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NOTES ON THE RUFOUS GOATSUCKERS OF VENEZUELA

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Examination of specimens of Caprimulgus rufus in the Phelps Collection in Caracas has brought to attention a striking variation in the direction of large size in one individual that has led to a prolonged and careful study of available material with results of definite interest. The most recent review of the group is that of Griscom¹ who recognizes 4 subspecies, describing Caprimulgus rufus minimus as new (type from near Panamá City, Panamá), with a range extending from Panamá to Colombia and Venezuela. Griscom's treatment was accepted by Peters in volume 4 of the Check-list of the Birds of the World in 1940, and represents current understanding of the species. In the course of our work we have seen all of the skins available in Venezuela and in the United States of America, a total of more than 50 specimens. The following is a summary of our observations.

Caprimulgus otiosus (Bangs)

Antrostomus rufus otiosus Bangs, Proc. Biol. Soc. Washington, vol. 24, June 23, 1911, p. 188 (St. Lucia, British West Indies).

While earlier ornithologists, with scanty material, included the birds of St. Lucia with those ranging from Panamá to northern Argentina as one form, under the name Caprimulgus rufus, Bangs recognized that specimens from St. Lucia were decidedly larger than those of adjacent continental areas in Panamá, Colombia and Venezuela and separated them as a geographic race, a status that has remined without dispute until the present. In 1949 the Phelps Collection received a male taken by R. Urbano September 2, near Poseción El Aral, at 275 meters elevation on the Rio Socuy in the State of Zulia, Venezuela, (Phelps Collection no. 48, 712). This specimen initiated the present study, as it differed from the usual style of the bird under discussion in duller coloration, and also in size, though comparative measurements were difficult to obtain as it was renewing the outermost primaries in molt. We had considerable discussion of this skin, but were able to come to no conclusion regarding it. Presently, there appeared another in the collection of the Museo de Ciencias Naturales La Salle, in Caracas, taken December 10, 1948 at La Ciénaga, Baruta, Miranda, also a bird in partial molt. And a little later there came to this same collection from the same locality, a female (marked as having enlarged ova),

¹Bull. Mus. Comp. Zoöl., vol. 81, May, 1937, pp. 423-425.

taken April 22, 1951, by G. Yépes. Careful comparisons of these three with skins in the U. S. National Museum, the American Museum of Natural History, and the Museum of Comparative Zoölogy have indicated their allocation with the bird of St. Lucia, a most surprising result, and a conclusion that has been reached only after detailed and careful study.

The bird of St. Lucia differs from Caprimulgus rufus minimus of northern South America and Panamá in decidedly larger size, and in darker, less rufescent coloration, particularly on the anterior part of the body. The following measurements have been taken from skins of otiosus,

Males, 8 specimens, wing 183-193 (188), tail 123.5-131.0 (127.3), culmen from base 7.3-8.7 (8.1), tarsus 17.0-18.6 (17.8) mm.

Females, 3 specimens, wing 187-190 (188), tail 120.5-128.9 (124.1),

culmen from base 7.0-7.2 (7.1), tarsus 17.0-18.6 (17.7) mm.

It will be observed that the two sexes are practically alike in size. Measurements for available specimens of Caprimulgus rufus minimus are given in detail beyond under the next heading. It is sufficient here to call attention to the decidedly longer tail in otiosus, as well as to the longer wing.

The two males of otiosus from Venezuela, as already stated, have the outer primaries in molt so that wing measurements are not available. The bird from El Aral also is molting the tail. The male from La Cienaga, Miranda has the tail 126.5 mm., being near the average for otiosus from St. Lucia, and longer than any specimen of minimus. The female assigned to otiosus also is defective in wing and tail (due to loss of feathers in preparation) so that it does not give valid measurements. All three, however, agree with otiosus, and differ from C. r. minimus, in definitely duller color, and are assigned to the first mentioned bird. The blacker coloration of the under side of the primaries in otiosus is especially to be noted, this difference being marked in the three Venezuelan birds.

