First record of Allen's Hummingbird east of Louisiana

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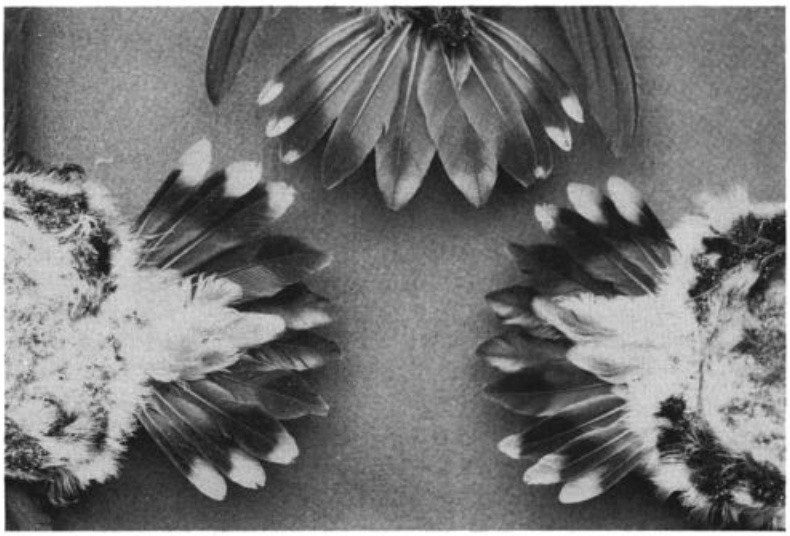
Sub-adult male Allen's Hummingbird (Selasphorus sasin) *on Nantucket Island, Massachusetts. First state record, and first record east of Louisiana. Photograph/Alan Bennett.*

On August 26, 1988, a Selasphorus hummingbird was captured in a mist net at the Nantucket Bird Banding Station on Nantucket Island, Massachusetts. The plumage was striking in that the crown and back were a metallic green, a portion of the gorget a fiery-orange, the breast white, and the sides and tail rufous. When field guides were consulted it was discovered that under field conditions it is virtually impossible to separate Allen's Hummingbird (*Selasphorus sasin*) from the Rufous Hummingbird (*S. rufus*), particularly females and immatures. The bird was given sugar water and photographed, and its wing chord was measured. Then, without warning, the bird died in the hand. It was now possible to have it preserved as a study skin (MCZ 332830) in the Museum of Comparative Zoology at Harvard. When skinned it was found to be in poor condition with relatively little fat. Dissection showed the specimen to be an immature male.

Using dial calipers and a key to identification by Stiles (1972) as a guide, the following measurements were recorded: exposed culmen, 16.5 mm; wing chord, 39.5 mm; tail length 24.7 mm; width of rectrix 1, 8.1 mm; and width of rectrix 5, 2.0 mm. From these measurements the wing chord and the width of rectrix 5 indicated Allen's, as did the lack of emargination at the tip of rectrix 2. The other three measurements were nonetheless in the range of overlap between Rufous and Allen's. Rectrix 1 as initially measured is just within the range given by Stiles (1972) for an immature male Allen's. In preparing the specimen, however, the tail was spread and held with a weight to set it in an open position. In doing so the natural curl of the feathers may have been destroyed, particularly of the middle rectrices.

The specimen was subsequently sent to W. H. Baltosser at the Museum of Southwestern Biology, University of New Mexico, where the tentative identification of Allen's Hummingbird was confirmed and a determination to subspecies made (*S. s. sasin*). The specimen was measured again, with minor differences from initial measurements being noted in the bill, 16.15 mm; width of rectrix 1, 8.45 mm; and width of rectrix 5, 1.95 mm. The pattern and coloration of the central rectrix (1) and the shape of rectrix 2 at its tip, in conjunction with the chin pattern and the very slight trace of bill corrugations (see Ortiz-Crespo 1975 and Baltosser 1987), all indicate that the bird is a subadult male. The single measurement that is not typical of either race of Allen's is that of the maximum width of rectrix 1, which is herein attributed to the weighting of



Comparison of underside of spread tails of sub-adult male Rufous (lower two) and Allen's hummingbirds. Photograph/W.H. Baltosser.

the tail during specimen preparation. The fact that only the Rufous Hummingbird is shown by Stiles (1972) to have a width in excess of 8.2 mm for this feather is not particularly bothersome, given that all other traits exhibited by this specimen are well within the range of Allen's Hummingbird. Because measurements such as the maximum width of rectrix 5 (perhaps the most diagnostic character) are not intermediate, there is little evidence to suggest that the bird is of hybrid origin.

Designation to subspecies was based primarily on two factors. The first is the fact that the wing chord is less than 40 mm, which according to Stiles (1972), rules out the Rufous Hummingbird and all but eliminates the nonmigratory race of Allen's, *S. s. sedentarius*. The second factor that enabled a subspecies determination to be made was the virtual absence of bill corrugations. The lack of bill corrugations indicates that the bill of this bird had in essence achieved 99% of its adult length. The bill length of the specimen at full maturity would therefore not have been appreciably different and would have been much less than 17 mm, which rules out *sedentarius* and makes the Massachusetts specimen *sasin*.

The range of Allen's Hummingbird has been summarized by Phillips (1975), but the migratory subspecies is known to winter in areas as far south as central Mexico. Within the United States, however, the species is basically confined to California. The occurrence of an Allen's Hummingbird in Massachusetts, so far to the east of its known range, is therefore amazing. To our knowledge, the only other confirmed records east of California have been in Arizona (Phillips 1975, Monson and Phillips 1981) and Louisiana (Newfield 1983). A published record for Texas (Beavers 1977) has been questioned by Newfield (1983). Whether the species is more common to the east than presently thought remains unknown, but as Conway and Drennan (1979) noted, one cannot automatically assume that all hummingbirds with rusty plumage east of the Mississippi River are Rufous Hummingbirds, although this species is still more likely than Allen's.

The occurrence of an Allen's Hummingbird in Massachusetts should serve as an added caution and example of the subtleties involved in hummingbird identification, particularly under field conditions, and the need for inspection in the hand. Perhaps with more people banding and therefore having the opportunity to inspect birds in the hand, more will become known of the distribution of this and other hummingbirds. This will be particularly true if one or two diagnostic rectrices are plucked and preserved before questionable birds are released.

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