby-throated with its buzzing flight. By alternating the spacing of wing or tail feathers, causing them to vibrate as air passes through, the hummer produces these acoustical sounds.

AS SUMMER PROGRESSES:

Through the summer, population dynamics change: when fewer nesting-interested females are present, seasoned males in mid-July begin their return migration. Late July and early August sees swelling numbers of "females", but many are young males with plumage development in progress. August birds are not necessarily your May/June residents but birds migrating through. Because it's usually not possible to count birds, some researchers multiply visible feeder individuals by 3 to 5 times in estimating peak season numbers.

THE SEASON IS NOT OVER IN SEPTEMBER!

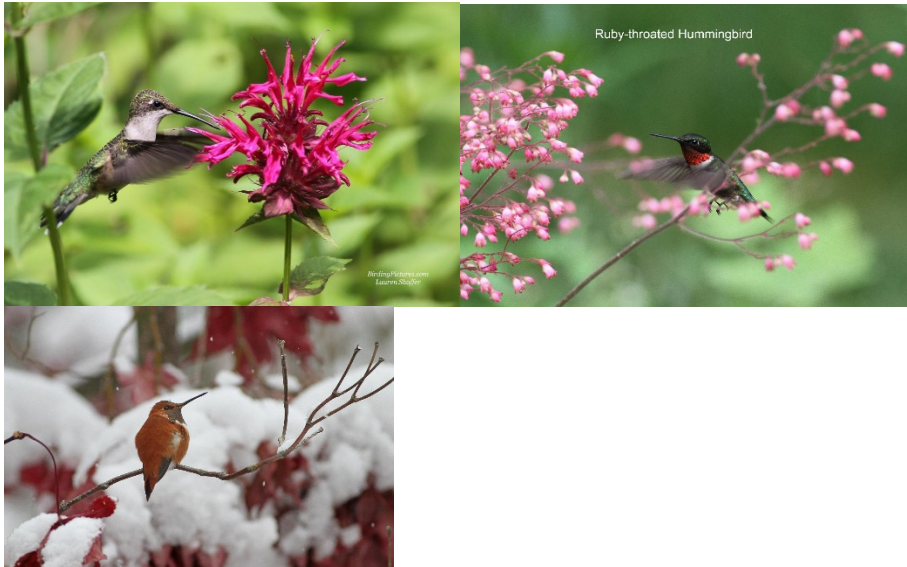
By the third week in September, Rubys seem to evaporate. This may seem strange, especially after witnessing the chaotic flying gyrations just weeks before. You will see a few ruby-throat stragglers but keep those feeders up. A myth: your feeders will not keep birds from migrating.

Keep vigilant, a new phenomenon may unfold for you. Here is the testimony of Dave Ferry of Williamsport, a former president of our Lycoming Audubon, sharing an observation of a late season Rufus hummer, a genus *Selasphorus* equivalent of the Ruby-Throated:

*The Rufous Hummingbird has lasted past Thanksgiving holiday and is still actively feeding at my home. The bird appears to have molted into a nice rufous body plumage and there is no longer mistaking this bird for a ruby-throat. Some of you may recall, before banding, that we weren't sure if it was a *Selasphorus* hummingbird because the rufous color was not obvious. Now it is. As Scott Weidensaul and others have noted, these birds are incredibly cold tolerant and hardier than one might expect from a tiny "neo-tropical" migrant. To date, I've watched the bird feed in 17-degree temps, driving snow, and 30-50 MPH wind gusts. The forecast for the week ahead should make hummingbird watching even more interesting. I'm kind of hoping we get a foot of snow, just so I can observe the bird out my kitchen window with drifting snow in the background.*

These winter hummers may drift east in late summer into the Northeast, then as cold weather comes on, they hopscotch down into the mid-Atlantic and finally into the Southeast and Gulf states for the winter period before heading back to the Rockies or Pacific Northwest to breed.

So, why are we so mesmerized? Perhaps, as one seasoned birder suggested, "We are nature, looking at nature." As humans, when we stop and allow creation to come close, our sense of superiority diminishes and a deeper level of humility opens our hearts and minds to remind us of the idea of mutuality. We are all in this together!



Photos by Lauren Shaffer