# REVISION OF THE COLLARED GNATWREN, MICROBATES COLLARIS (AVES: PASSERIFORMES)

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Abstract.—Microbates collaris, a small passeriform bird of uncertain affinities, has a highly disjunct range in northern South America. Three subspecies are recognized in current literature. Two more are described, from Colombia and the Guianas; a name for the latter is already available.

The gnaturens, of which two species (collaris, cinereiventris) are placed in the genus Microbates and one, the longer-billed, longer-tailed melanurus, in the genus Ramphocaenus, are of uncertain affinities within the Passeriformes. The history of their classification was reviewed by Rand and Traylor (1953). Their relationships are currently thought to be with the Old World warblers, which are variously given their own family, Sylviidae, or considered members of a large family Muscicapidae which includes all the socalled "Old World insect-eaters." The only other sylviid-like birds in the Neotropics are the gnatcatchers, Polioptila, and the gnatwrens are now uniformly placed next to Polioptila. Paynter (1964) gave these three genera their own subfamily, Polioptilinae, within the enlarged Muscicapidae, thus giving them equal rank with the Old World warblers (Sylviinae). At the same time he admitted in a footnote (p. 443) that "The three genera in this subfamily are presumably not closely related to one another, with the possible exception of Microbates and Ramphocaenus. Their proper taxonomic placement awaits further study." This is a highly conservative statement, as many authors believe that Microbates and Ramphocaenus are barely separable as genera.

The range of *Microbates collaris* appears to be composed of several disjunct populations, and it is probable that this is not entirely an artifact of insufficient collecting (although the species is not abundantly represented in museums). Paynter (1964) recognized three subspecies in the "Peters" Check-list. The species has not been critically studied since the description of *M. c. paraguensis* by Phelps and Phelps (1946). Material in any one museum is so limited that a full appreciation of variation in this species can be attained only by assembling specimens from several sources. The present study is based on the combined collections of Carnegie Museum of Natural History (CM) and the American Museum of Natural History (AMNH), supplemented by key specimens borrowed from the Field Museum of Natural History (FMNH) and the Los Angeles County Museum (LACM). I am

grateful to John W. Fitzpatrick and Ralph W. Schreiber, respectively, for permission to borrow specimens from the latter two museums, and to Wesley E. Lanyon for use of the facilities of the AMNH.

The adult *Microbates collaris* is a small (wing chord 48–53 mm), rather long-billed (exposed culmen 17–20 mm), short-tailed (25–31 mm), superficially wrenlike bird, as suggested by the name gnatwren. The crown, back, flanks, wings, and tail are brown, ranging from olivaceous to reddish, with the crown usually somewhat darker than the back. The throat and upper breast are white. A transverse black pectoral band borders the abdominal area, which is white with gray sides. There is a complex facial pattern. A white superciliary line, beginning at the lores, is bordered below by a black transocular line; the cheeks are white, bordered below by a black moustachial streak.

The characters that have been found to be useful in assessing geographic variation in *Microbates collaris* are as follows: (1) color of upperparts, including relative contrast between crown and back; (2) color of flanks; (3) degree to which pigmentation of sides invades abdominal area; (4) width of black pectoral band; (5) width of black postocular and moustachial streaks. There is no geographic variation in size, and the sexes are alike.

As illustrated by the fine series from French Guiana in CM, the juvenal plumage of this species completely lacks the black pectoral band, white superciliary line, and black facial markings of the definitive plumage. The juvenal plumage is succeeded by a first basic plumage in which the dorsum is more rufescent than in the definitive plumage, and the remiges, wing coverts, and rectrices (retained from the juvenal plumage) have conspicuous rufescent edgings (subject to wearing away). The black pectoral band in the first basic plumage is often reduced in size, being confined in extreme individuals to a transversely elongated spot. As both dorsal color and the extent of the pectoral band are also geographically variable characters, it is obvious that series must be segregated by age before being compared. There is no evidence that either Hellmayr (in Cory and Hellmayr 1924:211, footnote) or Phelps and Phelps (1946:154) so segregated their specimens, which undoubtedly accounts for their finding that dorsal color was not completely correlated with distribution (to the extent that Hellmayr, who apparently examined only seven specimens, failed to recognize any subspecies). My study of a combined series of 58 specimens showed that two additional subspecies should be recognized, for one of which a name is already available. Characters and distribution of the five subspecies are as follows.

# Microbates collaris collaris (Pelzeln)

Rhamphocaenus collaris Pelzeln, 1868, Orn. Bras. 2:84, 157 [not seen]. Barra do Rio Negro, Maribitanas, and Rio Içanna, upper Rio Negro; restricted to Barra do Rio Negros (=Manáos) by Berlepsch (1908:156).

