PROCEEDINGS

OF THE

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THE CENTRAL AMERICAN RACES OF

RUPORNIS MAGNIROSTRIS

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DURING the last few years the Museum of Comparative Zoölogy has received a good many specimens of *Rupornis* magnirostris from Central America, and these birds, taken in conjunction with the large series from Guatemala in the Dwight Collection that one of us (Griscom) is now studying, reveal the fact that this species throughout its range in southern Mexico and Central America is as plastic as it is in South America, where at least seven forms are recognized today and others indicated.

In Central America this is a common species of the tropical lowlands, rarely occurring as high as 3500 feet in the mountains. It is absent in the heavy rain-forest, and appears to be more numerous in the regions where there are clearings or expanses of open country in which there are poles or dead trees that serve as suitable lookouts and perches.

Between us, we have personally observed in the field all the forms here dealt with except griseocauda and insidiatrix. Wherever found in Central America, Rupornis is an almost stupidly tame hawk. Time and again the birds will sit on telephone poles beside a railroad while a train goes by, or will remain perched on the top of some low tree and permit an approach within collecting-gun range. In appearance Rupornis is much like a small Buteo, though the external structural characters and proportions strongly show the distinctness of the two genera. The flight of Rupornis is Buteo-like, especially the habit of circling high in the air, while the notes are similar to those of the Red-tailed Hawk (*Buteo jamaicensis*).

In Rupornis magnirostris the adults vary in color above from brown to pale gray, the pale bars on the wings and tail from grayish brown to deep cinnamon rufous. The breast runs from brownish gray with buffy flammulation to pale gray, unbroken; the posterior under parts, including the tibiae are barred rufous and white, or rufous and buff, often with a cinnamomeous wash. The immature bird is similar above to the adult except that the feathers of the upper parts are more or less tipped (the amount depending on the freshness of the plumage) with buffy or pale rufous and the tail is more narrowly banded; the breast is never uniform gray, but streaked, each feather with a broad dusky central portion, widely edged with buffy or cinnamomeous.

A peculiar fact for which we can find no explanation is the large number of individuals of this species in which the tail is so broken and abraded as to be shortened to about half of its normal length.

All material here listed is in the Museum of Comparative Zoölogy unless otherwise indicated.

Rupornis magnirostris griseocauda Ridgw.

Rupornis magnirostris var. griseocauda Ridgway, Proc. Boston Soc. Nat. Hist., XVI, 1873-1874 (Dec., 1873), p. 87 (in key), p. 88 (orig. descr.).

Male cotype, now no. 77,367, Museum of Comparative Zoölogy from Tehuantepec, Mexico, collected by F. Sumichrast. Female cotype, now no. 77,366, from Rio Seco, [Oaxaca] Mexico.

Subspecific characters.—Upper parts brownish gray; head concolor with back; pale interspaces on tail without *trace* of red. Fore neck and

chest in adults always distinctly flammulated with buffy, never uniform gray.

Measurements of wing (chord of primaries): nine males, 219-230 (average, 224); six females, 237-241 (average, 239) mm.

Range: Southern Mexico from central Tamaulipas and Vera Cruz south to Oaxaca, and probably to Tabasco and Chiapas.

Material examined.—TAMAULIPAS: Caballeros, 1 male, Altamira, 6 males, 4 females; Santa Leonor, 1 male; Rio Cruz, 1 male, 1 female; no definite locality, 1 male. VERA CRUZ: Medillin, 1 male; Buena Vista, 1 female; Precidio, 1 male. OAXACA: Rio Seco, 1 [male]; no definite locality, 1 female (cotypes of the subspecies).

Rupornis magnirostris conspecta Peters

Rupornis magnirostris conspecta Peters, Auk, XXX, 1913, p. 370. (San Ignacio, Yucatan.) Type, no. 40,123, M. C. Z.

Subspecific characters.—Similar to R. m. griseocauda, but averaging slightly smaller; paler and purer gray (less brownish) above; slightly paler below.

Measurements of wing: four males, 219-225 (average, 221.5); four females, 230-237 (average, 232.5) mm.

