An Extraordinary Occurrence of a Female Ruby-throated Hummingbird With a 50-mm Appendage of Nesting Material Attached to Her Leg

On 18 Jul 2011, I (RJP) received an email from Elizabeth Brooks, Braddock Bay Bird Observatory, describing a Ruby-throated Hummingbird (Archilochus colubris) observed with a long appendage of foreign matter attached to its right foot (see Fig. 1) coming to a feeder at the residence of Kate Jackson and Nate Bernardi in Bradford, Steuben County, New York, south of Keuka Lake. They had explained that the bird appeared to be having trouble negotiating access to their hummingbird feeder and were concerned for the welfare of the bird.

I travelled to Bradford on 23 Jul 2011 and within a half-hour of trapping effort captured the hummer at 14:20 using a Sargent trap (Russell and Russell 2001). The bird weighed 3.6 g with the attached appendage which I removed with small cuticle scissors, 3.4 g after removal. The material at the left side of the appendage (see Fig. 2.) was wrapped tightly around and between the toes of the right foot which was slightly swollen.

I aged and sexed the bird as after-hatching-year female; wing chord 44 mm and fat class 0 (on a scale of 0-3) with a well developed brood patch. I banded the bird on the left tarsus; and when released, it seemed physically strong and flew with no apparent problem. Two other hummers captured that day at that location were banded on the right tarsus.

Fig. 2 represents a photograph taken upon my return home. Upon close inspection, I could identify only lichen and some fibrous plant material, so I mailed it to R. P. Yunick for further analysis. On 25 Jul, I received an email from Kate Jackson informing me that they had observed a left-leg-banded female Ruby-throat using one of their feeders, still perching on its left leg. The right foot appeared slightly swollen when viewed through binoculars.

Photo by Kate Jackson 21 Jul 2011

Photo by R. Pantle
RPY noted the following observations using up to 3X magnification. The appendage measured 50.1 mm long, 9.3 mm wide near the left end, 11.8 mm wide at the right end and 6.9 mm thick near the middle and weighed 0.135g on an analytical balance. At the right end there was the distinct elliptical shape of the lining of a nest which measured 11.8 mm outside diameter perpendicular to the long axis of the appendage and 15.7 mm outside diameter along the axis of the appendage. When viewed from above, the thickness of the nest lining varied from 2.7 to 3.2 mm; and consisted of thin, dark fibrous material suggesting tiny rootlets.

Attached to this lining were three pieces of lichen and one body feather, possibly a breast feather of the hummingbird. The fluffy, lightly buff-colored fibrous material (32.2 mm in length) attached to the left of the apparent nest lining appeared to consist of spider silk and possibly other matter. Sargent (1999) illustrates a nest (p. 4) made of this same outer buff-colored material; and on p. 49 illustrates a nest containing a U.S. 25-cent piece. Using the diameter of a 25-cent piece as a reference (24.2 mm), the illustrated nest has an outside diameter of 45.9 mm. Sargent (1999) states an outside diameter of 1.5-2.0 in (38-50 mm) while Robinson et al. (1996) give nest dimensions of 45-50 mm outside diameter of base, inside diameter of 28 mm and nest wall thickness of 10 mm.

The dimensions and the nature of the material in this appendage are consistent with a nest of a Ruby-throated Hummingbird. Apparently the bird somehow entangled its right foot in the outer material of its nest and tore the nest from its mounting. How long it carried this attached material in flight is not known, but long enough to cause irritation to the right foot. The date of notification that the bird was at the feeder, 19 Jul, is shortly after the first recorded date of fledging of young, 12 Jul, in New York state (Bull 1974).

Colwell (2011) addresses the occurrence of spider silk sometimes accumulating on the tarsus under a band on female Anna's Hummingbirds (Calypte anna), thus causing irritation and swelling. Entanglement of this silk may be due to the females' practice of tamping down the nest material with their feet during nest construction. The instance reported here of a female Ruby-throat carrying almost an entire nest entangled on her foot appears to be a first occurrence. The appendage specimen has been deposited in the egg and nest collection curated by Prof. William Cook at Columbia-Greene Community College, Hudson, NY as CGCC 1372.

Acknowledgement

Thanks to Elizabeth Brooks for calling my attention to this hummingbird and to Kate Jackson and Nate Bernardi for allowing capture and banding of this bird at their residence.

Literature Cited


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