Migration from St. Lucia during the non-breeding season is the first thought that comes to mind to explain the presence of these birds in Venezuela, but this is ruled out by the widely separated dates of occurrence, viz., April 22, September 2 and December 10, and by the female which is recorded by the collector as in laying condition. It appears that there are two populations, one in St. Lucia and one in northern Venezuela. As the latter apparently ranges in the area where Caprimulgus rufus minimus is found we must conclude that C. otiosus is a distinct species, and not a geographic race of rufus as has been supposed.

It may be observed that the three birds from Venezuela appear slightly darker, particularly on the head and the anterior part of the body, than those from St. Lucia, so that it may be practicable with better material to separate them as a distinct geographic race. This however is not warranted on the basis of the present material.

Caprimulgus rufus minimus Griscom

Caprimulgus rufus minimus Griscom, Bull. Mus. Comp. Zoöl., vol. 81, May, 1937, p. 424 (Panamá City, Panamá).

The strictly nocturnal habits of this bird probably make it seem

rarer than it really is, since by day it is seldom encountered, and few are secured by collectors. The call of the male, resembling that of the Chuck-will's-widow (Caprimulgus carolinensis) that nests in the south-eastern United States, may offer a clue to abundance when once it is learned.

This race differs from Caprimulgus otiosus in smaller size, and lighter, more rufescent coloration, with the light and dark markings showing more contrast.

Available measurements, including specimens from Panamá and Colombia with those from Venezuela, are as follows:

Males, 2 specimens, wing 179-184 (181), tail 119.7-121.0 (120.3), culmen from base 8.8-9.2 (9.0), tail 18.8-19.2 (19.0) mm.

Females, 13 specimens, wing 176-182 (175), tail 107.6-120.5 (113.5), culmen from base 6.6-9.1 (7.8), tarsus 16.3-18.8 (17.2) mm.

In personal acquaintance with this form males have been found to be wild and difficult to approach in comparison with the females, which seemingly is reflected in the smaller number of the male sex found in collections.

The range of this bird in Venezuela is confined to the northern part of the country, where it is recorded in available material from Zulia (Ciénaga de Tule in the Distrito Mara), Mérida (Culata, Los Conejos, Escorial), Lara (Camoa), Distrito Federal (Río San Julián), and Sucre (Cumaná). In the Sierra de Mérida it is recorded to an elevation of 3,000 meters, which seems strange since elsewhere it is a bird of the tropical lowlands.

Six females seen from Venezuela compared to 7 females from Panamá and Colombia, in series, appear brighter and slightly more rufescent, with the dark markings bolder. Some individual specimens may however be placed in either group. The markings appear especially contrasted and bold in the two males from Venezuela, but no males have been seen from the countries to the west. It is possible that a Venezuelan race may be separable when more material has been secured.

A further point of considerable interest has come to light during the course of these studies. It will be recalled that Caprimulgus carolinensis, the Chuck-will's-widow of the southeastern United States, that winters south to Panamá and Colombia, has the long rictal bristles with well developed lateral filaments, while in all other species of the genus these bristles are smooth. The difference is so marked that it has been suggested that C. carolinensis might appropriately be recognized as a distinct generic entity under the name Antrostomus Bonaparte. Ridgway considered this but concluded that Caprimulgus rufus so closely resembled carolinensis "in coloration and large size that, notwithstanding the absence of pinnae to the rictal bristles, its different wing formula, etc., it would seem unreasonable to separate the two generically."

In the series of birds available in this study it has been of particular value to note a young individual of *C. r. minimus* in which the soft juvenal plumage is still in evidence in part, particularly on the under tail coverts. This is M.C.Z. 120370, collected by Wirt Robinson, July 25, 1900, on the Río San Julián, east of La Guaira, Venezuela. This bird has a few of the strong rictal bristles, resembling those of the

Bull. U. S. Nat. Mus., no. 50, pt. 6, 1914, p. 504.

adult, growing with the bases still in sheaths. On either side there are one or two shorter ones, apparently of the juvenal stage, which have numerous short lateral filaments on the basal half, resembling thus those of *C. carolinensis*. We may interpret this as a juvenile condition in *C. rufus* that persists in the adult of *C. carolinensis*, a still further indication of the close relation between the two that has been pointed out by Ridgway. It may be repeated that the song of *C. r. minimus*, heard on many occasions in the Canal Zone and in the eastern part of the Province of Panamá, is remarkably similar to that of the Chuck-will's-widow.