Range: Yucatan Peninsula and extreme northern British Honduras. Material examined.—YUCATAN: San Ignacio, 1 male (the type); Chichen Itza, 1 female; Rio Lagartos, 1 male; no definite locality, 1 not sexed. QUINTANA ROO: Camp Mengel, 1 male, 1 female, 2 not sexed; Xcopen, 1 female; Chunyaxche,¹ 1 female; Acomal,¹ 1 male.

Rupornis magnirostris gracilis Ridgw.

Rupornis gracilis Ridgway, Proc. U. S. Nat. Mus., VIII, 1885, p. 94. (Cozumel Id., Yucatan.)

Subspecific characters.—Smallest of all the Central American races of Rupornis magnirostris. Similar to R, m, griseocauda above. Breast brownish gray with wide buffy lateral margins to the feathers; the posterior under parts less washed with cinnamomeous; barring on tibiae obsolete.

Measurements of wing: one immature male, 195; four adult females, 213-225 (average, 217.5); one immature female, probably wrongly sexed, 199 mm.

Range: Islands of Cozumel, Meco,² Holbox,² and probably Mugeres Id.

¹ Specimens in American Museum of Natural History.

² Specimens from these islands not seen by us.

Material examined.—Cozumel Id., 1 male, 5 females, (coll. U. S. Nat. Mus.); 2 males, 1 female, (coll. Am. Mus. Nat. Hist.).

The nearest affinities of this strongly differentiated insular form are with R. m. griseocauda. It seems, however, to have lost the ability to assume the characteristic adult plumage of that form: the widely flammulated breast of the adult gracilis vividly recalls the immature plumage of griseocauda.

Rupornis magnirostris direptor subsp. nov.

Type, no. 57,790, collection of Jonathan Dwight in American Museum of Natural History, adult female, from Finca El Cipres, near Mazatenango, Pacific Slope, Guatemala, collected 22, July, 1924, by A. W. Anthony (orig. no. 410.).

Subspecific characters.—Similar to R. m. griseocauda in the color of the upper parts, but the pale interspaces on the basal half or third of the tail strongly washed with bright rufous. Below, darker and more richly colored; flammulation of the lower breast more cinnamomeous, less buffy; light bars on posterior lower parts averaging narrower. Size of griseocauda.

Measurements of wing: six males, 221-231 (average, 225.2); five females, 231-240 (average, 234.2) mm.

Range: Guatemala (except, probably, the extreme northeastern part) and Salvador; probably also southwestern British Honduras (an immature male from the Toledo district is intermediate between this form and *conspecta*).

Material examined.—GUATEMALA: Puebla,¹ 1 female; Hacienda Carolina,¹ 1 male, 2 females; Hacienda California,¹ 1 female; Finca El Cipres,¹ 7 males, 6 females; Virginia Plantation (near Puerto Barrios), 1 female. SALVADOR: Hacienda Zapatitlan, 1 male.

Rupornis magnirostris arguta subsp. nov.

Type, no. 234,242, Museum of Comparative Zoölogy, adult male from Almirante, Panama, collected 26, February, 1926, by John D. Smith.

Subspecific characters.—Similar to R. m. direptor nobis, but pale, above; top of head purer gray, clearly defined from the darker, grayish brown back. Breast much less distinctly flammulated, more extensively washed with gray which is of a paler and purer shade rather than brownish gray. Size smaller.

¹ Specimens in Dwight collection, Am. Mus. Nat. Hist.

Measurements of wing: 10 males, 210-220 (average, 213.6); 12 females, 220-235 (average, 229) mm.

Range: Central America from eastern Honduras (Ulua Valley) south on the Caribbean slope to the Chiriqui lagoon region of Panama, and from the Honduras-Nicaragua boundary southward on the Pacific slope to northwestern Costa Rica.

Material examined.—HONDURAS: Urraco, 1 female, Toloa Lagoon, 1 female; Tela, 1 male; Lancetilla, 1 male, 2 females. HONDURAS-NICARAGUA boundary: 180 miles from the Pacific coast, 2 [females]. NICARAGUA: Cape Gracias à Dios, 1 male, 1 female. COSTA RICA: Cerro Santa Maria, 1 female; Tenorio, 1 female; Azahar de Cartago, 1 male. PANAMA: Almirante, 4 males, 4 females; Changuinola, 1 male; Western River, 1 male; Chiriquicito, 1 male, 1 female; Sheperd Id., 1 male; Cricamola, 1 male.

