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BIRDS COLLECTED BY THE NATIONAL GEOGRAPHIC  
SOCIETY'S EXPEDITIONS TO NORTHERN BRAZIL AND  
SOUTHERN VENEZUELA

By HERBERT FRIEDMANN

THE collection of birds described in the present report was made by Ernest G. Holt and his assistants on two expeditions under the auspices of the National Geographic Society in connection with the field work of the Venezuelan-Brazilian Boundary Commission. This Commission resulted from the decision of the Brazilian and Venezuelan Governments to mark and accurately map their common boundary, which, "according to treaty, follows the watershed of a rugged chain of mountains that extends from British Guiana more than 900 miles southwestward to the banks of the Upper Rio Negro. Because this remote region was not only geographically unexplored, but was totally unknown zoölogically, the National Geographic Society had obtained special permission of the governments concerned to attach a party of naturalists to the official commissions appointed to carry out the boundary demarcation." (Holt, *Nat. Geogr. Mag.*, vol. 64, Nov. 1933, p. 585.)

On the first of the two expeditions, Mr. and Mrs. Holt traveled as guests of the Comisión Venezolana de Límites, and ascended the Orinoco from Ciudad Bolívar to Puerto Ayacucho, just below the impassable rapids of Atures, where the river journey was interrupted by an overland portage of 42 miles. The Orinoco was reached again above the Maipures Rapids and was followed to Tamatama, where the Casiquiare branches off to the south. Then the route of the expedition followed that stream to its junction with the Rio Negro,

thence down the Rio Negro to Cucuhy. From there the expedition retraced its steps, making few stops on the way back to Ciudad Bolívar.

On this first trip relatively few birds were collected—some 288 skins as compared with about 3,000 on the second trip. The whole trip was considerably shorter and more time was spent in traveling without opportunity for collecting than on the second journey. The collecting stations and dates for the first trip, starting on the Orinoco and going to the Amazon, are as follows:

November 25–27, December 8, 12, 20, 1929. Venezuela, Ciudad Bolívar.

November 29–31, December 4, 7, 10, 11, 1929. Venezuela, Soledad.

December 1, 1929. Venezuela, Isla Orocopiche, near Soledad.

December 8, 1929. Venezuela, Laguna Icacal, near Ciudad Bolívar.

December 31, 1929–January 10, 1930. Venezuela, Puerto Ayacucho.

January 10, 1930. Venezuela, near Río Sanariapo, near Puerto Ayacucho.

January 12, 1930. Venezuela, Río Orinoco, above Maipures Rapids.

January 30, 1930–February 8, 1930. Brazil, Cucuhy, Rio Negro.

Holt has described some aspects of this journey in an article entitled "In Humboldt's Wake" (*Nat. Geogr. Mag.*, vol. 60, Nov. 1931, pp. 621–644).

On the second journey the route was reversed, the party starting on the Amazon and proceeding up the Rio Negro, with detours to explore some of its tributaries such as the Rio Cauabury and the Rio Maturacá, thence up the Brazo Casiquiare to the upper waters of the Orinoco. This great river was then descended all the way to Ciudad Bolívar, where the collecting came to an end. Where the first, Orinoco-to-Amazon, journey lasted not quite 3 months, the second, Amazon-to-Orinoco, occupied more than three times that time. Furthermore, on the second journey Holt was accompanied by two assistant collectors, Emmet Reid Blake and Charles T. Agostini; and the collection of birds amassed by this industrious trio totaled about 3,000 specimens.

The exact collecting itinerary, as evidenced by the dates on the labels of the specimens, is as follows:

BRAZIL

1930

Sept. 18	Fazenda Marinha, São Joaquim, Rio Amazonas, Pará.
Sept. 20	North bank of Rio Amazonas at Ceo do Arary, above Parintins, Amazonas.
Sept. 26–Oct. 2	Manãos (Flores Tramway), Amazonas.
Oct. 4	Near Muirapinima, Rio Negro, Amazonas.
Oct. 6	Barcellos, Rio Negro, Amazonas.
Oct. 7	Providencia, between Sao João and Florianopolis, Rio Negro, Amazonas.
Oct. 9–17	Santa Isabel, Rio Negro, Amazonas.
Oct. 21–22	Mouth of Rio Cauabury, Rio Negro, Amazonas.

1930

- Oct. 24 Cachoeira Caranguejo, Rio Cauabury, Amazonas.  
 Oct. 25 Sitio Conobany, Rio Cauabury, Amazonas.  
 Oct. 26-27 Cachoeira Thomaz, Rio Cauabury, Amazonas.  
 Oct. 28 Below Cachoeira Destacamento, Rio Cauabury, Amazonas.  
 Oct. 29 Cachoeira Destacamento, Rio Cauabury, Amazonas.  
 Oct. 30 Cachoeira Manajó, Rio Cauabury, Amazonas.  
 Oct. 31 Above Cachoeira Manajó, Rio Cauabury, Amazonas.  
 Nov. 1 Above Cachoeira, Panela de Onca, Rio Cauabury, Amazonas.  
 Nov. 2 Below second Cachoeira Thomaz, Rio Cauabury, Amazonas.  
 Nov. 3 Below mouth of Rio Já, Rio Cauabury, Amazonas.  
 Nov. 4-5 Above mouth of Rio Já, Rio Cauabury, Amazonas.  
 Nov. 6-7 Below mouth of Rio Maturacá, Rio Cauabury, Amazonas.  
 Nov. 8 Mouth of Rio Maturacá, Rio Cauabury, Amazonas.  
 Nov. 9-13 Rio Maturacá, Amazonas.  
 Nov. 14-26 Salto do Huá, Rio Maturacá, Brazilian-Venezuelan line.  
 Nov. 26-Dec. 9 Western foothills of Serra Imeri, near Salto do Huá.  
 Dec. 11 Rio Maturacá, below Salto do Huá.  
 Dec. 14 Cachoeira Destacamento, Rio Cauabury, Amazonas.  
 Dec. 23 Camanãos, Rio Negro, Amazonas.  
 Dec. 26-Jan. 19, São Gabriel, Rio Negro, Amazonas.

1931

## VENEZUELA

1931

- Jan. 25 Isla Yagrumo, Río Negro, Amazonas.  
 Jan. 26 Santa Rosa, Río Negro, Amazonas.  
 Jan. 27 Río Negro Islands below San Carlos, Amazonas.  
 Jan. 27-28 San Carlos, Río Negro, Amazonas.

## COLOMBIA

- Jan. 29-30 Bank of Río Negro opposite San Carlos, Venezuela.

## VENEZUELA

- Jan. 30-31 Chapazon, right bank of Brazo Casiquiare near its mouth.  
 Feb. 1-2 Raudal San Sebastián, Brazo Casiquiare.  
 Feb. 2 Solano, Brazo Casiquiare.  
 Feb. 4 Cerro Guanari, Brazo Casiquiare.  
 Feb. 4 Opposite Buena Vista, Brazo Casiquiare.  
 Feb. 5 El Mango, Brazo Casiquiare.  
 Feb. 5 Raudal Quirabuena, Brazo Casiquiare.  
 Feb. 6 Brazo Casiquiare at mouth of Caño Atamoni.  
 Feb. 7 Curare, Brazo Casiquiare.  
 Feb. 7 Raudal Corocoro below Playa de Candela, Brazo Casiquiare.  
 Feb. 8 Playa de Candela, Brazo Casiquiare.  
 Feb. 9 Raudal Corocoro, below Playa de Candela, Brazo Casiquiare.  
 Feb. 10 Playa de Candela, Brazo Casiquiare.  
 Feb. 10-13 Brazo Casiquiare, below mouth of Río Pacila.  
 Feb. 13 Viudita, Brazo Casiquiare.  
 Feb. 14 Piedra Pintado, Brazo Casiquiare.  
 Feb. 16 Capibara, Brazo Casiquiare.  
 Feb. 17 Near mouth of Caño Berimpomoni, Brazo Casiquiare.  
 Feb. 18 Caño Matipin, Brazo Casiquiare.  
 Feb. 18 Caño Perro de Agua, Brazo Casiquiare.  
 Feb. 19 Caño Durutomoni, Brazo Casiquiare.

1931

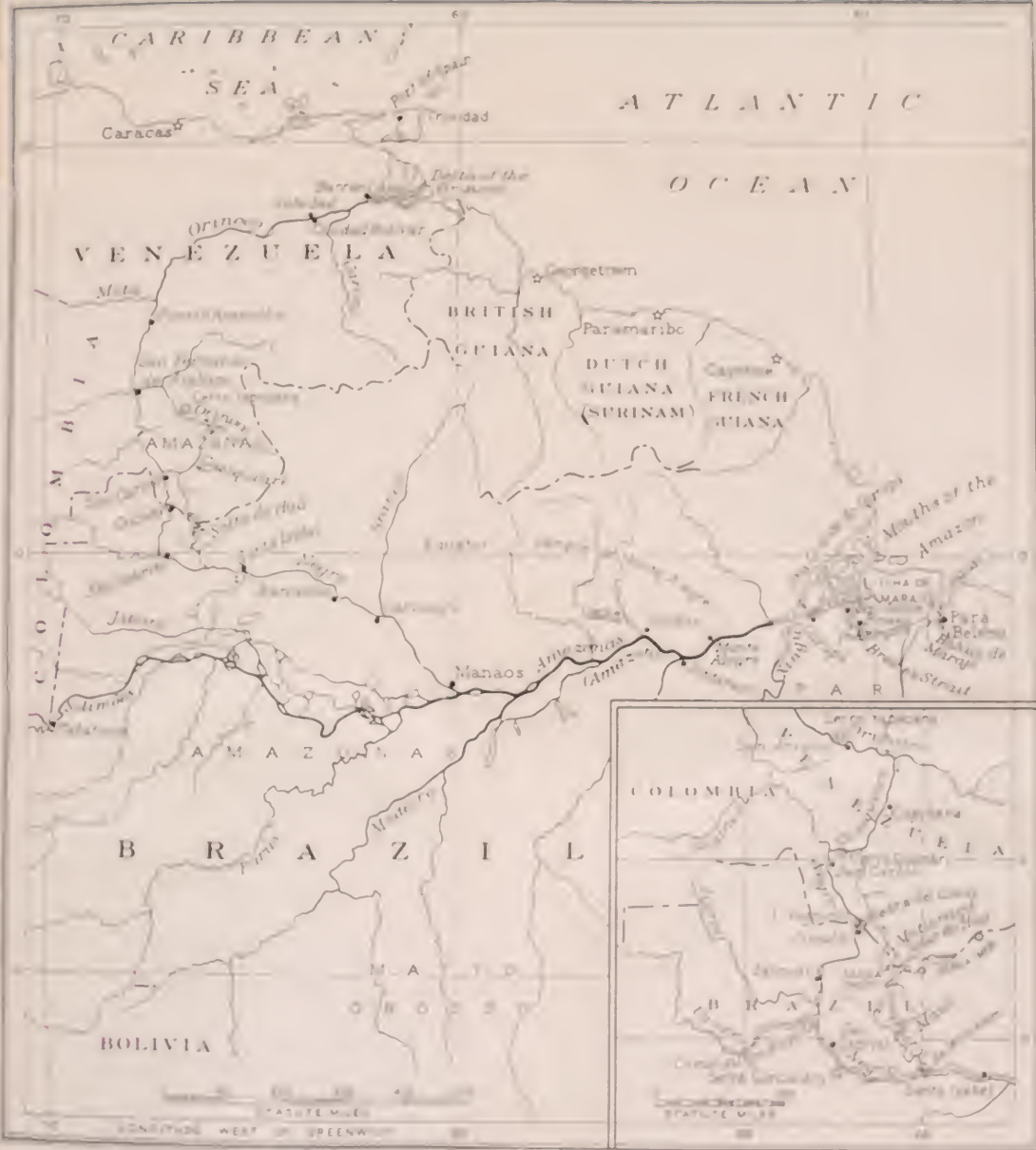
Feb. 19	Caño Pamoni, Brazo Casiquiare.
Feb. 20	Caño Mabinagui, Brazo Casiquiare.
Feb. 21	Buenos Aires, Brazo Casiquiare.
Feb. 22	Brazo Casiquiare, below Caño Caripo.
Feb. 23	Upper Orinoco, Tamatama.
Feb. 24	Upper Orinoco, near Cerro Cariche.
Feb. 25	Upper Orinoco, near Isla Temblador.
Feb. 28-Mar. 9	Upper Orinoco, San Antonio.
Mar. 12-16	Upper Orinoco, right bank opposite Corocoro Island.
Mar. 17-23	Upper Orinoco, base camp, Cerro Yapacana.
Mar. 23-Apr. 29	Upper Orinoco, Cerro Yapacana.
May 8-23	Río Orinoco, Puerto Ayacucho.
June 8-11	Río Orinoco, Ciudad Bolívar.
June 11-12	Río Orinoco, Soledad, Anzoátegui.

Just as Holt has written a descriptive account of the first trip, he also published a similar paper on the second, under the title "A Journey by Jungle Rivers to the Home of the Cock-of-the-Rock" (*Nat. Geogr. Mag.*, vol. 64, Nov. 1933, pp. 585-630). To these two articles the interested reader is referred for descriptions of parts of the areas traversed. For the present report the map and the photographs, kindly furnished by the National Geographic Society, will serve in lieu of description.

