

## Ruby-throated Hummingbird *Archilochus colubris*



**Folk Name:** Hominy-bird, Whizzer

**Status:** Breeder

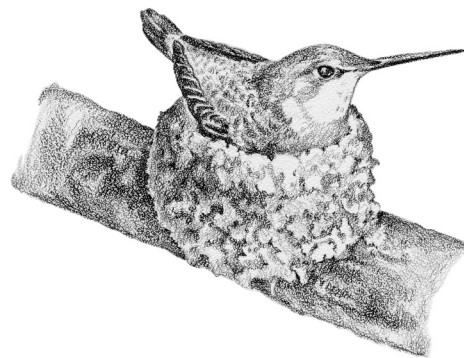
**Abundance:** Fairly Common

**Habitat:** Woodlands and residential areas with tubular flowers, hummingbird feeder stations

The Ruby-throated Hummingbird is one of our “neotropical” migrants, a bird that nests here during the spring and summer, but migrates to the Neotropics, far to our south, each winter. This species primarily overwinters in Mexico and Central America. Scientists are beginning to get a better picture of the migratory exploits of this amazing long-distance traveler, but much of their journey is still a mystery. Weighing less than 1 ounce, these fearless birds return across the Gulf of Mexico each spring to reach our southern shores. There, they rest, before continuing their trek northward.

Several websites now use citizen science data to track and map this migration online. Hummingbird enthusiasts record the dates of the first arrival of Ruby-throated Hummingbirds at their location each spring, as the birds spread north to their breeding sites in the United States and Canada. Male hummingbirds arrive first and establish breeding territories. The females arrive about a week later, mates are quickly selected, and the nesting season begins.

As might be expected, there is a great deal of history associated with this beloved hummingbird here in the Central Carolinas. During the late 1800s, R.B. McLaughlin and Leverett Loomis studied the Ruby-throated Hummingbird and conducted scientific collecting of their nests and eggs in Iredell and Chester counties, respectively. Both recorded this hummer as a common summer breeding resident. At least 10 of McLaughlin’s nest and egg sets, collected between 1887



and 1893, are still available for examination today. They are stored in collections at the Smithsonian Institution and at the California Academy of Sciences.

On April 23, 1928, William McIlwaine visited Latta Park in downtown Charlotte and wrote: “The little hummingbirds are [back] with us. How they travelled the road to Central America and back again, just on those flimsy, gauzy wings—this is one of the mysteries. But they are enjoying themselves today sipping the honey from the paulownia blossoms.” Both McIlwaine and Charlie Sellers recorded hummingbird migration dates for several years as part of the U.S. Department of Agriculture’s Bureau of Biological Survey migration card program. Their earliest recorded arrival date was 18 April (1939), active nest date was 12 May (1930), and their latest departure date was 4 October (1929). Sellers described the Ruby-throat as being a “plentiful” breeder in Charlotte.

Elizabeth Clarkson loved to watch the Ruby-throated Hummingbirds she hosted each year in her garden at Wing Haven. In May 1943, she shared this account of an early male arriving from its long journey:



*Hummingbird nestlings. (Phil Fowler)*



*Adult male Ruby-throated Hummingbird. (Will Stuart)*

The tame Ruby-throated Hummingbirds which eat out of my hand come immediately to the terrace when they return, for the feeders are on the backs of the chairs. For my garden the males return from the 12th to the 16th of April, and the females from the 14th to the 18th, but this year I was in the garden on the 9th and a male hummingbird came to me and fluttered a few feet in front of me and lit on a twig close by. I ran in the house and got his feeder and put it on the back of a terrace chair and he hardly waited for me to get my hands off it before drinking. Then we had some very cold weather, frosty at night, and damp, chilly days, and he sat, fluffed out over my terrace for days alone. Not another male came for about six days and the continued cold kept my garden “female-less” until the 24th, the latest they have ever been. Only two pairs came to the feeders at first, but now there are ten.

Despite all of the hummingbird activity in her garden that year, Clarkson noted she was not able to find any of their nests. Clarkson’s earliest recorded arrival dates were April 1, 1949, and April 5, 1954, and she noted her latest departure date as 8 October in 1962.

Some variance in annual arrival (mean first appearance) and departure dates can be expected due to differences in weather conditions from year to year. However, recent data indicate the average arrival date of the Ruby-throated Hummingbird in the region has changed over the past 85 years. In fact, our hummingbirds appear to be both arriving earlier and leaving later. Today, the arrival of the first male hummingbirds here is often as early as the third week of March. An examination of Ruby-throat migration map data for the past 10 years indicates the average reported arrival of the first hummingbirds in the region is now about 23 March. Adult males usually begin to depart in late July and have generally moved through by the first or second week of September. Adult females and young birds now often linger as late as the end of October or early November.

Where do our hummingbirds go? An immature male banded at Riverbend Park in Catawba County on September 30, 2008, was recaptured 12 days later in Rockport, Texas, about 1,100 miles away. After it was released, it may have followed the coast line into Mexico or it may have turned and headed due south across the Gulf.