Characters.—Upperparts and flanks somewhat rufescent, with crown differing little or not at all from back. Gray of sides relatively limited in extent. Black moustachial stripe not connected posteriorly with postocular line. Pectoral band of medium extent for the species as a whole.

Range.—From the mouth of the Rio Negro, Brazil (Manáos) and the adjacent left (north) bank of the Rio Solimões (Manacapurú) northwest along the Rio Negro at least to Maribitanas; southwestern Amazonas, Venezuela, north to the vicinity of Cerro Duida.

Specimens examined.—BRAZIL: Manacapurú, Rio Solimões, 10 (CM); Rio Manacapurú, 1 (CM); Tatú, Rio Negro, 3 (AMNH); Yucali [Yucalu of Phelps and Phelps, 1946:154], Rio Negro, 1 (AMNH). VENEZUELA: Vicinity of Cerro Duida (various localities), 7 (AMNH); Solano, left (south) bank Río Cassiquiare, 1 (AMNH); El Merey, left (south) bank Río Cassiquiare, 1 (AMNH); Río Huaynia (=Guainia), right (east) bank at junction with Río Cassiquiare, 2 (AMNH).

# Microbates collaris perlatus Todd

Microbates collaris perlatus Todd, 1927, Proc. Biol. Soc. Washington 40:161. Tonantins, Rio Solimoës [sic], Brazil.

Characters.—Black pectoral collar widest in the species. Flank color little if any different from that of collaris, but sides grayer, impinging slightly more on the white of the median underparts. Moustachial stripe distinctly broader and tending to connect posteriorly with the black postocular line, thus restricting the white area of the ear coverts between these black lines. Upper parts darker and duller than in collaris, somewhat less rufescent, but difference not striking.

Range.—Known only from the type locality on the left (north) bank of the upper Rio Solimões, Brazil. Meyer de Schauensee (1951:926) postulated that "It is probable that birds from the lower Putumayo Valley and the Leticia territory [of Colombia] represent Microbates collaris perlatus Todd, described from Tonantins, on the left bank of the Amazon River near the mouth of the Putumayo." The wording suggests that this species has been collected in the area mentioned, but to the best of my knowledge it has not. There is a major gap in distributional records of this species in the western Amazonian region from Tonantins west to the foothills of the Eastern Andes of Colombia.

Specimens examined.—BRAZIL: Tonantins, Rio Solimões, 8 (CM), including the holotype.

# Microbates collaris paraguensis Phelps and Phelps

Microbates collaris paraguensis Phelps and Phelps [erroneously cited simply as "Phelps" by Paynter, 1964:444], 1946, Bol. Soc. Venezolana Cienc.

Nat., no. 65-66:153. Salto María Espuma (300 m), Caño Espuma, Alto Río Paragua, Bolívar, Venezuela.

Characters.—Described as having the crown and anterior upperparts more reddish brown, less olivaceous than in collaris. In the two specimens available, the crown was faintly more rufescent, but the color of the rest of the back could be matched by many specimens of collaris. The gray of the sides impinges on the white of mid-abdomen even more than in perlatus, but the flanks are much more rufescent, less olive-brown than in that race.

Range.—Known only from the upper Río Paragua, from Salto Guaiquinima up to Salto Maiza, southeastern Bolívar, Venezuela (see map in Phelps and Phelps, 1946:160).

Specimens examined.—VENEZUELA: Salto María Espuma, Alto Río Paragua, 300 m, 1 (AMNH), the holotype; Campamento Comején, Cerro Guaiquinima, 1 (AMNH).

## Microbates collaris torquatus Sclater and Salvin

Microbates torquatus Sclater and Salvin, 1873, Nomenclator avium neotropicalium: 72 (nomen nudum), 161 (description). St. George d'Oyapock, Cayenne [=French Guiana].

Characters.—Upperparts duller, less rufescent, more olivaceous brown than in any other subspecies. Crown and back approximately uniform. Flanks of a slightly more olivaceous brown than in *collaris*. Gray of sides restricted, not impinging on white abdomen as in other races. Black pectoral band broader than in *collaris*, with extreme individuals matching some *peraltus*. Black postocular line and moustachial streak also variable between extremes shown by *collaris* (narrow) and *perlatus* (broad).

Range.—Known from southern Surinam (Kaysergebergte Airstrip), French Guiana, and Amapá, northeasternmost Brazil. Two specimens from "Oyapoc" in the U.S. National Museum were erroneously attributed to "GUAYANA INGLESE" by Phelps and Phelps (1946); the specimens are from French Guiana, and the species has not been recorded in Guyana (formerly British Guiana). In view of the gap between the Surinam and French Guiana localities, it is quite possible, if not probable, that this subspecies occurs just south of the Guianas in the ornithologically little-known area of northern Pará, Brazil.