Aside from adding to our knowledge of the variations, plumages, and distribution of many of the nearly 500 kinds of birds collected, the present material has been studied in the hope that it might throw some light on the general problem of the variational and distributional behavior of species and subspecies at the meeting place of two faunal areas, the Amazonian and the Orinocoan. As the study progressed and species after species was examined it became apparent that there is no marked distinction between the bird life of the Upper Amazon and the Rio Negro on the one hand and that of the Casiquiare and Upper Orinoco on the other. The two river systems are apparently so much older than the birds that dwell in their drainage basins and the watershed between them became practically nonexistent at such an early time geologically that the distribution of the bird species today reflects nothing of what may have been an originally quite different topographic picture. The statement that the watershed between them became nonexistent is intended to apply primarily to the routes of the main streams—the Upper Orinoco and the Upper Rio Negro, which are, in fact, connected by the Casiquiare, a true canallike stream which drains Orinoco water southward into the Amazonian system. There is still something of a real watershed along the more eastern part of the Brazilian-Venezuelan and the Brazilian-Guianan borders. The great age of the present uninterrupted terrain of low forested country from the Upper Rio







Map of the Amazonia, South America, showing drainage basins of the R.R. Negro and Amazon. (Scale 1:1,000,000)





Negro to the Upper Orinoco is apparently the most important basic factor behind the present distributional picture of the local avifauna. It should not be assumed that there are no differences in the bird life of the Upper Rio Negro and of the Upper Orinoco, but the number of forms that break up into different races in the two areas is small indeed compared to the great number that do not. Many more species divide into races well down the Orinoco, but not between the Negro, the Casiquiare, and the Upper Orinoco. Among the species that do have separate subspecific groups in the two areas are the following:

<i>Sakesphorus canadensis</i> :	
<i>S. c. loretoyacuensis</i> -----	Rio Negro.
<i>S. c. fumosus</i> -----	Casiquiare, Upper Orinoco.
<i>Grallaria macularia</i> :	
<i>G. m. paraensis</i> -----	Rio Negro.
<i>G. m. diversa</i> -----	Casiquiare, Upper Orinoco.
<i>Sublegatus glaber</i> :	
<i>S. g. sordidus</i> -----	Rio Negro.
<i>S. g. orinocensis</i> -----	Casiquiare, Upper Orinoco.
<i>Phaeomyias murina</i> :	
<i>P. m. wagae</i> -----	Rio Negro.
<i>P. m. incomta</i> -----	Casiquiare, Upper Orinoco.
<i>Camptostoma obsoletum</i> :	
<i>C. o. napaeum</i> -----	Rio Negro.
<i>C. o. venezuelae</i> -----	Upper Orinoco.
<i>Manacus manacus</i> :	
<i>M. m. interior</i> -----	Rio Negro.
<i>M. m. umbrosus</i> -----	Upper Orinoco.

The surprisingly few birds that range north to the Upper Rio Negro but not to the Casiquiare and the Upper Orinoco, birds like *Myiozetetes luteiventris* and *Todirostrum maculatum annectens*, may yet be found in the latter area, as the total bulk of collections made there is still not great. For this reason, it is well not to attempt to read any significance into these few instances.

Of the 486 species and subspecies of birds in the collections here reported on, the following 10 were found to be new to science and have been described elsewhere:

<i>Brotogeris chrysopterus tenuifrons</i> Fried-	<i>Formicivora grisea rufiventris</i> Carriker
mann	<i>Myrmeciza disjuncta</i> Friedmann
<i>Nyctiprogne leucopyga exigua</i> Friedmann	<i>Manacus manacus umbrosus</i> Friedmann
<i>Nyctiprogne latifascia</i> Friedmann	<i>Ateleodacnis margaritae</i> Holt
<i>Reinarda squamata semota</i> Riley	<i>Thlypopsis sordida orinocensis</i> Fried-
<i>Capito auratus transilens</i> Friedmann	mann

In addition to these novelties, 11 forms seem to be additions to the published records of birds for Venezuela, and 5 appear to be new to Brazil. The apparent additions to the Venezuelan avifauna are as follows:

<i>Micrastur semitorquatus semitorquatus</i>	<i>Psilomycter theresiae leucorrhous</i>
<i>Ara severa castaneifrons</i>	<i>Trogon violaceus ramonianus</i>
<i>Ciccaba huhula</i> (previously published on the basis of the same specimen)	<i>Galbula albirostris chalconecephala</i>
<i>Chordeiles rupestris</i>	<i>Coryphotriccus parvus parvus</i>
<i>Chaetura spinicauda aethalea</i>	<i>Attila citriniventris</i>
	<i>Pseudattila phoenicurus</i>

The five birds added to the recorded Brazilian orniths are:

<i>Hydropsalis climacocerca schomburgki</i>	<i>Terenura spodioptila spodioptila</i>
<i>Aeronautes montivagus tatei</i>	<i>Leptopogon superciliaris venezuelensis</i>
<i>Heliodoxa xanthogonyx</i>	

In addition to these, the present collection serves to extend, or to fill gaps in, the previously known ranges of some 30 or more other birds among which may be mentioned:

<i>Tinamus major zuliensis</i>	<i>Todirostrum pictum</i>
<i>Crypturellus noctivagus duidae</i>	<i>Colaptes auratus</i>
<i>Accipiter pectoralis</i>	<i>Elaenia ruficeps</i>
<i>Leucopternis melanops</i>	<i>Perisoreus tricolor</i>
<i>Porzana flaviventer flaviventer</i>	<i>Xenopipo atronitens</i>
<i>Thalurania furcata nigrofasciata</i>	<i>Schiffornis major duidae</i>
<i>Jacamerops aurea ridgwayi</i>	<i>Microcerculus bambla caurensis</i>
<i>Myrmotherula ambigua</i>	<i>Turdus ignobilis arthuri</i>
<i>Myrmotherula cherriei</i>	<i>Hylophilus muscicapinus muscicapinus</i>
<i>Myrmotherula guttata</i>	<i>Piranga flava haemalea</i>
<i>Gymnopithys rufigula rufigula</i>	<i>Tachyphonus phoeniceus</i>
<i>Xiphorhynchus pardalotus</i>	<i>Caryothraustes canadensis canadensis</i>
<i>Xenops tenuirostris acutirostris</i>	<i>Pitylus grossus grossus</i>
<i>Microzenops milleri</i>	

In working out the various problems raised by the different species in the collection, I have been fortunate in the loan of pertinent material from the American Museum of Natural History, the Museum of Comparative Zoology, the Carnegie Museum, and the Academy of Natural Sciences of Philadelphia. I am especially indebted to Dr. John T. Zimmer for aid in identifying a few obscure plumages and for his opinion on a number of other items. Some time before I began to study this collection, Dr. Alexander Wetmore made a number of identifications in connection with other studies he was pursuing; these he has generously placed at my disposal. In some instances he had examined long series in other museums, and his comments, which have been retained in the present paper, are appreciated accordingly. A number of years ago M. A. Carriker, Jr., worked over the Tyrannidae in the collection, but subsequently published papers on these difficult birds have made it necessary to go over them anew. After this report had been completed a few of the forms involved were reexamined together with W. H. Phelps, whose comments have been used to modify earlier wordings.

The National Museum is indebted to the National Geographic Society for the present splendid collection, which has greatly enriched

its series of Neotropical birds and which is of particular value as it comes from a region at once so interesting and hitherto so poorly represented in museum collections.

The photographs for the illustrations are reproduced by courtesy of the National Geographic Society. All were taken by Mr. Holt, and all are copyrighted by the Society.

### Family TINAMIDAE: Tinamous

#### TINAMUS MAJOR ZULIENSIS Osgood and Conover: *Zulia Tinamou*

*Tinamus major zuliensis* OSGOOD and CONOVER, Publ. Field Mus. Nat. Hist., Zool. Ser., vol. 12, 1922, p. 24 (Río Cogollo, Perijá, State of Zulia, Venezuela).

#### SPECIMENS COLLECTED

5 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 4-25, 1931.

Most of the specimens were noted by the collectors as having enlarged gonads when shot.

These skins have either no noticeable crests or very short ones. Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, p. 17, footnote) write of their material that "while most of the birds united here under *zuliensis* have no crest or but a short one, one from the foot of Mount Duida has the occipital feathers fully as long as in *T. m. major*." The same authors note also that birds from the Caura and the Orinoco average more brownish than more western (more toptotypical) specimens, but that they vary considerably, "and two from the Río Ocamo are very nearly as yellowish olive as the type of *zuliensis*."

This series shows very clearly that *zuliensis* is dichromatic; two of the birds (one of each sex) are considerably more rufescent above than the other five olive-brown ones. There is also great variation in the darkness or paleness of the underparts; in one extreme the ground color of the breast, all but the lower middle abdomen, sides, and flanks, is a dusky buffy, and the vermiculations are strong and dark; in the other extreme (of the same sex and color phase) the ground color is almost whitish except for the breast, which is more washed with pale buffy, but the vermiculations are finer and paler, giving a very light appearance to the ventral surface of the bird.

The *Zulia tinamou* occurs from the Santa Marta area of Colombia and most of Venezuela south to the Upper Orinoco (Cerro Yapacana, Mount Duida) and east to the Caura River. In other words, the present series is from the extreme southern limit of the range of the race.

#### TINAMUS MAJOR SERRATUS Spix: *Rio Negro Tinamou*

*Tinamus serratus* SPIX, Avium species novae . . . Brasiliam . . . , vol. 2, 1825, p. 61, pl. 76 ("in sylvis campestribus fl. Nigri"=Rio Negro, Brazil).

## SPECIMEN COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, above Cachoeira, Panela de Onca, November 1, 1930.

The Rio Negro tinamou differs from the Zulia race in having the upperparts somewhat darker, more brownish, less olivaceous, and on the average less heavily barred, the top of the head slightly duller, less brightly rufescent, but with the rufescent tone extending downward more on the cheeks and auriculars, and, even in pale-bellied individuals, with the ventral ground color more buffy, less whitish.

The present example is one of the northernmost records for the subspecies. The known range of this tinamou extends from the Rio Negro south to the north bank of the Solimões, and west to the Lower Rio Iça.

TINAMUS GUTTATUS Pelzeln: *White-throated Tinamou*

*Tinamus guttatus* (Natterer, MS.) PELZELN, Verh. zool.-bot. Ges. Wien, vol. 13, 1863, pp. 1126, 1128 (Borba, Rio Madeira, Brazil; designated by Hellmayr, Nov. Zool., vol. 14, 1907, p. 409).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 24, 1930.

2 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, December 1-4, 1930.

3 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 28-April 25, 1931.

At first glance it seems that the Brazilian birds might prove to be separable from the Venezuelan ones, as the former are darker, more ochraceous-tawny on the throat and breast than are the latter. However, one of the four Venezuelan birds agrees in this respect with the Brazilian specimens, so for the present, and in the absence of comparative series, especially of topotypical *guttatus*, it seems advisable to keep them all under one name. Furthermore, as indicative of the variability of this character, it may be noted that Hellmayr (Nov. Zool., vol. 14, 1907, p. 409) describes birds from the Rio Madeira as having the underparts "rather pale brownish buff, almost white along the middle of the abdomen . . ." Also, Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, p. 23, footnote) write that birds from the Upper Rio Negro appear to be inseparable from those from south of the Amazon.

The Cerro Yapacana specimens were noted as having enlarged, active gonads when collected.

No Peruvian specimens have been seen; Salvadori (Catalogue of the birds in the collection of the British Museum, pt. 27, 1895, p. 508) noted that birds from Peru have the upperparts with scarcely any blackish bars, and the whitish-buff spots on the wings larger and less numerous than Brazilian ones.

CRYPTURELLUS SOUI SOUI (Hermann): *Pileated Tinamou*

*Tinamus soui* HERMANN, Tabula affinitatum animalium . . . , 1783, p. 165 (based on "Le Soui" Buffon, Histoire naturelle des oiseaux, vol. 4, p. 512, and Daubenton, Planches enluminées . . . , pl. 829: Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Rio Negro, February 8, 1930.  
 1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 27, 1930.  
 1 im. -, Venezuela, Cerro Yapacana, Upper Orinoco, April 17, 1931.

The female is larger and more rufescent than the male and has the top of the head darker, more blackish. The young bird has the feathers of the breast and lower throat and sides of the neck tipped with wedge-shaped white marks edged with black on their proximal sides, the feathers of the upper and lateral abdomen with the white tips more elongated less wedge-shaped and with no black edging; the upper wing coverts also have small medioterminal white spots; the greater upper wing coverts and the scapulars are tipped with olive-brown, the basal part of this terminal area being lighter and yellower, proximally broadly bordered with fuscous to fuscous-black.

The pileated tinamou occurs throughout the areas traversed by the collectors.

CRYPTURELLUS VARIEGATUS VARIEGATUS (Gmelin): *Variegated Tinamou*

*Tetrao variegatus* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 768 (based on "Le Tinamou varié" Daubenton, Planches enluminées . . . , pl. 828: Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Serra Imeri (western foothills), December 2, 1930.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 9, 1931.

The two specimens taken at Cerro Yapacana had the gonads enlarged and in active condition when collected.

The Brazilian specimen is quite different from the other two, and agrees with Todd's description (Proc. Biol. Soc. Washington, vol. 50, 1937, p. 176) of two birds from the Caura River, Venezuela, and one from Obidos, Brazil. "Instead of being black, above, narrowly barred with buffy, they are decidedly rufescent (near Brussels brown), barred and mottled with black; the buffy bars are scarcely obvious, except on the wing-coverts; the upper tail coverts have black bars separated by olive brown interspaces each having a median transverse rufescent buffy line . . . Since we have also a perfectly typical adult (*variegatus*) from Obidos these three odd birds must represent either a color-phase, a stage of plumage not fully mature, or another species altogether. They certainly look different enough to justify the latter alternative, hard as it is to accept . . ." Todd's birds showed traces of immaturity—some whitish spots on the upper wing coverts; the present example shows none, and it therefore decreases the likeli-

hood of its being a "stage of plumage not fully mature." By adding a new locality record for this plumage it seems to increase the possibility of its being a color phase appearing here and there within the range of *variegatus*. As a matter of fact, one of the present Venezuelan birds has the pale dorsal bars much more rufescent than the other one and helps to bridge the difference between the latter and the Serra Imeri skin. The Brazilian bird is more buffy, less whitish on the lower middle abdomen than are the two Venezuelan examples.

