experimentelle Untersuchung an Enten. Psychol. Forsch. 28:439–463.

- SIMMONS, K. E. L., & U. WEIDMANN. 1973. Directional bias as a component of social behaviour with special reference to the Mallard Anas platyrhynchos. J. Zool. London 170: 49-62.
- STANDEN, P. J. 1976. The social behaviour of the Chilean Teal. Ph.D. dissertation, United Kingdom, Univ. Leicester.

—. 1980. The social display of the Chilean Teal Anas flavirostris flavirostris. J. Zool. London 191: 293-313.

VEEN, J. 1985. On the functional significance of long call components in the Little Gull. Netherlands J. Zool. 35:63–86.

- VON DE WALL, W. 1963. Bewegungsstudien an Anatinen. J. Ornithol. 104: 1-15.
- -----. 1965. "Gesellschaftsspiel" und Balz der Anatini. J. Ornithol. 106: 65-80.
- WEIDMANN, U., & J. DARLEY. 1971. The role of the female in the social display of Mallards. Anim. Behav. 19: 287-298.
- WILEY, R. H. 1975. Multidimensional variation in an avian display: implications for social communication. Science 190: 482-483.
- WISHART, R. A. 1983. The behavioral ecology of the American Wigeon (*Anas americana*) over its annual cycle. Ph.D. dissertation, Univ. Manitoba.

Received 16 December 1988, accepted 26 July 1989.

Taxonomic Status of the Coquette Hummingbird of Guerrero, Mexico

RICHARD C. BANKS

Biological Survey Group, NERC, U.S. Fish and Wildlife Service, National Museum of Natural History, Washington, D.C. 20560 USA

An isolated population of small hummingbirds in the state of Guerrero, Mexico, was originally named as a subspecies (*brachylopha*) of the much more southerly *Lophornis delattrei*, the Rufous-crested Coquette (Moore 1949). The form was not reported again until rediscovered by Ornelas (1987) and remains known by only three male and two female specimens. Examination of two of the males indicates that the population deserves specific status as *Lophornis brachylopha* Moore, for which I propose the English name Shortcrested Coquette.

Moore (1949) based his description of brachylopha on two male specimens from San Vicente de Benitez, altitude 1,500 ft (450 m) in the Sierra Madre del Sur approximately 70 km northwest of Acapulco, Guerrero. This was an extension of the range of the species delattrei, and of the genus Lophornis as then constituted, of ca. 1,900 km north from central Costa Rica. The subspecies was accepted by Friedmann, Griscom, and Moore (1950), and the species was included in subsequent guides to Mexican birds (Blake 1953, Davis 1972, Edwards 1972, Peterson and Chalif 1973). The descriptions in most of these guides, however, were apparently based on other populations of the species, as they largely ignored the distinctive characters ascribed to brachylopha by Moore (1949). This is especially true of the descriptions of the then unknown female! The Mexican range of the species was also noted by Eisenmann (1955), and the distinction of the form was affirmed by Hardy and Webber (1975). Despite this, the American Ornithologists' Union (1983) omitted any part of Mexico from the range of the species—presumably a lapse rather than a denial of Moore's description.

After Moore's (1949) description of brachylopha,

nothing of significance was added to our knowledge of it until Ornelas (1987) collected three additional specimens, one male and two females, in 1986. These specimens were taken in mist nets in evergreen subtropical forest at Arroyo Grande, 13 km northeast of Paraiso, Guerrero, at an elevation of 1,350 meters. Paraiso is in south-central Guerrero, northwest of Acapulco and near Atoyac de Alvarez, and thus ca. 10 km northeast of the type locality (J. F. Ornelas in litt.).

Shortly after the reported rediscovery of brachylopha, I studied Moore's (1949) description of the taxon relative to specimens of Lophornis delattrei delattrei and L. d. lessoni in the National Museum of Natural History (USNM). It was readily apparent that the birds described were different-so different, in fact, that I wondered if they were actually the same species. It struck me that the stated differences were much like those one would record if specimens of Lophornis ornata of northeastern South America were compared with delattrei. Subsequently, I examined two of the three male specimens of brachylopha (MLZ 46069, UNAM P007047) and compared one or both of them with specimens of all species in the genus in the USNM, the American Museum of Natural History, and the Museum of Comparative Zoology. The diagnostic characters of males of L. brachylopha, emphasized by Hardy and Webber (1975), are the short crest, black bill, terminal tail pattern, and pale abdomen. Neither of the females was available for study, but Ornelas (1987) noted that they have the "throat completely white," which distinguishes them from L. delattrei.

The rufous crest feathers of *brachylopha* are wide and short (ca. 1 cm). The feathers on these two specimens are very worn, but on some of them a broad green patch (visible under magnification) remains near the end. They differ from the crest feathers of delattrei, which are very narrow and longer (to 2 cm), with smaller green spangles at the tips only. In brachylopha as in the short-crested (1.2 cm) magnifica, the small amount of green is dispersed along the barbules at the feather tips rather than being coalesced into an ocellus as in delattrei and stictolopha. On some specimens of *delattrei*, the green spot at the tip remains even though the sides of the crest feathers are worn nearly away. Hardy and Webber (1975) believed that the short crest of brachylopha was "entirely a result of wear." There is, however, no indication from available specimens of *delattrei* (or any other long-crested species) that wear could affect the length of the crest by that extent, and the remnant green at the tips of the brachylopha feathers indicates that they were short even before wear had an effect.