Like our vagrant western hummingbirds (described in detail below), changes have also been noted in the wintering behavior of Ruby-throated Hummingbirds over the past 30 years. This species has begun to overwinter in small numbers each year along the coast of the Carolinas and now there are a number of records of Ruby-throated Hummingbirds staying late or overwintering in the Carolina Piedmont. *Archilochus* type hummingbirds have been sighted during winter many times in the Central Carolinas since the late 1990s. However, in most cases observers were unable to confirm which *Archilochus* species was seen. Fortunately, there are now banding confirmations of at least six Ruby-throated Hummingbirds wintering in the region.

In 1999, Susan Campbell, a Research Associate with the North Carolina State Museum, captured, banded, and released a “hatch year” male Ruby-throated Hummingbird on 12 December near Quail Hollow in Charlotte. The bird remained until at least February 16, 2000. It was the first Ruby-throated Hummingbird ever counted on the annual Charlotte Christmas Bird Count. Campbell banded another “hatch year” male near Harrisburg, NC, on January 29, 2003. Almost five years later, participants in the Charlotte Christmas Bird Count recorded a second Ruby-throated Hummingbird, this time a female, on the count held on December 27, 2014.

The Ruby-throated Hummingbird remains a fairly common nesting bird in the region. The fascinating details of the construction of its tiny cup nest have been lauded here for more than a century. A note published in a local paper in 1913 depicts the hummingbird’s nest as being “exquisitely dainty,” and their description of it mirrors exactly the nest that birders find and photograph here today:

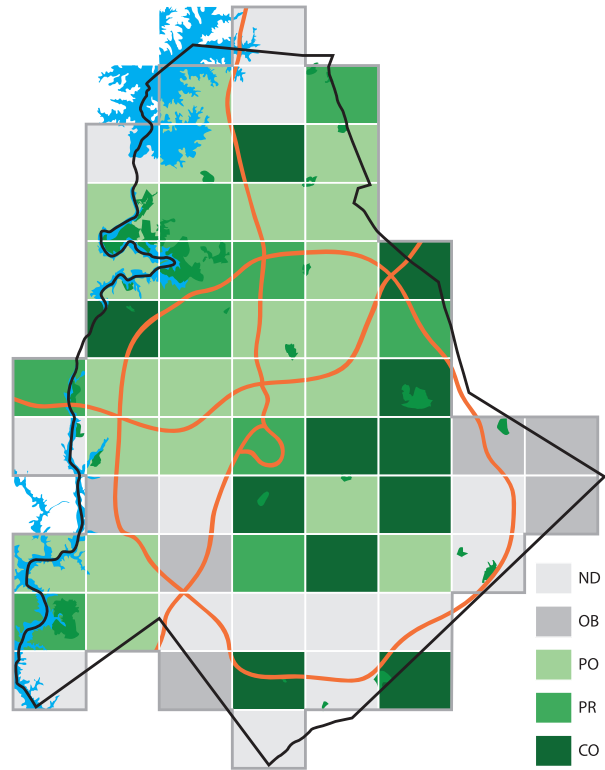
## Spotlight on Local Research: Hummingbirds and Ozone

The Mecklenburg County Conservation Science Office was selected as a field station site in 2003 and 2004 for a multi-disciplinary federal research project on air pollution and hummingbirds, sponsored by the U.S. Environmental Protection Agency. Staff participated in the study by managing and monitoring hummingbird feeding stations. Each station was equipped

with infra-red sensors and data loggers which documented the frequency of feeding activity and correlated changes in the frequency of feeding with changes in local ground-level ozone levels. Higher ground level ozone readings appeared to reduce the frequency of hummingbird feeding. Results of the study were used in several published air pollution studies and were also published in a summary by the EPA in 2006.

When completed it is scarcely larger than an English walnut and is usually saddled on a small horizontal limb of a tree or shrub frequently many feet from the ground. It is composed entirely of soft plant fibers, fragments of spiders' webs sometimes being used to hold them in shape. The sides are thickly studded with bits of lichen, and practiced indeed is the eye of the man who can distinguish it from a knot on the limb.

Where does the Ruby-throated Hummingbird build its nest? A few examples of nest locations found in Mecklenburg County are listed below. One nest was built on a branch of a river birch tree 20 feet directly above a busy paved driveway in a forested residential neighborhood. The nest was built during the first week of May and was later collected. Another nest was built on the branch of another river birch tree growing on the edge of Sedgefield Park. This female was observed incubating on 13 May. A third nest was built on top of a grapevine sticking out of a bird feeder on a home's front porch. This unusual location was still successful. The first egg was laid 14 May, hatched 23 May, and the baby fledged 14 June. A second egg was laid 15 May, hatched 24 May, and the baby bird fledged 15 June. The final nest was found about 20 feet up on a horizontal branch of a red maple tree deep in the forest at Cowan's Ford Wildlife Refuge. This nest was active on 28 June and probably represents a second brood. Each of these nests was within 50 yards of a stream or pond.



**Mecklenburg County Breeding Bird Atlas:**

*Fairly Widespread (PR/10, CO/11)*