**CRYPTURELLUS NOCTIVAGUS DUIDAE** (Zimmer): *Duida Tinamou*

*Crypturellus noctivagus duidae* ZIMMER, Proc. Biol. Soc. Washington, vol. 51, 1938, p. 48 (Mount Duida ("Campamento del Medio"), Venezuela, altitude 350 feet).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 30–April 7, 1931.

These two specimens are the first to be taken away from the type locality, and extend the known range of the tinamou a short distance to the west. The measurements are as follows (adult first): Wing 161, 156; tail 46, 48; culmen from base 32.5; tarsus, 52, 50 mm. Zimmer's measurements of the type, an adult male, agree fairly well except in wing length, the type having a wing 173 mm. long.

The specimen marked immature resembles the adult one but is paler on the back, rump, and upper tail coverts, the black bars not so dark and narrower.

**Family ANHINGIDAE: Waterturkeys**

**ANHINGA ANHINGA ANHINGA** (Linnaeus): *Southern Waterturkey*

*Plotus anhinga* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 218 (Brazil; restricted to Rio Tapajóz, Pará, Brazil, by Griscom and Greenway, Bull. Mus. Comp. Zool., vol. 88, 1941, p. 103).

SPECIMEN COLLECTED

1 ♀, Brazil, Salto do Huá, Rio Maturacá, November 20, 1930.

The waterturkeys of South America are considerably larger than the North American form, *A. a. leucogaster*.

**Family ARDEIDAE: Herons**

**BUTORIDES STRIATUS STRIATUS** (Linnaeus): *South American Green Heron*

*Ardea striata* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 238 (Surinam).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 17, 1930.

The single specimen obtained is in fresh plumage. Occurs throughout the areas traversed by the expedition.

An alcoholic specimen was made of a bird taken near Durumutoni, Brazo Casiquiare, Venezuela, February 19, 1931.

**NYCTICORAX NYCTICORAX HOACTLI** (Gmelin): *Black-crowned Night Heron*

*Ardea hoactli* GMELIN, *Systema naturae*, vol. 1, pt. 2, 1789, p. 630 ("In Novae Hispaniae lacubus" = Valley of Mexico).

SPECIMEN COLLECTED

1 im. ♂, Venezuela, Ciudad Bolívar, June 8, 1931.

The specimen, although labeled "adult" by the collectors, is obviously a young bird in the streaked brown and white plumage.

**TIGRISOMA LINEATUM LINEATUM** (Boddaert): *Northern Tiger Blittern*

*Ardea lineata* BODDAERT, *Table des planches enluminées . . .*, 1783, p. 52 (Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2-9, 1931.

This heron occurs throughout the regions collected over by the expedition, but apparently it is not common anywhere. The two examples obtained are in fairly fresh plumage.

Family COCHLEARIIDAE: Boat-billed Herons

**COCHLEARIUS COCHLEARIUS COCHLEARIUS** (Linnaeus): *South American Boat-billed Heron*

*Cancroma cochlearia* LINNAEUS, *Systema naturae*, ed. 12, vol. 1, 1766, p. 233 (Guiana).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

A specimen in fairly worn plumage.

Family CICONIIDAE: Storks, Jabirus

**JABIRU MYCTERIA** (Lichtenstein): *Jabiru*

*Ciconia mycteria* LICHTENSTEIN, *Abh. Akad. Wiss. Berlin (Phys. Kl.)*, 1816-17 (1819), p. 163 (Brazil).

SPECIMEN COLLECTED

1 skull, Ciudad Bolívar, Venezuela, 1931.

This skull was picked up at Ciudad Bolívar and may not even have been of a bird killed at that spot.

Family THRESKIORNITHIDAE: Ibises

**MESEMBRINIBIS CAYENNENSIS** (Gmelin): *Cayenne Ibis*

*Tantalus cayennensis* GMELIN, *Systema naturae*, vol. 1, 1789, p. 652 (Cayenne).

SPECIMENS COLLECTED

1 im. ♀, Brazil, Rio Cauabury, Cachoeira Destacamento, October 29, 1930.

1 ad. ♂, Brazil, Rio Cauabury, below Cachoeira Thomaz, November 2, 1930.

This ibis ranges from Panama to Chile and Paraguay and to south-eastern Brazil.

The immature female has the chin, throat, and breast slightly darker than the adult male. Both birds are in fairly worn plumage.

**PHIMOSUS INFUSCATUS BERLEPSCHI** Hellmayr: *Berlepsch's Ibis*

*Phimosus berlepschi* HELLMAYR, Verh. zool.-bot. Ges. Wien, vol. 53, 1903, p. 247 (Orinoco region).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 4, 1930.

Hellmayr circulated proof sheets containing this species and marked them "Verhandl. Zool.-Bot. Ges. Wien, Heft 3-4-22.5.03," the present name appearing on p. "xvi" of the proof. If this be considered as constituting valid publication the reference given above should be altered accordingly. I am indebted to the late Dr. C. W. Richmond's invaluable card file of bird names for this information.

Unfortunately, there are no notes on the color of the bare parts of the head accompanying our specimen, which is thus, of necessity, identified to subspecies on geographic grounds. The race *berlepschi* is said to have the bare part of the head dark carmine, the bill wood brown with a blackish tip, but the carmine, like the corresponding clay color of the Brazilian race *P. i. nudifrons*, fades out to yellowish in dried skins.

Family ANATIDAE: Ducks, Geese, etc.

**DENDROCYGNA AUTUMNALIS DISCOLOR** Selater and Salvin: *Gray-breasted Tree Duck*

*Dendrocygna discolor* SCLATER and SALVIN, Nomenclator avium neotropicalium . . ., 1873, p. 161 (Venezuela, Guiana, and Brazil).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 13, 1931.

The bird is in a molting stage; the remiges are only partly grown and are still enclosed in their sheaths basally.

This tree duck occurs in suitable places throughout the Amazonian-Orinocoan regions traversed by the collectors. It is wholly a bird of the tropical lowlands, seldom occurring over 1,000 feet above the sea.

**NEOCHEN JUBATA** (Spix): *Orinoco Goose*

*Anser jubatus* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 84, pl. 108 ("Ad ripam fl. Solimoëns in insula Praya das Onças").

SPECIMEN COLLECTED:

1 im. ♀, Venezuela, Estado Bolívar, December 8, 1929.

Although labeled as an immature bird this specimen appears to be an adult. It is in fine, fresh plumage.



The so-called Orinoco "goose" is found throughout the areas involved in the present report. According to Phillips (Natural history of the ducks, vol. 1, 1922, p. 201) it is the commonest duck on the Orinoco; it inhabits wet and densely wooded tropical lowlands.

### Family CATHARTIDAE: New World Vultures

**CATHARTES URUBITINGA** Pelzeln: *Yellow-headed Vulture*

*Cathartes urubitinga* "Natterer," PELZELN, Sitzungsber. Akad. Wiss. Wien, vol. 44, 1861, p. 7 (southern and central Brazil).

#### SPECIMEN COLLECTED

1 im. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 15, 1931.

The yellow-headed vulture occurs from northeastern Venezuela and the Guianas south to northern Argentina and Uruguay. Because of the unpleasantness in handling, it (like many of its congeners) is all too rare in collections and has been studied but little. Not enough specimens are available to attempt a study of its possible variations.

### Family ACCIPITRIDAE: Hawks, Harriers, etc.

**CHONDROHIERAX UNCINATUS UNCINATUS** (Temminck): *Hook-billed Kite*

*Falco uncinatus* "Illiger" TEMMINCK, Nouveau recueil de planches coloriées d'oiseaux, livr. 18, 1822, pls. 103, 104, 115, and text ("Vicinity of Rio to the north of Brazil and all of Guiana").

#### SPECIMEN COLLECTED

1 ad.—, Venezuela, Ciudad Bolívar, June 9, 1931.

The single example obtained of this rather uncommon hawk is preserved in alcohol. It is in the gray-barred type of plumage.

**ACCIPITER PECTORALIS** (Bonaparte): *Red-collared Goshawk*

*Falco pectoralis* BONAPARTE, Rev. et Mag. Zool., 1850, p. 490 (Brazil).

#### SPECIMEN COLLECTED

1 ad.—, Venezuela, Cerro Yapacana, Upper Orinoco, April 23, 1931.

By plumage and measurements (wing 263, tail 200 mm.) this specimen is apparently an adult male. As has been pointed out by earlier writers this hawk is very similar to, but much smaller than, *Spizaetus ornatus* in appearance. It is a very rare bird and still is known from only a few widely scattered localities and specimens.

This appears to be the second known Venezuelan specimen, the other being a female from Mount Auyán-tepuí, recorded by Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 457).

**BUTEO ALBICAUDATUS COLONUS** Berlepsch: *Guiana White-tailed Hawk*

*Buteo albicaudatus colonus* BERLEPSCH, Journ. für Orn., vol. 40, 1892, p. 91 (Island of Curaçao).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, near Soledad, Anzoátegui, December 1, 1929.

The short wing length of this example, 418 mm., shows that the bird is of the race *colonus* to which it should belong on geographic grounds. It is a fully adult bird in good plumage. Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 458) has recorded *colonus* from as far south as Mount Auyán-tepuí, and lists it from Maripa, about a hundred miles west of Soledad. It gets to Pará (Ilha Marajó) on the Lower Amazon, but Griscom and Greenway find (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 112) that a bird from the Tapajóz is referable to *B. a. albicaudatus*. They write that the two forms meet in lower Amazonia.

**BUTEO MAGNIROSTRIS MAGNIROSTRIS** (Gmelin): *Insect Hawk*

*Falco magnirostris* Gmelin, Systema naturae, vol. 1, pt. 1, 1788, p. 282 (Cayenne).

## SPECIMENS COLLECTED:

1 ad. ♂, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, opposite Corocoro Island, March 12-16, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 27-29, 1931.

4 ad. ♂, 1 im. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930, and May 11-21, 1931.

1 ad. ♀, Venezuela, Ciudad Bolívar, December 8, 1929.

This excellent series secured between the Casiquiare and Ciudad Bolívar averages slightly darker above than true *magnirostris* as represented by specimens from British Guiana and may eventually prove to be an undescribed race. With the present material it seems best to refer them to the nominate subspecies as the forms of this hawk in South America are not too well defined or understood at the present time.

The bars on the thighs of the adult males are very variable, apparently without regard to geography. Thus, in some specimens from the Casiquiare and the Upper Orinoco the dark bars are very narrow and dull, rather light olive-brown, while in others from the Upper Orinoco they are much broader and tawny-rufescent. Inasmuch as the bird is not known to be migratory, one can look upon this only as individual variation.

The adult female from the Upper Orinoco, opposite Corocoro Island, March 16, is quite different from all the other specimens in the present series in its dark, distinctly brownish-gray coloration on the upperparts and in having much darker bars on the underparts.



Looking up the mouth of the Já River from the Cauabury, Brazil.



View over Rio Negro at Santa Isabel, Brazil.



Serra Imeri, Brazil. Home of the cock-of-the-rock.



Serra Imeri, Brazil. This great unsurveyed cordillera separates Brazil and Venezuela.

LEUCOPTERNIS MELANOPS (Latham): *Black-faced Hawk*

*Falco melanops* LATHAM, Index ornithologicus, vol. 1, 1790, p. 37 (Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 8, 1930.

3 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 31–April 28, 1931.

A male collected April 28 was noted as being in breeding condition when shot.

As far as I know this fine hawk has not been recorded before from the Rio Negro area. It was not known from Venezuela until very recently when Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, pp. 458–459) listed specimens from the Caura River and Mount Auyán-tepuí.

This series agrees with material from British Guiana. The width of the black streaks on the top of the head and interscapulars is very variable; apparently it averages broader in males and narrower in females. A British Guiana unsexed bird is, however, the most broadly streaked one I have seen. Gilliard (*cit. supra*) writes that comparison of a female taken at Mount Auyán-tepuí with four nearly topotypical specimens "indicates that our specimen may prove worthy of recognition when more material is obtained. Chiefly the Auyán-tepuí specimen disagrees with the series at hand by having ground color on head and neck white, not suffused with buff; by having broader darker shaft streaks on head, nape, shoulders, malar region, auriculars, and anterior flanks, by having dark upperparts, including tail, black instead of brownish black, and, finally, by having no suggestion of the white tail tipping, present in all others. It averages larger than true *melanops*: wing 234.5; tail 147; culmen from base 29.5; exposed culmen 21; tarsus 66 . . ." mm. The present series, which should belong with the Mount Auyán-tepuí bird, completely negatives the characters of the dark shaft streaks on the head, nape, and shoulders, and of the white tail tipping (present in five of our six examples). Our British Guiana bird (unsexed) is just as black on the dark areas of the upperparts and tail as our Orinoco and Rio Negro birds and has the ground color of the head and neck just as white, just as little tinged with buffy, as in them. None of our specimens from Brazil, Venezuela, or British Guiana have any dark shaft streaks on the anterior flanks.

Another specimen taken at Playa de Candela, on the Brazo Casiquiare, February 10, was saved in alcohol.

HYPOMORPHNUS URUBITINGA URUBITINGA (Gmelin): *Brazilian Urubitinga*

*Falco urubitinga* GMELIN, Systema naturae, pt. 1, 1788, p. 265 (Brazil).

## SPECIMENS COLLECTED

1 im. ♂, 1 im. –, Venezuela, Cerro Yapacana, April 6–26, 1931.

Widely distributed throughout the areas traversed by the expedition.

**SPIZAETUS ORNATUS ORNATUS** (Daudin): *Crested Eagle Hawk*

*Falco ornatus* DAUDIN, *Traité d'ornithologie*, vol. 2, 1800, p. 77 (Cayenne).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 7, 1931.

