

Ruby-throated Hummingbird Banded in Gunnison County, CO

1998-82

ACCEPTED (6-1)

On 1 October 1998, Ruth O. Russell banded a subadult male Ruby-throated Hummingbird about 7.5 miles south of CO 149 on county road 27, near Powderhorn. The lat/long is N 38° 12.425', W 107° 03.959'; the elevation is approximately 8450'. The site is on Cebolla Creek. Mixed conifers dominate the hillsides and the flood plain of the stream includes hay fields and patches of narrow-leaved cottonwoods. In summer as the opportunity has been available, hummingbirds have been banded. This 26 September upon arrival at the cabin, we placed three sugar-water feeders in locations where they have been regularly situated. No feeders had been present since August 1. Cebolla Creek has few residents and we are unaware of any other currently filled feeders.

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Gunnison County

No hummingbirds were seen at the feeders (or in the area) until 30 September, when one appeared in late afternoon. On the morning of 1 October, the bird was captured and banded with Fish and Wildlife Service band number T73273 by Ruth O. Russell (Federal Banding Permit No 21896, Colorado Permit No. 98-BD796). Ruth Russell's experience with hummingbirds involves the banding of several thousand hummingbirds, including thousands of Black-chinned Hummingbirds and other western species. She has observed the banding of Ruby-throated Hummingbirds at eastern localities.

No camera was available but careful notes were taken on the bird and the single metallic-iridescent gorget feather and the terminal few millimeters of primary #6 were saved (sent to Dr. Van Remsen at LSU). These feathers and the measurements and observations made are considered diagnostic. References available and used while the bird was in hand include Pyle (1998) and Baltosser (1987). The bird was examined by Ruth O. Russell and Stephen M. Russell and released after banding.

Features:

wing 43 mm (= wing chord)
tail 25 mm
exp. culmen 15.7 mm
weight 3.4 g (fat score of 1 on scale of 0 to 3)
rectrix 5 = 4.8 mm at widest; terminal 5 mm white
" 4 = 5.7 mm " " 4 mm "
" 3 = 5.9 mm " " 2 mm "
" 2 = 7.8 mm " no white in tip
" 1 = 7.8 mm " "
rectrix 1 was 3.5 mm shorter than rectrix 5

The bill had many fine striations indicative of a hatching year bird. The extent of the striations was estimated to be about 40% of the maximum extent of striations in a very young *Archilochus*. The superficial appearance of the bird was much like that of any small subadult hummingbird in juvenal plumage: whitish below and green above, with a white-tipped tail. There was a tinge of buffy on the sides, discernable only in the hand-held bird. There was no rufous in the tail. There was no molt and feathers were unworn. The presence of a small amount of fat suggested the bird was in a good physiological condition.

Identification. The bill striations indicated the bird was hatched in 1998. Its small size eliminated all of the "large" hummingbirds (*Cynanthus*, *Hylocharis*, *Amazilia*, *Lampornis*, *Eugenes*, *Calothorax*, etc.). Possibilities considered included the genera *Archilochus*, *Calypte*, *Stellula*, and *Selasphorus*.

The rectrices were not spatulate in shape, eliminating *Stellula*.

Primaries 1-6 were narrower than primaries 7-10 (See Fig. 2H and 2I in Baltosser and Fig. 100 in Pyle), a character of the genus *Archilochus* and not of *Calypte* and *Selasphorus*. Further, the measurements of wing, tail, exposed culmen, tail fork and absence of rufous in tail (in combination) excluded the three species of *Selasphorus*. The wing length and width of rectrix 5 were less than those of *Calypte anna* (and other measurements were marginally less). The extent of the tail fork and the width of rectrix 5 also indicated the bird was not *Calypte costae*.

Archilochus colubris vs *A. alexandri*.

The shape of the outer primary (=P10) is characteristic of *Archilochus*. P10 shape in this bird was somewhat similar to "A" in Fig. 97 of Pyle, but much more curved and thus more similar to "B" in Fig. 2J of Baltosser (= *A. colubris*). The measurement of the maximum width of the inner web of P10 (as described by Baltosser) = 2.2 mm, which is within the range for *A. colubris* and less than the minimum 2.5 mm in *A. alexandri*.

Primary 6 (P6) is highly diagnostic and the terminal few millimeters were saved. In *A. colubris*, the outer web of P6 is practically absent in the subadult males (see Baltosser Fig. 2G; Pyle Fig. 101); in the subadult female *A. colubris* and in both sexes of subadult *A. alexandri* there is a relatively wide outer web. Further, the shape of the tip of P6 is diagnostic of the subadult *A. colubris* male (Baltosser Fig. 2G; Pyle Fig. 101). In the banded bird, P6 matches the characters of the subadult male *A. colubris*.

Although not diagnostic in itself, the head and back of the banded bird were an intense metallic green (though tinged buffy, a characteristic of young birds), characteristic of *A. colubris* and not of *A. alexandri*. The iridescent color of the only metallic gorget feather is orange-red, unlike any gorget feathers in *A. alexandri*. The one metallic gorget feather and the tip of P6 are to be deposited in the Louisiana State University Museum of Natural Sciences.

References:

- Baltosser, W. H. 1987. Age, species, and sex determination of four North American hummingbirds. *N. American Bird Bander* 12:151-166.
Pyle, P. 1997. Identification guide to North American birds. Part I. Slate Creek Press. Bolinas, California.

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