The black bill of *L. brachylopha* seems to be unique within the genus *Lophornis* (including *Paphosia*), in which the bill is generally pale (i.e. in specimens, but bright red in life) or pale with a dark tip. A few individuals of *L. ornata* have very dark bills, but the base, especially of the lower mandible, is paler. Bills of the closely related (probably congeneric) *Popelairia* and *Polemistria* are similarly dark. One juvenile male of *L. delattrei* (if properly identified; USNM 64127) has a black bill except for a slightly paler base. The bills of the two specimens of *brachylopha* lack corrugations, indicating that the birds are adult (Ortiz-Crespo 1972).

The pattern of the color at the tip of the tail of *brachylopha* differs from that of other members of the genus or closely related forms. As noted by Moore (1949) the rectrices are broadly tipped with black which extends proximally on the inner webs. Black is variably mixed with the rufous or green in the rectrices of other species, but in no other species does it form a broad terminal band (although females and young males may have a subterminal dark band).

Several members of the genus Lophornis (magnifica, ornata, gouldii, helenae, adorabilis, "Polemistria" chalybea and pavonina) have a tuft of elongated and elaborately decorated or modified feathers at the side of the neck. In stictolopha, delattrei and brachylopha, these decorations are inconspicuous, consisting only of slightly elongated rufous feathers with green tips. These three forms further agree in having a few narrow white feathers protruding below the lower edge of the green throat patch.

The throat of the female of *L. brachylopha* is, according to Ornelas (1987), completely white. A white throat in females occurs elsewhere in the genus only in *L. helenae*, but even in that species the throat usually shows spotting as a result of colored feather tips, a condition seen also in *L. adorabilis*. The throat is more heavily spotted in the other species, in which the background color varies from white to gray. Too few certainly sexed females of any species are available

for extensive comparison of that sex or for differentiation of them from young males.

Measurements provided by Ornelas (1987) show that brachylopha has a longer wing, tail, and culmen than L. d. lessoni of Panama. In these characters, brachylopha approximates the South American L. d. delattrei.

Summary.—Diagnostic differences in crest length, bill color, and tail pattern of males and in throat color of females are sufficient to separate Lophornis brachylopha from other species of the genus. In the nearly complete lack of adornment on the crown and throat, brachylopha is the plainest member of the genus and it may be an isolated remnant of the original stock.

I thank John C. Hafner of the Moore Laboratory of Zoology (MLZ) and Gonzalo Gaviño of the Instituto de Biología, Universidad Nacional Autonoma de México (UNAM) for the loan of specimens, Patricia Escalante for transporting the UNAM specimen to the United States, and curators at the American Museum of Natural History and the Museum of Comparative Zoology for allowing me access to those collections. M. Ralph Browning, Gary R. Graves, and Richard L. Zusi read and commented on the manuscript. Steven N. G. Howell and J. F. Ornelas provided information about the locality Arroyo Grande.

LITERATURE CITED

- AMERICAN ORNITHOLOGISTS' UNION. 1983. Check-list of North American birds, 6th ed. Washington, D.C., Am. Ornithol. Union.
- BLAKE, E. R. 1953. Birds of Mexico. Chicago, Univ. Chicago Press.
- DAVIS, L. I. 1972. A field guide to the birds of Mexico and Central America. Austin, Univ. Texas Press.
- EDWARDS, E. P. 1972. A field guide to the birds of Mexico. Sweet Briar, Virginia, published by the author.
- EISENMANN, E. 1955. The species of Middle American birds. Trans. Linnaean Soc. New York 5: 1– 128.
- FRIEDMANN, H., L. GRISCOM, & R. T. MOORE. 1950. Distributional check-list of the birds of Mexico, part 1. Pacific Coast Avifauna 29.
- HARDY, J. W., & T. WEBBER. 1975. A critical list of type specimens of birds in the Moore Laboratory of Zoology at Occidental College. Contrib. Sci., Nat. Hist. Mus. Los Angeles County, 273.
- MOORE, R. T. 1949. A new hummingbird of the genus Lophornis from southern Mexico. Proc. Biol. Soc. Washington 62: 103–104.
- ORNELAS, J. F. 1987. Rediscovery of the Rufous-crested Coquette (*Lophornis delattrei brachylopha*) in Guerrero, Mexico. Wilson Bull. 99: 719–721.
- ORTIZ-CRESPO, F. I. 1972. A new method to separate immature and adult hummingbirds. Auk 89: 851– 857.
- PETERSON, R. T., & E. L. CHALIF. 1973. A field guide to Mexican birds. Boston, Houghton Mifflin Co.
- Received 20 January 1989, accepted 2 August 1989.