The nominate race of this fine bird occurs throughout the countries collected in by the expedition. It is replaced by an allied form *S. o. vicarius* in Central America and western South America.

The specimen is in good, fresh plumage.

**CIRCUS BUFFONI** (Gmelin): *Buffon's Marsh Hawk*

*Falco buffoni* GMELIN, *Systema naturae*, vol. 1, pt. 1, 1788, p. 277 (Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, near Soledad, Anzoátegui, December 1, 1929.

The bird collected is in good, fresh plumage.

This marsh hawk is a bird of eastern South America from Venezuela and the Guianas to the Straits of Magellan; it is rare in Chile. I know of no definite previous record from Venezuela as far to the west as Soledad, although Chapman (*Bull. Amer. Mus. Nat. Hist.*, vol. 36, 1917, p. 240) lists two melanistic birds, probably of this species, from as far west as the Río Frío, Colombia.

**GERANOSPIZA CAERULESCENS** (Vieillot): *Gray Crane-Hawk*

*Sparvius caerulescens* VIEILLOT, *Nouv. Dict. Hist. Nat.*, vol. 10, 1817, p. 318 (South America; Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 20, 1931.

This single specimen obtained is narrowly barred with white below. It measures: Wing 270, tail 214, culmen from cere 18.4, tarsus 77.2 mm.

Although known from Venezuela and the Guianas south to northern Brazil (Santarém, Obidos, Rio Caissary, etc.) this hawk does not appear to have been recorded as yet from the Rio Negro.

## Family FALCONIDAE: Falcons, etc.

**MICRASTUR SEMITORQUATUS SEMITORQUATUS** (Vieillot): *Collared Harrier-Falcon*

*Sparvius semi-torquatus* VIEILLOT, *Nouv. Dict. Hist. Nat.*, vol. 10, 1817, p. 322 (Paraguay, ex Azara).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 5, 1931.

The bird was noted as being in breeding condition when collected; it had a shell-less egg in the oviduct.

It has the following dimensions: Wing (abraded) 266+, tail (abraded) 243+, culmen from cere 20.8, tarsus 90 mm., and therefore agrees with the nominate race of which it is probably one of the northernmost examples on record. As far as I have been able to learn, it is

the first specimen to be collected in Venezuela and is an addition to the avifauna of that country. The northern race *M. s. naso* has been taken in northern Venezuela (Perijá and other localities).

**MICRASTUR MIRANDOLLEI** (Schlegel): *Mirandolle's Harrier-Falcon*

*Astur mirandollei* SCHLEGEL, Mus. Hist. Nat. Pays-Bas, vol. 2, 1862, Astures, p. 27 (Surinam).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 31, 1931.

Even if Griscom and Greenway's Panamanian race of this species, *M. m. extimus*, should prove to be valid (the material I have seen does not enable me to recognize it with any feeling of certainty), the present specimen would be of the typical subspecies.

This is apparently a rather rare bird everywhere in all its vast range from Costa Rica to Peru and northern Brazil. The present specimen has the following dimensions: Wing 230, tail 198, culmen from cere 22.3, tarsus 73 mm.

**MICRASTUR RUFICOLLIS GILVICOLLIS** (Vieillot): *White-throated Harrier-Falcon*

*Sparvius gilvicollis* VIEILLOT, Nouv. Dict. Hist. Nat., vol. 10, 1817, p. 323 (no locality = Cayenne).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 6, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, December 27, 1930.

This gray-breasted race of its species occurs in the Guianas and southern Venezuela (Mount Auyán-tepuí) southward to the Amazon Valley. It has not been recorded as yet from the Upper Orinoco or the Casiquiare; in fact, the only Venezuelan locality to date seems to be Mount Auyán-tepuí.

The specimens collected are in fine, fresh plumage.

**DAPTRIOUS ATER** Vieillot: *Yellow-throated Caracara*

*Daptrious ater* VIEILLOT, Analyse d'une nouvelle ornithologie élémentaire, 1816, p. 68 (Brazil).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

Found sparingly throughout the areas traversed by the expedition.

The white basal area of one of the middle rectrices has a black blotch in it, apparently a type of individual variation common in this species as the majority of examples seen have one or more such spots, but no two birds are alike in this respect.

Two other specimens from the Brazo Casiquiare, one taken at Cerro Guanari, February 4, and one at Cerro Mabinagui, February 20, were saved as alcoholics.

**DAPTRIS AMERICANUS AMERICANUS** (Boddaert): *Red-throated Caracara*

*Falco americanus* BODDAERT, Table des planches enluminées . . ., 1783, p. 25 (ex Daubenton, planches enluminées . . ., pl. 417, no locality=Cayenne, ex Buffon).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

The remiges and rectrices of this specimen are rather abraded terminally; otherwise the bird is in good plumage.

**MILVAGO CHIMACHIMA CORDATUS** Bangs and Penard: *Panama Caracara*

*Milvago chimachima cordatus* BANGS and PENARD, Bull. Mus. Comp. Zool., vol. 62, 1918, p. 35 (San Miguel Island, Pearl Islands, Bay of Panama).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 20, 1931.

The light and dark tail bands in this example are of approximately equal width, agreeing with the characters of *cordatus*. The locality of our bird is probably the southernmost from which the form has been recorded in Venezuela. It occurs on Mount Auyán-tepuí but apparently has not been found on Mount Duida.

**FALCO ALBIGULARIS ALBIGULARIS** Daudin: *Bat Falcon*

*Falco albigularis* DAUDIN, Traité d'ornithologie, vol. 2, 1800, p. 131 (Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Río Negro, opposite San Carlos, altitude 350 feet, January 29, 1931.

A specimen in good, though not fresh, plumage. This pretty little falcon occurs throughout the regions traversed by the expedition.

**FALCO FEMORALIS FEMORALIS** Temminck: *South American Aplomado Falcon*

*Falco femoralis* TEMMINCK, Nouveau recueil de planches coloriées d'oiseaux, livr. 58, 1822, pl. 121, livr. 21, pl. 343 (Brazil, ex Natterer).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, near Soledad, Anzoátegui, December 1, 1929.

In spite of the fact that the specimen is labeled adult, it is apparently an immature bird, being one of those individuals with heavy markings of black on the upper breast, causing that area to appear almost solidly black. It is of very large size for this form, having the following dimensions: Wing 262.5, tail 175, culmen from cere 16.6, tarsus 44.6 mm.

The present race ranges over the greater part of South America from Colombia to Tierra del Fuego, but not in the Ecuadorian and Peruvian Andes, where it is replaced by *F. f. pichinchae* Chapman.

**FALCO SPARVERIUS INTERMEDIUS** (Cory): *Colombian Sparrow Hawk*

*Cerchneis sparveria intermedia* CORY, Publ. Field Mus. Nat. Hist., Orn. Ser., vol. 1, 1916, p. 325 (Villavicencio, 1,600 feet, base of eastern Andes, Colombia).



## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 23, 1931.

This specimen has the breast dull ochraceous, with narrow, indistinct streaks, and has the upper surface rather narrowly barred with black. The subterminal tail band measures in its greatest width 20.4 mm. The bird is paler and smaller than skins from the Merida region of Venezuela and differs from one from El Sombrero, in the state of Guárico, in having the crown decidedly darker gray. It has the following measurements: Wing 180, tail 116, culmen from base 12, tarsus 31 mm. The present specimen comes from the eastern edge of the range at present assigned to this subspecies.

## Family CRACIDAE: Curassows, Guans, etc.

MITU TOMENTOSA (Spix): *Lesser Razor-billed Curassow*

*Crax tomentosa* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 49, pl. 63 (Barcellos, Rio Negro, Brazil).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cachoeira Destacamento, Rio Cauabury, October 29, 1930.

1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 19, 1930.

1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, December 1, 1930.

1 ad. ♂, Venezuela, Brazo Casiquiare, Curare, February 7, 1931.

A fine series of a bird still uncommon in collections.

CRAX ALECTOR Linnaeus: *Crested Curassow*

*Crax alector* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 269 (Cayenne).

## SPECIMENS COLLECTED

2 ad. ♂, 1 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, Base Camp, 322 feet, March 19–22, 1931.

The immature bird shows signs of molt.

This fine curassow inhabits the tropical forests from the three Guianas south to the north bank of the Amazon, west to the Rio Negro, and across southern Venezuela to the east slopes of the eastern Andes in Colombia.

PENELOPE GRANTI ORIENTICOLA Todd: *Rio Negro Guan*

*Penelope jacquacu orienticola* TODD, Proc. Biol. Soc. Washington, vol. 45, 1932, p. 211 (Manacapurú, Rio Solimões, Brazil).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, opposite Buena Vista, February 4, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

The female is molting in the wings.

These specimens have long tails (300–345 mm.) and are therefore *granti* Berlepsch and not *marail* Müller.

Conover and Phelps (Bol. Soc. Venezolana Cienc. Nat., vol. 10, 1947, 321, 325) have listed the present examples in their account of the races of this guan.

**OFTALIS MOTMOT MOTMOT** (Linnaeus): *Guiana Chachalaca*

*Phasianus motmot* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 271 (Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 23, 1931.

The bird collected is in molting condition.

The Guiana chachalaca ranges across the areas traversed by the expedition. It occurs in the three Guianas, southern Venezuela, and northern Brazil, south to the north bank of the Amazon, west to the Rio Negro. The present specimen and those mentioned by Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 460) from Mount Duida are probably the southwesternmost records from Venezuela.

**PIPILE CUMANENSIS CUMANENSIS** (Jacquin): *White-headed Piping Guan*

*Craz (cumanensis)* JACQUIN, Beyträge zur Geschichte der Vögel, 1784, p. 25, pl. 10 (Orinoco River region near Cumaná, Venezuela).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Curare, February 7, 1931.

3 ad. ♂, Venezuela, Brazo Casiquiare, February 17, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

This fine series is remarkably uniform. The female from Curare is molting in the tail, the outermost rectrices being only partly grown.

Ranges from French and British Guiana west across southern Venezuela, and northern Brazil to eastern Colombia, Ecuador, and Peru.

**Family PHASIANIDAE: Pheasants, Quails, etc.**

**COLINUS CRISTATUS SONNINI** (Temminck): *Sonnini's Crested Quail*

*Perdix sonnini* TEMMINCK, Histoire naturelle générale des pigeons et des gallinacés, vol. 3, 1815, p. 451 (no locality stated, but evidently French Guiana).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 5, 1930.

The supposedly immature male resembles the adult one but is paler, especially on the interscapulars, the back, the wings, and to a lesser extent the occiput.

Sonnini's crested quail occurs from the three Guianas and the adjacent north Brazilian areas, westward along the Orinoco Basin. The present examples probably are among the most southwesterly records for the race.

The present specimens do not agree with the description of *C. c. barnesi* or with topotypical specimens of that race; they are very much paler in coloration.

**ODONTOPHORUS GUJANENSIS MEDIUS** Chapman: *Duida Partridge*

*Odontophorus gujanensis medius* CHAPMAN, Amer. Mus. Nov., No. 380, 1929, p. 3 (Caño Secco, Mount Duida, Venezuela).

SPECIMENS COLLECTED

2 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 24–April 1, 1931.

This form of this wide-ranging partridge has the throat and sides of the head grayish as in *buckleyi* but has the underparts ochraceous-tawny as in *gujanensis*. Hellmayr and Conover (Catalogue of birds of the Americas, pt. 1, No. 1, 1942, p. 264, footnote) refer specimens from the uppermost stretches of the Rio Negro (Cocuy) near the Venezuelan boundary, to this race. In other words, here as in so many other species, the birds of the Upper Rio Negro and of the Upper Orinoco are alike. The race ranges from southern Venezuela (Caura and Upper Orinoco Valleys and Mount Duida) to the adjacent parts of extreme northwestern Brazil (Upper Rio Negro and Rio Uaupés).

The male is somewhat paler than the female. Both birds are in fairly fresh plumage.

**Family OPISTHOCOMIDAE: Hoatzins**

**OPISTHOCOMUS HOAZIN** (P. L. S. Müller): *Hoatzin*

*Phasianus hoazin* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 125 (based on "Faisan huppé de Cayenne"; Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 7, 1931.

The single specimen of this peculiar bird obtained is in fine, fresh plumage.

**Family ARAMIDAE: Limpkins**

**ARAMUS GUARAUNA GUARAUNA** (Linnaeus): *Southern Limpkin*

*Scelopaz guaraua* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 242 (based on "Le Courly brun d'Amerique" Brisson, Ornithologia . . ., vol. 5, p. 330, and "Guarauna" Marcgrave, Historiae rerum naturalium Brasiliae libri octo, p. 204; "in America australi"; type from Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Brazo Casiquiare, Viudita, February 13, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, Piedra Pintada, February 14, 1931.

The female has more white along the midventral line than the male. Both birds are in good but slightly worn plumage.

The southern limpkin is widely distributed over tropical South America from Panama to northern Argentina. If Vieillot's form *A. g. carau* be recognized, the southern limit of the nominate race

would be the Amazon River. Gyldenstolpe (Kungl. Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, p. 39) finds birds from the south side of the Amazon are large like the Paraguayan *carau*.

### Family PSOPHIIDAE: Trumpeters

*PSOPHIA CREPITANS CREPITANS* Linnaeus: *Common Trumpeter*

*Psophia crepitans* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 154 (South America=Cayenne, ex Barré).

#### SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 5, 1930.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, February 18, 1931.  
 1 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, Base Camp, 322 feet, March 17, 1931.

The male taken on March 17 was in breeding condition when collected.

The common trumpeter occurs from the Orinoco Valley and its associated drainage system of southern Venezuela to the three Guianas and to northern Brazil north of the Amazon, west as far as the Rio Negro. Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, p. 309) have compared Rio Negro with Guiana birds and find no constant differences.

Holt (Nat. Geogr. Mag., vol. 64, Nov. 1933, p. 606) writes of this species that grunter would be a more descriptive name than trumpeter. "Easily tamed, such birds may be seen on the main streets of almost any backwoods village, where they lord it over domestic fowl of every sort . . ."