Caprimulgus rufus noctivigulus subsp. nov.

Characters.—Similar to Caprimulgus rufus rufus Boddaert but darker, and much more reddish brown; black markings less extensive, and less clearly defined; abdomen darker, nearly concolor with the breast; sides of head mainly chestnut, instead of mainly dull black; light throat band browner. Decidedly more rufescent than any other known race of rufus.

Description .- Type, Phelps Collection no. 20667 (on deposit in U. S. National Museum), male, Atures, Caño Cataniapo, elevation 100 meters, Territorio Amazonas, Venezuela, January 27, 1943, collected by F. Benedetti. Crown, lores, hindneck and bordering area of upper back russet; loral feathers barred lightly with black; feathers of crown with black shaft streaks, which are narrow to nearly obsolete on forecrown, and heavy from the center of the crown to the hindneck, all of the feathers in addition mottled with minute spots and broken streaks of black; sides of head black with russet bars; back and rump with central portions of feathers mainly black, edged and spotted with brown. between Prout's brown and a color somewhat brighter than Mars brown; wing coverts dull black edged and barred irregularly with tawny, which changes to ochraceous buff on the concealed webs of some of the feathers: primaries and secondaries dull black, barred with tawny, which changes in part to ochraceous-tawny on the concealed parts of the webs, the barring most definite on the outer webs of the primaries, irregular and broken elsewhere; ends of the innermost secondaries clay color, with shaft streaks of black, and irregular mottling of neutral gray, the clay color producing a lighter spot on the wing; tertials broadly and irregularly black on the centers, edged with tawny, which is mottled with dull black, the concealed parts of the feathers pinkish buff to cinnamon-buff which is slightly exposed to form another small, indistinct lighter patch on either side of the body; upper tail coverts dull black mottled with cinnamon buff and clay color; central rectrices and outer webs of lateral ones barred irregularly with dull black and mottled with cinnamon; three outermost rectrices with a large spot near the tip that is white viewed from above, and dark pinkish-buff from beneath, with the feathers tipped and edged externally with cinnamon; under surface in general between tawny and russet with fine, irregular cross bars of dull black; a broad band of chamois across the throat, barred narrowly and distinctly with dull black; several feathers in center of breast with small terminal areas of cinnamon that appear as distinct spots; under wing coverts dull black, barred indistinctly with snuff brown; edge of wing

^{*}Caprimulugus rufus Boddaert, Tabl. Planch. enlum., 1783, p. 46 (Cayenne).

clay color; under tail coverts, cinnamon-buff barred sparingly with narrow, irregular lines of black. Maxilla dull black, fuscous at base; mandible fuscous; lower part of tarsus and toes fuscous (from dried skin).

Measurements.—Male (type specimen), wing 167, tail 120, culmen from cere 7.8, tarsus 18.7 mm.

Female (one specimen), wing 175, tail 120, culmen from cere 7.5, tarsus 17.5 mm.

Range.—The two known specimens come from El Carmen, Alto Parguaza, in extreme western Bolívar, and from Atures, near the mouth of Caño Cataniapo, in northwestern Amazonas. It is believed that this form may range through the upper regions of the basin of the Río Orinoco.

Remarks.—In addition to the male in the Phelps Collection that serves as type we have available also a female presented to the U. S. National Musuem by Ventura Barnes, Jr., taken by him at El Carmen on the Alto Río Parguaza in extreme western Bolívar, about 75 kilometers in an air line from the type locality. This female is brighter, more rufescent than the male, especially on the dorsal surface, so that in these two specimens we find represented the two color phases, one grayer, and one more rufescent, that are noted regularly in the races of this goatsucker. In the description of this race comparison has been made with skins of Caprimulgus rufus rufus Boddaert from Goiaz, Baía, and the Tapajoz region in Brasil. Boddaert's name is based on plate 735 in Daubenton, marked as coming from Cayenne.