Remarks.—Sclater and Salvin (1873) described Microbates torquatus as a new genus and species in ignorance of Pelzeln's Rhamphocaenus collaris, described five years earlier. After learning of Pelzeln's name, Scalter (1883) synonymized torquatus with collaris solely on the basis of the written description of the latter, as the holotype of torquatus was still the only spec-

imen he had actually seen. The name torquatus has remained in synonymy since 1883. Berlepsch (1908:156) compared two French Guiana specimens with one of collaris from the Rio Içanna, and stated that the latter showed "perhaps a little more rusty suffusion on the upperparts." Hellmayr (in Cory and Hellmayr, 1924:211, footnote) compared two French Guiana specimens with one from Manáos and three from the upper Rio Negro. He found that the Manáos specimen matched those from French Guiana, whereas those from the upper Rio Negro were "decidedly more rufescent, less olivaceous above." Novaes (1978) listed four specimens from Amapá, the Brazilian territory adjacent to French Guiana, as M. c. collaris without comment, as did Blake (1963) in reporting the first specimens of this species from Surinam. As stated earlier, the failure to appreciate the distinctiveness of the Guianan birds can undoubtedly be explained in large part by the rufescence of specimens in first basic plumage. This plumage in torquatus approaches in dorsal and flank color the definitive plumage of collaris, but it is not quite as rusty and shows more contrast between the darker crown and the dull rufous-brown back. Another pitfall is museum age, as foxing tends to redden the brown colors of this species. Adults of torquatus collected in 1917 have flanks that are definitely more olivaceous than adults of collaris collected in 1923-29. However, French Guiana specimens taken in 1902 and 1903 (AMNH) have clearly foxed. They are more reddish above, and have flanks indistinguishable from those of the 1923-29 series of collaris. These two specimens, from Ipousin, Approuague River, may be the ones that Hellmayr (loc. cit.) found to match a topotype of collaris, suggesting that they may have begun to fox by 1924.

Of the two Surinam specimens seen (those reported by Blake, 1963), one (FMNH 260628) is in first basic plumage and is noticeably more rufescent on crown, dorsum, and flanks than the other (FMNH 260269), a female marked as having had an enlarged ovary. The second specimen is a good match for French Guiana adults.

Although Meyer de Schauensee (1966:418) includes Amapá, northeasternmost Brazil, in the range of this species, I have seen no published record to document his statement. Novaes (1978:42) listed 4 Amapá specimens in the Museu Goeldi, Belém, Pará. In addition to these, there are 5 (Serra do Navio, 4; Porto Platon, 1) in the United States National Museum (S. Olson, in litt.) and 1 from Serra do Navio in LACM. The latter specimen is the only Amapá specimen I have examined; it matches Guianan specimens of torquatus (as do also the USNM specimens, fide Olson).

Specimens examined.—FRENCH GUIANA: Pied Saut, Oyapock River, 10 (CM); Tamanoir, Mana River, 5 (CM); Ipousin, Approuague River, 2 (AMNH). SURINAM: Kaysergebergte Airstrip, 2 (FMNH). BRAZIL: Serra do Navio, Amapá, 1 (LACM).

## Microbates collaris colombianus, new subspecies

*Holotype*.—FMNH 287487, adult male, collected at San Antonio Guamuez, Putumayo, Colombia (400 m), 12 October 1969, by Kjell von Sneidern (original no. 27888).

Characters.—Gray of sides much more extensive than in any other subspecies, with only a small amount of white on midventral line. Flanks similar to those of torquatus. Crown rich dark chocolate brown, contrasting more with the dorsum than in any other subspecies. Dorsum between than of collaris and perlatus (duller and less rufescent than the former; slightly paler, more rufescent than the latter). Black of postocular and moustachial lines about as in torquatus. Pectoral band variable in size, but less extensive laterally than in adults of other subspecies, because the gray of the sides extends anteriorly to encroach on the lateral margins of the pectoral band.

Range.—Colombia, along the eastern foot of the Eastern Andes, in Putumayo and western Caquetá; may also occur in the upper Putumayo drainage in extreme northeastern Ecuador. In addition to the localities from which specimens have been examined, the species (and undoubtedly this subspecies) has been collected at Morelia and Cuembí (Meyer de Schauensee, 1951).

Specimens examined.—COLOMBIA: San Antonio Guamuez, Putumayo, 3 (FMNH); Florencia, Caquetá, 1 (AMNH). The latter specimen, collected in 1912, shows distinct foxing when compared to the 3 1969 FMNH specimens.

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