### Family RALLIDAE: Rails, etc.

*ARAMIDES CAJANEA CAJANEA* (P. L. S. Müller): *Cayenne Wood Rail*

*Fulica cajanea* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 119 (Cayenne, ex Daubenton, Planches enluminées . . . , pl. 352).

#### SPECIMENS COLLECTED

- 1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 3, 1931.

The two specimens are quite unequal in size, the one from the Casiquiare being considerably larger than the Orinoco bird, but the differences are matched by others in the series examined. The larger bird is also a little darker above and slightly so below.

The nominate race of this species occurs over much of South America from southern Costa Rica to Argentina and Uruguay. It is indeed surprising that a bird that "breaks up" into half a dozen races in Central America should remain so unvarying over an enormous range in South America. It is possible, of course, that larger series will reveal geographic forms there too, but so far the material does not show any.

**PORZANA FLAVIVENTER FLAVIVENTER** (Boddaert): *Yellow-breasted Rail*

*Rallus flaviventer* BODDAERT, Table des planches enluminées . . . , 1783, p. 52  
(Cayenne, ex Daubenton, Planches enluminées . . . , pl. 847).

## SPECIMEN COLLECTED

1 im. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.

Although this little rail has been recorded from many places from the Guianas and Venezuela south to northern Argentina, it is very local in its distribution. It does not seem to have been recorded in print from the Rio Negro area before.

The specimen is in fresh plumage.

## Family HELIORNITHIDAE: Sun-grebes

**HELIORNIS FULICA** (Boddaert): *Little Sun-grebe*

*Colymbus fulica* BODDAERT, Table des planches enluminées . . . , 1783, p. 54  
(Cayenne, ex Daubenton, Planches enluminées . . . , pl. 893).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, below Cachoeira Thomaz, November 2, 1930.

1 ad. ♀, 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 20–21, 1930.

The immature bird is exactly like the adults. One of the adults is just beginning to grow new rectrices; the other is in an earlier stage of molt.

## Family EURYPYGIDAE: Sun-bitterns

**EURYPYGA HELIAS HELIAS** (Pallas): *Surinam Sun-bittern*

*Ardea helias* PALLAS, Neue Nord. Beytr., vol. 2, 1781, p. 48, pl. 3 (Surinam).

## SPECIMENS COLLECTED

1 im. ♂, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 6, 1930.

The only sun-bittern collected is a bird in its postjuvinal molt.

Holt records that a pair was seen on the Cauabury, probably on the day the above specimen was collected. At San Antonio, on the Upper Orinoco, he noted a free, but apparently man-raised, sun-bittern walking about in the vicinity of the village.

## Family JACANIDAE: Jaçanas

**JACANA SPINOSA** JACANA (Linnaeus): *South American Jaçana*

*Parra jacana* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 259 (South America: Surinam accepted as type locality by Berlepsch, Nov. Zool., vol. 15, 1908, p. 304).

## SPECIMEN COLLECTED

1 juv. —, Venezuela, Ciudad Bolívar, December 20, 1929.

This young bird is preserved in alcohol.

## Family CHARADRIIDAE: Plovers

**BELONOPTERUS CHILENSIS CAYENNENSIS** (Gmelin): *Cayenne Lapwing*

*Parra cayennensis* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 706 (Cayenne).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 4, 1930.

The specimen is in molting condition. It fully agrees with the characters of this race as given by Brodtkorb (Occ. Pap. Mus. Zool. Univ. Michigan, No. 293, 1934, pp. 2-4).

The race occurs from Colombia (west to the Atrato and Cauca Valleys) and east through Venezuela and the Guianas to northern Brazil, where it intergrades with *lampronotus* along the Amazon.

**HOPLOXYPTERUS CAYANUS** (Latham): *Spur-winged Plover*

*Charadrius cayanus* LATHAM, Index ornithologicus, vol. 2, 1790, p. 749 (Cayenne).

## SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 4, 1930.

The female marked immature resembles the adult male in plumage and even has the well-developed carpal spur, but it has the black pectoral band much broader than the male.

**PLUVIALIS DOMINICA DOMINICA** (P. L. S. Müller): *American Golden Plover*

*Charadrius dominicus* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 116 (Hispaniola).

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 13, 1930.

A migrant from North America, going as far south as the Argentine pampa country.

**CHARADRIUS COLLARIS** Vieillot: *Collared Plover*

*Charadrius collaris* VIEILLOT, Nouv. Dict. Hist. Nat., vol. 27, 1818, p. 136 (Paraguay, ex Azara).

## SPECIMEN COLLECTED

1 im. ♀, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

The single example obtained is in molting condition; all the remiges are new and only partly grown. On an island just below San Carlos, Río Negro, Venezuela, on January 27, 1931, Holt found and photographed a chick of this species.

The supposedly smaller northern race *C. c. gracilis* Cabanis appears to be unrecognizable. It has been supported, however, fairly recently by Laubmann (Vögel Paraguay, vol. 1, 1939, p. 89) but more recently it has been "sunk" by Gyldenstolpe (Kungl-Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, pp. 42-43).

## Family SCOLOPACIDAE: Sandpipers, etc.

TRINGA MELANOLEUCA (Gmelin): *Greater Yellowlegs*

*Scolopax melanoleuca* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 659 (sandy shores of Labrador=Chateau Bay, Labrador).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Soledad, Anzoátegui, November 29, 1929.

A migrant from North America, the greater yellowlegs has been recorded throughout the length of the South American Continent.

TRINGA SOLITARIA SOLITARIA Wilson: *Eastern Solitary Sandpiper*

*Tringa solitaria* WILSON, American ornithology, vol. 7, 1813, p. 53, pl. 58, fig. 3 (Pocono Mountain, Pennsylvania, Kentucky, New York).

## SPECIMENS COLLECTED

1 im. ♀, Brazil, Manáos, September 27, 1930.

1 im. ♀, Brazil, São Gabriel, Rio Negro, December 30, 1930.

These two specimens are small having wings of 126.6 and 130 mm., respectively, and therefore agree with the nominate form according to the account of the species given by Conover (Auk, 1944, pp. 537-544). They also have the white supraloral streak characteristic of typical *solitaria*.

A migrant from North America.

ACTITIS MACULARIA (Linnaeus): *Spotted Sandpiper*

*Tringa macularia* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 249 (Europe and North America=Pennsylvania, *ex* reference to Edwards, pl. 277, fig. 2).

## SPECIMEN COLLECTED

1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 10, 1930.

A migrant from North America; winters south to Bolivia and southern Brazil.

## Family LARIDAE: Gulls and Terns

PHAETUSA SIMPLEX SIMPLEX (Gmelin): *Great-billed Tern*

*Sterna simplex* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 606 (Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 4, 1930.

The January specimen was noted as having enlarged gonads.

This fine tern occurs along the larger rivers and the coasts of northern South America south to the Amazon Valley, to Pernambuco, and to Bahia along the east coast.

STERNA SUPERCILIARIS Vieillot: *South American Least Tern*

*Sterna superciliaris* VIEILLOT, Nouv. Dict. Hist. Nat., vol. 32, 1819, p. 176 (Paraguay, *ex* Azara, No. 415).

## SPECIMEN COLLECTED

1 im. ♀, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

The single specimen obtained is in molt into adult plumage and presents a mixture of its old and new feathering.

## Family RYNCHOPIDAE: Skimmers

RYNCHOPS NIGRA CINERASCENS Spix: *Brazilian Skimmer*

*Rhynchops cinerascens* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 80, pl. cii (Rio Amazonas).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 10, 1931.

The under wing coverts in the female are slightly darker than in the male. The two specimens are in perfect breeding plumage. They are included in the locality records given by Wetmore (Caldasia, vol. 3, No. 1, 1944, p. 115).

## Family COLUMBIDAE: Pigeons

COLUMBA SPECIOSA Gmelin: *Scaled Pigeon*

*Columba speciosa* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 783 (based on "Pigeon ramier, de Cayenne" Daubenton, Planches enluminées . . ., pl. 213: Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 10, 1930.

The single specimen obtained was noted as being in breeding condition when collected.

This is a wide-ranging, nonvarying bird that occurs without racial differentiation from southeastern Mexico to southern Matto Grosso and to Paraguay.

COLUMBA CAYENNENSIS CAYENNENSIS Bonnaterra: *Rufous Pigeon*

*Columba cayennensis* BONNATERRE, Tabl. Enc. Méth., Ornithologie, vol. 1, livr. 51, 1792, p. 234 (based on "Le Pigeon Ramier de Cayenne" Holandre, Abrégé Hist. Nat., vol. 2, 1790, p. 214: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 13, 1930.

1 ad. ♀, 1 im. ♀, Brazil, São Gabriel, Rio Negro, January 10-17, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, February 6, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Pamoni, February 19, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

6 ad. ♂, 2 ad. ♂, 1 im. ♀, 1 ad. -, Venezuela, Puerto Ayacucho, Río Orinoco, January 5-10, 1930, and May 9-20, 1931.

One of the May birds was noted as being in breeding condition when collected.

These birds are quite variable, especially in degree of darkness or of pallor on the abdomen and flanks.



This is the species that used to be called *rufina*. The material available for study is not sufficient to enable us to come to any independent decision as to the validity of *andersoni* Cory, and we follow Hellmayr and Conover; the latest reviewers of the group (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, p. 455) in considering it a synonym of *cayennensis*. Some years earlier Pinto (Rev. Mus. Paulista, vol. 22, 1938, p. 157) came to the same conclusion, although he used the name *rufina*. Peters (Check list of birds of the world, vol. 3, 1937, p. 67), on the other hand, considers *andersoni* a valid form. If future material should substantiate this race the present series would have to be referred to it. In the original description Cory (Publ. Field Mus. Nat. Hist., Orn. Ser., vol. 1, No. 7, 1913, p. 294–295) states that *andersoni* has the lower abdomen and under tail coverts slate gray, "nearly as in *sylvestris*." This is not true of the present series.

Recently Gyldenstolpe (Kungl. Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, p. 44–45) has found that *sylvestris* occurs north to the north side of the middle stretches of the Amazon, but it clearly does not extend up the Rio Negro.

COLUMBA SUBVINACEA PURPUREOTINCTA Ridgway: *Purple-tinted Ruddy Pigeon*

*Columba purpureotincta* RIDGWAY, Proc. U. S. Nat. Mus., vol. 10, 1888, p. 594, footnote (Demerara, British Guiana).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 3–5, 1931.
- 1 ad. ♂, Venezuela, Brazo Casiquiare, Raudal San Sebastián, February 1, 1931.
- 1 ad. ♂, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.
- 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.
- 1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 20, 1931.
- 1-, Venezuela, Ciudad Bolívar, December 8, 1929.

The example collected on May 20 was noted as having the gonads active and enlarged.

It appears that Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, p. 467) are justified in placing *purpureotincta* as a race of *C. subvinacea*.

The Ciudad Bolívar specimen shows no approach to the description of *C. s. peninsularis* Chapman and appears to be the northernmost Venezuelan record for *purpureotincta*. Chapman's race *peninsularis* is said to be darker vinaceous below and more reddish, less olivaceous on the wings, back, and tail than *purpureotincta*, but the Ciudad Bolívar specimen reverses this if anything when compared with the rest of the series. Hellmayr and Conover record undiluted *purpureotincta* as far down the Orinoco as Maipures, but the present material shows that this race continues at least as far east as Ciudad Bolívar.

ZENAUDURA AURICULATA STENURA (Bonaparte): *Colombian Eared Dove*

*Zenaida stenura* BONAPARTE, Compt. Rend. Acad. Sci. Paris, vol. 40, No. 3, Jan. 1855, p. 98 ("Columbia"=Colombia).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Ciudad Bolívar, June 11, 1931.

This bird has the dull coloration characteristic of this race.

The nomenclature here followed is that advocated by Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, p. 490).

SCARDAFELLA SQUAMMATA RIDGWAYI Richmond: *Ridgway's Scaled Dove*

*Scardafella ridgwayi* RICHMOND, Proc. U. S. Nat. Mus., vol. 18, 1896, p. 660 (Margarita Island, Venezuela).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Soledad, June 11, 1931.

The bird was in breeding condition when collected. It is one of those specimens in which the black barring is relatively narrow, apparently a purely individual variation. It agrees with others from northern Venezuela.

COLUMBIGALLINA PASSERINA GRISEOLA (Spix): *Grayish Ground Dove*

*Columbina griseola* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 58, pl. 75 a, fig. 2 ("in sylvis fl. Amazonum," Brazil).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 31, 1930–January 16, 1931.

The black bill and dark coloration characteristic of *griseola* are well shown in these specimens.

COLUMBIGALLINA PASSERINA ALBIVITTA (Bonaparte): *Cartagena Ground Dove*

*Chamaepelia albivitta* BONAPARTE, Compt. Rend. Acad. Sci. Paris, vol. 40, No. 1, Jan. 1855, p. 21 ("Bogota").

## SPECIMEN COLLECTED

1 im. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 8, 1930.

This race differs from the preceding in the lighter color of the posterior underparts and in the paler bill.

Another example from Puerto Ayacucho was preserved in alcohol.

COLUMBIGALLINA MINUTA MINUTA (Linnaeus): *Plain-breasted Ground Dove*

*Columba minuta* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 285 (based on "Turtur parvus fuscus americanus" Brisson, Ornithologia, vol. 1, p. 116, pl. 8, fig. 2: "San Domingo," errore; Cayenne substituted as type locality by Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 119).

## SPECIMENS COLLECTED

- 1 ad. ♂, 1 im. ♂, Venezuela, San Antonio, Upper Orinoco, March 2-5, 1931.  
 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 6, 1930.

The two males are, respectively, adult and immature, but not as indicated on the labels. By some strange trick of fate, the adult bird is the one marked immature, and vice versa.