Rupornis magnirostris ruficauda (Scl. and Salv.)

Asturina ruficauda Sclater and Salvin, Proc. Zool. Soc. London, 1869, p. 133. (Cordova, Jalapa, Mexico City, Omoa, Guatemala, Veragua, David.¹)

Subspecific characters.—Similar to R. m. arguta nobis, but still paler and grayer; back distinctly gray rather than brown; pale interspaces of the tail entirely rufous. Below, the chest nearly uniform pale gray; long. est under-wing coverts with two or more poorly defined cinnamon bars.

Measurements of wing: 4 males, 205-214 (average, 209.8); 7 females, 217-234 (average, 224.6) mm.

Range: Pacific slope of Central America, from the head of the Gulf of Nicoya to the mouth of the Rio Tuyra, eastern Panama.

Material examined.—COSTA RICA: Bolson, 1 male; Boruca, 1 male, 1 female; El General, 1 female. PANAMA: Divala, 2 females; Bogaba, 2 males; Boquete, 1 male; Canal Zone, 2 females.

¹ David was selected as type locality by Chapman, Bull. Am. Mus. Nat. Hist., XXXVI, 1917, pp. 244-245. This selection is not quite correct. As was often the custom of that time, Sclater and Salvin did not designate a type specimen, but gave several references and a list of localities. As may be seen, the range assigned to their Asturina ruficauda is now found to be inhabited by four distinct races of Rupornis magnirostris. Cordoba, Jalapa and Mexico City are within the range of grisecauda; the bird of Guatemala is direptor of Omoa, almost certainly arguta; of Veragua and David, ruficauda, as here understood. The description, however, can apply only to the bird of the Pacific slope of Panama, so the type locality narrows down to the two localities last named. David was included on Lawrence's authority, who merely listed a specimen from there of "Asturina magnirostris," taken by Hicks (Ann. Lyc. Nat. Hist. N. Y., VIII, 1865, p. 178). It seems, therefore, that the description must have been drawn from the Veragua specimens collected by Arcé, which apparently were the only ones that Sclater and Salvin had at hand that could have formed the basis for their description.

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Rupornis magnirostris alia subsp. nov.

Type, no. 114,285, Museum of Comparative Zoölogy, adult female, from San Miguel, El Rey, Pearl Islands. Collected 24, February, 1904, by W. W. Brown.

Subspecific characters.—Similar to R. m. ruficauda (Scl. and Salv.), but rufous of wings and tail paler; feathers of chest with two incomplete white bars (producing a spotted appearance); barring of abdomen coarser; longest under-wing coverts immaculate or with only a faint subterminal spot. Averaging very slightly smaller.

Measurements of wing: one male, 207; three females, 219-226 (average, 221.3) mm.

Range: Only on El Rey; absent from the smaller islands.

Material examined.—PEARL IDS., BAY OF PANAMA: El Rey, 1 male, 3 females.

Rupornis magnirostris insidiatrix Bangs and Penard

Rupornis magnirostris insidiatrix Bangs and Penard, Bull. Mus. Comp. Zoöl., LXII, 1918, p. 36. (Santa Marta Mts., Colombia.) Type, no. 105,014, M. C. Z., examined.

Subspecific characters.—Similar to R. m. ruficauda in color of upper parts, but pale interspaces of the tail clear gray (instead of rufous). Below, throat and breast uniform pale gray; posterior under parts and tibiae barred as in *ruficauda*, but without (or with only faint) rufous wash.

Five examples recently collected by H. Wedel at Permé (shown on maps as Anachucuna), Caribbean slope of extreme eastern Panama, are referable to the form originally named from Santa Marta. We have not sufficient material at hand to outline a 'range' for this subspecies, especially in view of certain anomalies in its distribution to which Chapman (Bull. Am. Mus. Nat. Hist., XXXVI, 1917, pp. 243-244, under name of R. m. magnirostris) has already called attention.