**COLUMBIGALLINA TALPACOTI RUFIPENNIS** (Bonaparte): *Red-winged Talpacoti Dove*

*Chamaepelia rufipennis* BONAPARTE, Compt. Rend. Acad. Sci. Paris, vol. 40, No. 1, Jan. 1855, p. 22 (environs of Cartagena, Colombia).

## SPECIMEN COLLECTED

- 1 ad. ♂, Brazil, Cucuhy, Rio Negro, February 1, 1930.

This specimen has the outer web of the outer primary entirely dusky brown but is otherwise like typical *rufipennis*. Cucuhy must be close to the southern limit of the range of the race.

**LEPTOTILA VERREAUXI BRASILIENSIS** (Bonaparte): *Guianan White-fronted Dove*

*Peristera brasiliensis* BONAPARTE, Compt. Rend. Acad. Sci. Paris, vol. 43, No. 20, Nov. 17, 1856, p. 945 (no locality given).

## SPECIMENS COLLECTED

- 2 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 12-14, 1931.  
 1 ad. ♀, Venezuela, Soledad, November 29, 1929.

All these examples are darker, less brownish above, when compared with *L. v. verreauxi* from Panama and western Costa Rica, and also have the hind neck and back grayer.

**LEPTOTILA RUFAXILLA DUBUSI** Bonaparte: *Dubus's Gray-fronted Dove*

*Leptoptila dubusi* BONAPARTE, Comp. Rend. Acad. Sci. Paris, vol. 40, No. 3, Jan. 15, 1855, p. 99 (banks of the Río Napo, Ecuador).

## SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, mouth of Río Maturacá, November 8, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 3-15, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, February 11, 1931.  
 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, February 28, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 14, 1931.  
 2 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2-22, 1931.  
 1 ad. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 3, 1930, and May 14-16, 1931.

Several of the Venezuelan specimens (March, April, and May) were noted as being in breeding condition when collected.

According to Peters (Check list of birds of the world, vol. 3, 1937, p. 126) *dubusi* ranges from southeastern Colombia and eastern Ecuador, eastward to the base of Mount Duida, and the limits of its

range in Brazil are not known. Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, pp. 590-591) write that it extends eastward to the Rio Purús. The present specimens from the upper Rio Negro help fill in the gap between these accounts and certainly are not different from the Upper Orinoco series, which, in turn, are clearly referable to the same race as the birds of the base of Mount Duida.

The nominate form extends westward in northern Brazil only to the Rio Jamundá, as far as known, although in southeastern Venezuela it has been recorded from farther west—from Mount Roraima and Mount Auyán-tepuí. Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 463) includes, without any new evidence, the Upper Orinoco and "northern Brazil," but it seems likely that he would find on reexamination of his material that the birds of the Upper Orinoco and of adjacent parts of Brazil are not *rufaxilla* but *dubusi*.

**OREOPELIA MONTANA MONTANA** (Linnaeus): *Ruddy Quail-dove*

*Columba montana* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 163 (Jamaica).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 6, 1931.  
 1 ad. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.  
 1 ad. ♂, Venezuela, Solano, Brazo Casiquiare, February 2, 1931.  
 8 ad. ♂, 7 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 31-April 28, 1931.

A number of the Cerro Yapacana birds were in breeding condition when collected.

It is not too well established that the race *martinica* is really valid, but the arrangement of Hellmayr and Conover (Catalogue of the birds of the Americas, pt. 1, No. 1, 1942, pp. 601-606) is here followed. It is true that in continental South America (and north to Mexico) there are no local subspecies of this wide-ranging pigeon.

**Family PSITTACIDAE: Parrots**

**ARA ARARAUNA** (Linnaeus): *Blue and Yellow Macaw*

*Psittacus ararauna* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 98 ("South America," Brazil).

SPECIMEN COLLECTED

- 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 18, 1931.

The bird is in worn plumage.

**ARA MACAO** (Linnaeus): *Scarlet Macaw*

*Psittacus macao* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 96 ("South America").

SPECIMENS COLLECTED

- 2 ad. ♀, Venezuela, right bank Upper Orinoco, opposite Corocoro Island, March 16, 1931.



Salto do Huá, Brazil, showing camp of the expedition.



Rio Cauabury, Brazil. View downstream from above Bocca do Já.



View showing the Serro do Cabary to the northwest of São Gabriel, Brazil.



Panoramic view to the northwest of São Gabriel, Brazil.

The rectrices are fairly abraded as is so often the case with these long-tailed macaws.

**ARA CHLOROPTERA** Gray: *Red, Blue, and Green Macaw*

*Ara chloroptera* GRAY, List of the specimens of birds in the collection of the British Museum, pt. 3, Psittacidae, 1859, p. 26 (British Guiana).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Serra Imeri, December 8, 1930.

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 9, 1930.

The female is considerably darker red on the underparts than the male.

**ARA SEVERA CASTANEIFRONS** Lafresnaye: *Lafresnaye's Macaw*

*Ara castaneifrons* LAFRESNAYE, Rev. Zool., 1847, p. 66 (Bolivia).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.

This specimen has a wing length of 243 mm., thereby agreeing in size with the race *castaneifrons*. Peters (Check list of birds of the world, vol. 3, 1937, p. 183) writes that birds from the Upper Amazon are probably referable to this form, but that birds from the Orinoco are typical *severa*. Apparently the two races meet on the Upper Orinoco in extreme southern Venezuela. It appears that the race *castaneifrons* has not been recorded before from Venezuela.

The present specimen is in badly worn plumage; when freshly feathered its dimensions would probably have been still greater.

**ARATINGA PERTINAX AERUGINOSA** (Linnaeus): *Brown-throated Parakeet*

*Psittacus aeruginosus* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 98, No. 12 (America—"West Indies," ex Edwards; Calamar, Lower Magdalena River, Colombia, suggested as type locality by Chapman, Bull. Amer. Mus. Nat. Hist., vol. 36, 1917, p. 257).

SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 16, 1931.

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 20, 1931.

These two specimens appear to be closer to *aeruginosa* than to *chrysophrys*. The male is darker than the female both above and below, and also larger.

**ARATINGA PERTINAX MARGARITENSIS** (Cory): *Margaritan Brown-throated Parakeet*

*Eupsittula pertinax margaritensis* CORY, Publ. Field Mus. Nat. Hist., Zool. Ser., vol. 13, pt. 2, 1918, p. 63 (Margarita Island).

SPECIMENS COLLECTED

3 ad. ♂, 1 ad. ♀, Venezuela, Soledad, December 4, 1929, and June 11–12, 1931.

1 ad. ♂, Venezuela, Ciudad Bolívar, June 11, 1931.

These birds have the brown of the sides of the head distinctly paler than *chrysophrys*, in this respect agreeing with *margaritensis*.

After careful comparison with 17 skins of the latter form in the collections of the National Museum and the Chicago Natural History Museum, the only difference noted by Wetmore is a slightly lighter shade of the breast, sides, and abdomen, particularly in the green areas. Although with additional material this may be looked upon as sufficient to set off another form, it seems best, for the present at least, to use the name *margaritensis* for specimens from northeastern Venezuela as well as from Margarita Island. Peters (Check list of birds of the world, vol. 3, 1937, p. 190) has commented also on the resemblances between birds from the mainland and those of Margarita Island.

**PYRRHURA MELANURA MELANURA** (Spix): *Black-tailed Parakeet*

*Aratinga melanurus* SPIX, Avium species novae . . . Brasiliam . . . , vol. 1, 1824, p. 36, pl. 22 (Tabatinga, Rio Solimões, Brazil).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Cachoeira Thomaz, Rio Cauabury, October 26, 1930.

7 ad. ♂, 3 ad. ♀, Brazil, São Gabriel, Rio Negro, January 12-16, 1931.

Two of the São Gabriel males, marked "adult" by the collectors, have none of the outer greater upper primary coverts red like all the others but have the whole wing area green except for the bluish outer webs of the primaries. In all other respects they agree perfectly with the rest of the series.

This race occurs from the Upper Orinoco to the Rio Negro and to northwestern Amazonia, southwest to northeastern Peru, and to the Solimões River.

Two additional examples from São Gabriel, January 13, 1931, were preserved in alcohol.

**FORPUS SCLATERI EIDOS** Peters: *Schomburgk's Parrotlet*

*Forpus sclateri eidos* PETERS, Check list of birds of the world, vol. 3, 1937, p. 205 (new name for *Psittacula modesta* Cabanis, 1848; not Fraser, 1845; British Guiana).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Cachoeira Caranguejo, Rio Cauabury, October 25, 1930.

1 im. ♀, Brazil, Sitio Conobany, Rio Cauabury, October 25, 1930.

2 ad. ♂, Brazil, Rio Cauabury, below mouth of Rio Já, November 3, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 15, 1931.

2 ad. ♂, Colombia, bank of Río Negro, January 29, 1931.

The immature female has the forehead and front half or more of the crown very pale yellowish green in sharp contrast to the dark green of the occiput and back.

This parrot occurs across the Upper Rio Negro and Upper Rio Orinoco to the Guianas in the northeast and to the Rio Madeira in the southwest.

Another specimen, preserved in alcohol, was taken at São Gabriel, January 15, 1931.



**FORPUS PASSERINUS CYANOCHLORUS** (Schlegel): *Schlegel's Parrotlet*

*Psittacula cyanochlora* "Natterer" SCHLEGEL, Mus. Hist. Nat. Pays-Bas, vol. 3, 1864, Psittaci, p. 31 (Forte do Rio Branco, Brazil) (in synonymy of *Psittaculus sancti-thomae* ("Kuhl"), not *Psittacus St. Thomae* P. L. S. Müller).

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 6, 1931.

In the absence of comparative material, this subspecific identification is made on geographic grounds, but even at that it is open to reexamination as São Gabriel is a good distance west of the Rio Branco, where *cyanochlora* is known to occur.

**FORPUS PASSERINUS VIRIDISSIMUS** (Lafresnaye): *Green Parrotlet*

*Psittacula viridissima* LAFRESNAYE, Rev. Zool., 1848, p. 172 (Caracas, Venezuela).

## SPECIMENS COLLECTED

4 ad. ♂, 1 im. ♂, Venezuela, Soledad, June 12, 1931.

Three of the adults were in breeding condition according to the collector's notes.

**BROTOGERIS JUGULARIS CYANOPTERA** (Pelzeln): *Deville's Parakeet*

*Sittace cyanoptera* "Natterer Cat. MS." PELZELN, Zur Ornithologie Brasiliens, 1870, p. 260 (in synonymy of *Brotegeris jugularis* (Deville)) (Rio Icanna, Rio Vaupé, Brazil).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Cachoeira Manajó, Rio Cauabury, October 30, 1930.

2 ad. ♂, Brazil, Rio Cauabury, below mouth of Rio Já, November 3, 1930.

1 ad. ♀, Brazil, Camanãos, Rio Negro, December 23, 1930.

2 ad. ♂, 4 ad. ♀, Brazil, São Gabriel, Rio Negro, January 1-5, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Chapazon, right bank of Brazo Casiquiare, January 30, 1931.

2 ad. ♀, 1 im. ♀, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.

2 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 8-15, 1931.

On the whole the October to early January birds are less abraded than those collected between the end of January and mid-April.

Peters (Check list of birds of the world, vol. 3, 1937, p. 207) credits the name *cyanoptera* to Salvadori (Catalogue of the birds in the collection of the British Museum, vol. 20, 1891, p. 261), but all that that author does is to list Pelzeln's listing of the name. It appears that von Pelzeln, 1870, is the real starting place of this term in nomenclature.

Two other specimens from São Gabriel were preserved in alcohol.

**BROTOGERIS CHRYSOPTERUS TENUIFRONS** Friedmann: *Rio Negro Parakeet*

*Brotogeris chrysopterus tenuifrons* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 58, 1945, p. 114 (Santa Isabel, Rio Negro, Amazonas, Brazil).

## SPECIMENS COLLECTED

2 ad. ♂, 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 13, 1930.

1 im. ♀, Brazil, Rio Negro, mouth of Rio Cauabury, October 22, 1930.

This is the original series on the basis of which this race was first described. As stated in the description, it agrees with the nominate form above and with *tuipara* of the south bank of the Lower Amazon below. It has the chin spot orange (not brownish as in the nominate form) but has practically no frontal band, and what little there is is not orange (as in *tuipara*) but brownish, almost as in *chrysopterus*. It is known only from the Upper Rio Negro (Santa Isabel, and at the mouth of the Rio Cauabury).

**AMAZONA AMAZONICA AMAZONICA** (Linnaeus): *Orange-winged Parrot*

*Psittacus amazonicus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 147 (Surinam, errore="le pays des Amazones," Hellmayr, Nov. Zool., vol. 17, 1910, p. 406).

SPECIMENS COLLECTED

5 ad. ♂, 2 im. ♂, 4 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 10, 1930, and May 12-23, 1931.

This is the common large green parrot of the areas worked over by the expedition.

**AMAZONA FARINOSA FARINOSA** (Boddaert): *Mealy Parrot*

*Psittacus farinosus* BODDAERT, Table planches enluminées . . . , 1783, p. 52 (Cayenne, ex Daubenton, Planches enluminées . . . , pl. 861).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, right bank Upper Orinoco, opposite Corocoro Island, March 16, 1931.

The yellow on the head of this specimen is restricted to a single feather, making the bird about as close to the race *inornata* as to *farinosa*. The former form occurs south from Panama and northern South America to the Caura River in Venezuela, while the latter ranges from the Caura-Orinoco Basin to Surinam and southward to eastern Peru and to Matto Grosso.

**AMAZONA OCHROCEPHALA OCHROCEPHALA** (Gmelin): *Yellow-headed Parrot*

*Psittacus ochrocephalus* GMELIN, Systema naturae, vol. 1, pt. 1, 1788, p. 339 (South America, restricted to Venezuela by Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 109).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 20, 1931.

Both specimens show traces of molt.

**PIONUS MENSTRUUS** (Linnaeus): *Blue-headed Parrot*

*Psittacus menstruus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 148 (Surinam).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 3, 1931.

An unusually richly colored individual in fresh plumage. From a study of admittedly inadequate material it appears that birds of upper

Amazonia (eastward to Santarém) may be more brightly colored and have the blue more extensive on the breast and upper abdomen than in Guianan examples.

**PIONITES MELANOCEPHALA MELANOCEPHALA** (Linnaeus): *Black-headed Caique*

*Psittacus melanocephalus* LINNAEUS, *Systema naturae*, ed. 12, vol. 1, 1766, p. 149 ("Mexico" = Caracas, *i. e.*, Venezuela, *ex* Edwards, *Gleanings of natural history*, pl. 169).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 6, 1931.

5 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2-29, 1931.

One of the Cerro Yapacana males was noted as having active, enlarged gonads when collected.

**TOUIT PURPURATA VIRIDICEPS** Chapman: *Chapman's Parrotlet*

*Touit purpurata viridiceps* CHAPMAN, *Amer. Mus. Nov.*, No. 380, 1929, p. 10 (Savana Grande, 330 feet, southeastern base of Mount Duida, Venezuela).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 12, 1931.

It seems that this is the first specimen taken except at the type locality and therefore constitutes a slight western extension of the known range of the race. It agrees with Chapman's description, having the entire crown, nape, and sides of the head green like the back. Its dimensions are: Wing 120, tail 47.3; culmen from cere 16.1 mm.

Family CUCULIDAE: Cuckoos

**COCYZUS MELACORYPHUS** Vieillot: *Azara's Cuckoo*

*Coccyzus melacoryphus* VIEILLOT, *Nouv. Dict. Hist. Nat.*, vol. 8, 1817, p. 271 (Paraguay).

SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 16, 1931.

1 ad. ♂, 2 im. ♀, 1 im. —, Venezuela, Ciudad Bolívar, June 8-11, 1931.

One of the June birds was in molt when collected, while another is in such abraded condition that it must have been ready to begin its molt. As a matter of fact, it does show some signs of molt on the occiput.

This cuckoo is found across the regions traversed by the expedition wherever open bushy country occurs. It is not a denizen of the deep forests which cover so much of the basins of the Rio Negro and the Upper Orinoco.

**MICROCOCCYX PUMILUS** (Strickland): *Dwarf Cuckoo*

*Coccyzus pumilus* STRICKLAND, *Contr. Orn.*, 1852, p. 28, pl. 82 ("Trinidad").

SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, Venezuela, Soledad, Anzoátegui, June 12, 1931.

Both specimens were noted as having enlarged, active gonads when collected, indicating that the "immature" male may well have been fully adult, as there is nothing in its plumage to indicate youthfulness.

**PIAYA CAYANA OBSCURA** Snethlage: *Snethlage's Squirrel Cuckoo*

*Piaya cayana obscura* SNETHLAGE, Journ. für Orn., 1908, p. 21 (Bom Lugar, Rio Verde, Upper Rio Purús, western Brazil).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 17, 1930.  
 3 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 13-14, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.  
 2 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 25-April 18, 1931.

These specimens considerably extend the previously known range of this cuckoo. All of them are deep brown above and gray below, with the under surface of the rectrices (except the middle pair) black, tipped with white. The one from San Antonio is lighter brown above than the others and so shows a slight approach to *columbiana*. All are very distinct in appearance from the specimen of *columbiana* taken at Soledad, and they differ from *P. c. cayana* in being slightly darker brown above and in having the under tail coverts lighter.

**PIAYA CAYANA COLUMBIANA** (Cabanis): *Colombian Squirrel Cuckoo*

*Pyrhrococcyx columbianus* CABANIS, Journ. für Orn., 1862, p. 170 (Cartagena, Colombia).

SPECIMEN COLLECTED

- 1 ad. ♀, Venezuela, Soledad, Anzoátegui, November 29, 1929.

This race is much paler than *C. c. obscura*.

**PIAYA MELANOGASTER MELANOGASTER** (Vieillot): *Black-bellied Cuckoo*

*Cuculus melanogaster* VIEILLOT, Nouv. Dict. Hist. Nat., vol. 8, 1817, p. 236 (Java, error=Cayenne by substitution of Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 97).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 12-13, 1931.  
 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 21, 1930.  
 1 ad. ♂, Brazil, Cucuhy, Rio Negro, February 4, 1930.  
 1 ad. ♀, Venezuela, Capibara, Brazo Casiquiare, February 16, 1931.  
 3 ad. ♂, 2 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 18-April 23, 1931.

One of the April birds was noted as having enlarged active gonads when collected.

The Cucuhy bird is slightly paler than any of the others and has a slightly shorter bill, suggesting in these characters an approach to the race *ochracea* Cory, known from Yurimaguas, Peru. It cannot be considered as belonging there, however, for it has these characters

only slightly developed and it comes from an area on all sides of which the nominate form occurs. Pinto (Rev. Mus. Paulista, vol. 22, 1938, p. 175, footnote) finds that birds from the Rio Juruá show a trend in the direction of *ochracea*.

**TAPERA NAEVIA NAEVIA** (Linnaeus): *Striped Cuckoo*

*Cuculus naevius* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 170 (Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Ciudad Bolívar, June 9, 1931.

This specimen is in exceedingly worn plumage and shows signs of molting in the wings.

**CROTOPHAGA MAJOR** Gmelin: *Greater Ani*

[*Crotophaga*] *major* GMELIN, Systema naturae, vol. 1, 1788, p. 363 (Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.]

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 17, 1931.

**CROTOPHAGA SULCIROSTRIS** Swainson: *Groove-billed Ani*

*Crotophaga sulcirostris* SWAINSON, Philos. Mag., 1827, p. 440 (Mexico).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 6, 1930.

**CROTOPHAGA ANI** Linnaeus: *Ani*

*Crotophaga ani* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 105 (Brazil).

SPECIMENS COLLECTED

2 ad. ♂, Brazil, Manáos, September 29, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 10, 1931.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 5, 1931.

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 9, 1931.

1 im. ♂, Venezuela, Ciudad Bolívar, November 25, 1929.

Another specimen from São Gabriel was preserved in alcohol.

## Family STRIGIDAE: Owls

**OTUS WATSONII WATSONII** (Cassin): *Watson's Screech Owl*

*Ephialtes watsonii* CASSIN, Proc. Acad. Nat. Sci. Philadelphia, vol. 4, 1848, p. 123 (South America=Orinoco River, Venezuela, cf. Chapman, Amer. Mus. Nov., No. 332, 1928, p. 2).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, western foothills, December 3, 1930.

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 20, 1931.

The Venezuelan example is somewhat paler on the breast and abdomen and also, to a lesser extent, on the back, than are the Brazilian examples, and it is also somewhat smaller, the wing about 10 mm. shorter. Another female, from eastern Ecuador, agrees with

the Serra Imeri bird and not with the one from the Upper Orinoco. Similarly, our east Ecuadorian male agrees with the present Brazilian one. None of the birds seen approach the figure of *O. w. usta* Sclater (Trans. Zool. Soc. London, vol. 4, 1859, pl. 61), but Chapman (Amer. Mus. Nov., No. 332, 1928, p. 3) states that "Slater's plate suggests *watsoni watsoni* rather than the bird for which I accept the name *usta*." Much more material is needed to elucidate the variations of this owl; at present it is not feasible to tell whether it is a species that breaks up into a number of local races or is merely very variable individually.

**PULSATRIX PERSPICILLATA PERSPICILLATA** (Latham): *Spectacled Owl*

*Strix perspicillata* LATHAM, Index ornithologicus, vol. 1, 1790, p. 58 (Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930.

Apparently rare or local throughout the Rio Negro-Orinoco country.

**CLAUCIDIUM BRASILIANUM PHALAEНОIDES** (Daudin): *Trinidad Ferruginous Pygmy Owl*

*Strix phalaenoides* DAUDIN, Traité d'ornithologie . . ., vol. 2, 1800, p. 206 (Trinidad).

SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 23, 1931.

3 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 18-20, 1931.

These four specimens show a mixed assortment of characters that are difficult to reconcile with each other. They were submitted to Dr. John T. Zimmer for his expert opinion and for comparison with the fine material in the American Museum of Natural History, and he found them all to be referable to *phalaenoides*, although by no means all typical of that race. Thus, one of the Puerto Ayacucho birds he found to be very similar to *duidae* in respect to its dark color and unmarked mantle, but with the streaks on the top of the head less obvious than in that race. These streaks are sometimes absent in *phalaenoides* where the mantle is usually more strongly marked, but not always so. Since *duidae*, as currently understood, is a form of high elevations, it appears that this specimen may be looked upon as *phalaenoides* but showing a trend toward *duidae*. Another one of the Puerto Ayacucho birds, however, has larger spots on the head than it should have, and can be matched in this respect only with typical *brazilianum*. Zimmer writes me that his series of *phalaenoides* come fairly close in this regard and the bird is probably *phalaenoides* at one extreme of its variational range. The third example from Puerto Ayacucho is considerably larger than the other two, but not beyond the range of the series in the American Museum. The Cerro Yapacana bird appears to be a fairly normal *phalaenoides*.

Peters (Check list of birds of the world, vol. 4, 1940, p. 130) gives the range of this owl as "Islands of Trinidad and Margarita; tropical parts of northern Venezuela; Guiana (?)." The present specimens come from a good distance to the south of "northern Venezuela," and this may account for their variational trends toward *dividae* and *brasilianum*. Until good series of birds from the Upper Orinoco can be assembled to determine the limits of variation in that region, the present examples will have to be assigned to *phalaenoides*.

**CICCABA HUHULA** (Daudin): *Dark Wood Owl*

*Strix huhula* DAUDIN, *Traité d'ornithologie* . . ., vol. 2, 1800, p. 190 (Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.

This specimen, in molting condition when collected, appears to be the only record for the species from Venezuela. This bird is the one mentioned by Kelso (*Synopsis of the American wood owls of the genus Ciccaba*, 1932, pp. 8-9). I have seen no other specimens of *huhula* and may only point out that the present one differs from the colored plates (Levaillant, *Oiseaux d'Afrique*, vol. 1, 1796, pl. 41, and Spix, *Avium species novae* . . . *Brasiliam* . . ., vol. 1, 1824, pl. 10a) in that it lacks the broad white terminal tail band, the tips of the rectrices being black with a narrow subterminal white band.

Family CAPRIMULGIDAE: Nighthawks, etc.

**CHORDEILES PUSILLUS ESMERALDAE** Zimmer and Phelps: *Esmeraldan Least Nighthawk*

*Chordeiles pusillus esmeraldae* ZIMMER and PHELPS, *Amer. Mus. Nov.*, No. 1338, 1947, p. 1 (Esmeralda, Territorio Amazonas, Venezuela; altitude 100 meters).

SPECIMENS COLLECTED

4 ad. ♂, 4 ad. ♀, Venezuela, Río Negro, San Carlos, January 27-28, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, February 28, 1931.

The fact that the collectors never met with this species in any number except on two days on the Venezuelan headwaters of the Río Negro makes one wonder if the species may be migratory and whether the meeting with it was due to a sudden flight. Unfortunately, nothing is known of the habits of this nighthawk, and no notes were made as to the condition of the gonads of the examples collected with one exception—a female from San Carlos, January 27, which was in breeding condition.

This race differs from both *pusillus* and *septentrionalis* in having the under tail coverts strongly barred.

**CHORDEILES RUPESTRIS** (Spix): *Sand-colored Nighthawk*

*Caprimulgus rupestris* SPIX, *Avium species novae* . . . *Brasiliam* . . ., vol. 2, 1825, p. 2, pl. 2 (Rocky Islands in the Río Negro, Brazil).

## SPECIMENS COLLECTED

4 ad. ♂, 2 ad. ♀, Venezuela, Isla Yagrumo, Río Negro, January 25, 1931.

This fine series of a bird still rare in collections, together with five others, including the types of *xyostictus* and *zaleucus*, suggests that there are no recognizable subspecies of this nighthawk. There is a slight dichromatism in the six Isla Yagrumo birds, which more than offsets the supposed color characters of *xyostictus* and *zaleucus*. As for the supposed size characters, it must be pointed out that in the case of *zaleucus* Oberholser (U. S. Nat. Mus. Bull. 86, 1914, p. 118) calls the type an adult female, while admitting that it is marked "male" on the original label, while in *xyostictus* (ibid., p. 116) he gives the type as an adult male, but it is actually an unsexed bird. In his table of measurements he records two specimens of *xyostictus*, a male (the type) and a female, but neither of the specimens bears any sex mark on the label. In other words, such slight size characters as he gives for these two races are based on purely arbitrary sexing and have no factual basis.

Three of the present examples show signs of molting in the wings; one of the males (U. S. N. M. No. 326819) is in the "gray" phase; the other specimens are in the "brown" phase.

The bird appears to be an addition to the known avifauna of Venezuela.

**CHORDEILES ACUTIPENNIS ACUTIPENNIS** (Hermann): *South American Nighthawk*  
*Caprimulgus acutipennis* HERMANN, Tabula affinitatum animalium, 1783, p. 230  
(Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Venezuela, San Carlos, Río Negro, January 28, 1931.

3 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 21-23, 1931.

Two of the males are rather small, having wings only 156 mm. long, while the third has a wing length of 166 mm. However, in their color characters all agree very closely, and the small birds are larger than the minimal measurements given by Oberholser in his account of this nighthawk (U. S. Nat. Mus. Bull. 86, 1914, p. 95).

**NYCTIPROGNE LEUCOPYGA EXIGUA** Friedmann: *Northern Small-billed Nighthawk*  
*Nyctiprogne leucopyga exigua* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 58,  
1945, p. 117 (right bank of Upper Orinoco, opposite Corocoro Island,  
Venezuela).

## SPECIMENS COLLECTED

2 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 12, 1931.

Two of the males, one from each locality, were noted by the collectors as being in breeding condition.



This is the original series on which the description of *N. l. exigua* was based. The form is similar to the nominate one of the Amazon Valley but is smaller (wings 128.2–136.4 in *exigua* as against 139–142 in *leucopyga*) and darker, the upperparts with the blackish marks larger and with the pale buffy marks on the outer webs of the remiges and rectrices reduced in size and frequency. The known range of *exigua* is from the upper stretches of the Orinoco (opposite Corocoro Island) south to the northern part of the Brazo Casiquiare (at the mouth of the Río Pacila), extreme southern Venezuela.

NYCTIPROGNE LATIFASCIA Friedmann: *Blackish Small-billed Nighthawk*

*Nyctiprogne latifascia* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 58, 1945, p. 118 (Raudal Quirabuena, Brazo Casiquiare, Venezuela).

SPECIMENS COLLECTED

1 ad. ♂, Venezuela, San Carlos, Río Negro, January 27, 1931.

4 ad. ♂, 2 ad. ♀, Venezuela, Raudal Quirabuena, Brazo Casiquiare, February 5, 1931.

Most of the specimens were in breeding condition when collected, according to the notes on their labels.

One of the males from Raudal Quirabuena is the type of this species, the whole series are paratypes. This nighthawk is similar to *Nyctiprogne leucopyga exigua* in size (males very slightly larger, the females more noticeably so), but the remiges and rectrices have no buffy transverse marks on their outer webs, the dark terminal area of the tail (from the white band to the tip of the tail) is much broader (47–51 mm. wide as against 30–40 mm. in *exigua* or typical *leucopyga*), and the coloration above and below is much darker, more blackish, less vermiculated with tawny-buff, the crown, occiput, and upper back being practically solid fuscous-black in *latifascia*.

This form is known only from extreme southern Venezuela, from San Carlos on the uppermost reaches of the Río Negro north to Raudal Quirabuena, on the Brazo Casiquiare. The present limits of the ranges of this bird and of *N. leucopyga exigua* are indeed difficult to explain except by the accident of collecting. As far as known there are no barriers to effect any spatial isolation between these birds and *exigua*, and it may well be that future collecting will find two to occur together. I know of no other case where two closely allied forms divide the Brazo Casiquiare between them. The whole, rather short extent of that stream seems to show no local variation in any of its birds.

An additional specimen from the Brazo Casiquiare, at Raudal Quirabuena, taken February 5, was preserved in alcohol.

PODAGER NACUNDA MINOR Cory: *Northern Nacunda Nighthawk*

*Podager nacunda minor* CORY, Publ. Field Mus. Nat. Hist., Orn. Ser., vol. 1, 1915, p. 300 (Bôa Vista, Rio Branco, Brazil).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Isla Yagrumo, Río Negro, January 25, 1931.

This example has the small measurements of the northern race, to which, by geography, it should belong. It is in rather worn plumage.

**LUROCALIS SEMITORQUATUS SEMITORQUATUS** (Gmelin): *Semicollared Nighthawk*  
*Caprimulgus semitorquatus* GMELIN, *Systema naturae*, vol. 1, pt. 2, 1789, p. 1031  
(Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, San Carlos, Río Negro, January 28, 1931.

The single specimen obtained is in worn plumage, the feathers of the interscapular and upper back areas being particularly abraded.

**NYCTIDROMUS ALBICOLLIS ALBICOLLIS** (Gmelin): *Cayenne Parauque*  
*Caprimulgus albicollis* GMELIN, *Systema naturae*, vol. 1, 1789, p. 1030 (Cayenne).

## SPECIMENS COLLECTED

2 ad. ♂, 1 im. ♂, 1 ad. ♀, Brazil, Santa Isabel, Río Negro, October 10-13, 1930.

1 ad. ♀, Brazil, São Gabriel, Río Negro, January 12, 1931.

3 ad. ♂, Venezuela, San Carlos, Río Negro, January 28.

1 ad. ♂, 1 ad. -, Venezuela, Cerro Yapacana, Upper Orinoco, April 5-29, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 9-16, 1931.

Some of the specimens taken in January, February, and May were noted as having enlarged, active gonads when collected.

All the Venezuelan specimens are in the rufescent phase, the rufescent color being especially strong on the throat and upper breast. The most variable feature is the color of the crown, occiput, nape, and interscapulars, which varies from pale tawny in one male to sayal brown tinged with gray in another, and to light drab tinged with avellaneous in another.

The Brazilian examples include birds in both the gray and the rufescent phase. They average a little darker than the Venezuelan birds (comparing only birds in the same phase) and appear to constitute what may prove to be a recognizable local form. Unfortunately they appear to correspond to the characters of the Peruvian form *N. a. obscurus* Cory. Zimmer (*Publ. Field Mus. Nat. Hist., Zool. Ser.*, vol. 17, 1930, p. 268), however, found that *obscurus* was not separable from *albicollis*. He had the type of *obscurus* available for study and found that there was "great variation in coloration throughout the series, with the two extremes of brown and sooty plumage quite different when compared with each other, but there are intermediates of every stage. The type of *obscurus* is a dark bird but it can be matched by specimens from near the type locality of *albicollis* while other Peruvian skins are as light in color as from

any other regions." The five Brazilian skins have been compared with specimens of *N. a. derbyanus*, with which they also disagree. It is possible that they represent an undescribed race, although how they differ from those individuals of *albicollis* that fit the description of *obscurus* is difficult to see.

**CAPRIMULGUS NIGRESCENS NIGRESCENS** Cabanis: *Dark Nighthawk*

*Caprimulgus nigrescens* CABANIS, in Schomburgk, Reisen in Britisch-Guiana . . . ; pt. 3, 1848, p. 710 (Lower Essequibo River, British Guiana).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Rio Cauabury, October 31, 1930.  
 1 ad. ♀, Brazil, Rio Maturacá, November 8, 1930.  
 2 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, December 30, 1930–January 6, 1931.  
 1 ad. ♂, Venezuela, San Carlos, Río Negro, January 28, 1931.  
 1 ad. ♂, Venezuela, Puerto Ayacucho, Upper Orinoco, January 8, 1930.

The Puerto Ayacucho bird was in breeding condition when collected.

In the absence of adequate comparative material, we follow Peters (Check list of birds of the world, vol. 4, 1940, p. 202) in considering *C. n. duidae* Griscom and Greenway a synonym of this race, with, however, due notice of the fact that the two describers stick to their original conception of the races of this nighthawk in a paper subsequent to Peters' volume (Bull. Mus. Comp. Zool., vol. 88, 1941, pp. 164–165). If future work should uphold *duidae* the present series would have to be referred to it.

**HYDROPSALIS CLIMACOCERCA SCHOMBURGKI** Selater: *Schomburgk's Nighthawk*

*Hydrosalis schomburgki* "G. R. Gray" SCLATER, Proc. Zool. Soc. London, 1866, p. 142 (British Guiana).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Rio Cauabury, Cachoeira Thomaz, October 26, 1930.  
 1 ad. ♀, Brazil, Rio Cauabury, below Cachoeira Destacamento, October 28, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Rio Cauabury, Cachoeira Destacamento, October 29 and December 14, 1930.  
 1 ad. ♀, Venezuela, Isla Yagrumo, Río Negro, January 25, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Santa Rosa, Río Negro, January 26, 1931.  
 1 ad. ♂, Venezuela, below San Carlos, Río Negro, January 27, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, Raudal San Sebastián, February 1, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Perro de Agua, February 18, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Buenos Aires, February 21, 1931.

Most of the examples collected in January and February were noted as being in breeding condition.

This series varies very considerably, so much so, in fact, that one is led to wonder if possibly it may be a migratory species and that more than one race is here represented. The three males from

the Brazo Casiquiare are different enough from each other in dorsal paleness or duskiness to represent as many "races" of some nighthawk species. If they are all resident birds it is strange indeed that the same species should show such excessive local speciation on the Lower Amazon, where between Obidos and Santarém, an air-line distance of not over 75 miles, three races are currently recognized.

The six females show a rather unusual type of variation apparently wholly individual in character. Three of them have a single large transverse buffy spot on the inner webs of the outer remiges; the other two have three such markings and have them somewhat lengthened, producing on the successive remiges the appearance of two bands. These three specimens (one from the Rio Cauabury, one from Isla Yagrumo, and one from the Brazo Casiquiare, Upper Rio Negro) have the blackish streaks on the top of the head narrower than do the other three.

The female from Cachoeira Destacamento is considerably larger than the other examples, wing 155 as against 147-150; tail 123 as against 107-114 mm. in the others.

The male collected on February 1 at Raudal San Sebastián is in molt.

The present series constitutes an extension of the known range of this nighthawk southwestward to the Casiquiare and Río Negro in extreme southern Venezuela and also into adjacent parts of Brazil, to the avifauna of which country it appears to be an addition.

On December 14, 1930, at Cachoeira Destacamento, Amazonas, Brazil, Holt found and photographed a "nest" and two eggs of this bird.

#### Family NYCTIBIIDAE: Potoos

##### NYCTIBIUS GRANDIS (Gmelin): *Grand Potoo*

*Caprimulgus grandis* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 1029 (Cayenne).

##### SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 7, 1930.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 8, 1931.

The Brazilian bird is in a much paler phase than is the Venezuelan example.

##### NYCTIBIUS GRISEUS GRISEUS (Gmelin): *Gray Potoo*

*Caprimulgus griseus* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 1029, No. 5 (Cayenne).

##### SPECIMEN COLLECTED

1 ad. ♀ Brazil, Serra Imeri, Rio Maturacá, near Salto do Huá, November 27, 1930.

This bird is in rather worn plumage.

## Family APODIDAE: Swifts

CHAETURA SPINICAUDA AETHALEA Todd: *Todd's Spine-tailed Swift**Chaetura spinicauda aethalea* TODD, Proc. Biol. Soc. Washington, vol. 50, 1937, p. 183 (Benevides, Pará, Brazil).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Chapazon, right bank of Brazo Casiquiare, January 30, 1931.

The lone example of this swift secured was noted as being in breeding condition when collected.

No material of *C. s. aethalea* has been available for comparison, but Dr. J. T. Zimmer has kindly compared this specimen with an example from the Tocantins in the American Museum of Natural History. He writes me that the two agree in all essential details although the sexes are different. The present bird is a trifle larger, but both are even more definitely larger than the average of *C. s. spinicauda*; although not much larger than the maximum extreme of that form. Both are distinctly darker on the underparts, both having a definitely whitish throat and both have more gray on the shorter upper tail coverts. Our specimen has the following dimensions: Wing 108, tail 40, culmen from base 5.5 mm.

This specimen extends the known range of the subspecies considerably to the north and constitutes an addition to the known avifauna of Venezuela.

AERONAUTES MONTIVAGUS TATEI (Chapman): *Tate's Swift**Duidia tatei* CHAPMAN, Amer. Mus. Nov., No. 380, 1929, p. 11 (High Point Camp, Mount Duida, Venezuela, 7,100 feet).

## SPECIMENS COLLECTED

1 ad. ♀, 1 im. —, Brazil, Serra Imeri, near Salto do Huá, December 3–9, 1930.

These two specimens constitute a small southwestern extension of the known range of this swift and add it to the recorded avifauna of Brazil. Previously it was known only from Mount Duida and Mount Auyán-tepuí, although it probably occurs in the Guiana highlands as well. The present records are more remarkable in that they come from a lowland area; in other words they extend the known range of the bird more extensively altitudinally than geographically.

The immature bird is much darker, more blackish, less brownish above than the adult female, and it may be a male. The dimensions of the two are as follows: ad. ♀—wing 116, tail 41, culmen from base 7.5 mm.; immature unsexed—wing 113, tail 40, culmen from base 7.4 mm.

I am indebted to Dr. J. T. Zimmer for comparing these specimens with material of *tatei* in the American Museum of Natural History.

REINARDA SQUAMATA SEMOTA Riley: *Riley's Swift*

*Reinarda squamata semota* RILEY, Proc. Biol. Soc. Washington, vol. 46, 1933, p. 39 (El Mango, Brazo Casiquiare, Venezuela).

## SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, 2 im. ♀, 1 —, Venezuela, El Mango, Brazo Casiquiare, February 5, 1931.

1 im. ♀, Venezuela, Brazo Casiquiare, near Caño Pamoni, February 19, 1931.

This is the original series that Riley had when he described *semota*. The adult female from El Mango is the type specimen.

Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, pp. 468–469) has found typical *squamata* to range from British Guiana westward to the lower Orinoco (Altigracia and Caicara) as well as to Mount Auyán-tepuí, Venezuela. Recently Rogers has examined the present examples and has compared them with specimens of *squamata* and concurs in finding *semota* a valid race.

Inasmuch as the race *semota* is still very rare in collections, it may be well to state its distinguishing characteristics. It differs from the nominate form in having the upperparts a shining greenish black instead of brownish black; in having a broader and darker pectoral band; and in having the feathers of the throat and center of the breast only fringed with white, with the dark basal parts of the feathers extensively exposed, and with the under tail coverts shining greenish black with only a very narrow white fringe on the inner web (instead of nearly all the inner web being white and the outer web narrowly edged with the same).

Peters (Check list of birds of the world, vol. 4, 1940, p. 255) writes that “birds recorded from eastern Peru may be referable here,” while Riley (*cit. supra*) states that “the species has been recorded from Peru, but birds from there will almost certainly prove to be different from the more eastern birds.”

Recently Gyldenstolpe (Kungl. Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, p. 72) has indicated that a specimen from Manáos shows characters of *semota* while another from the same place is typical *squamata*, and suggests that this throws some doubt on the validity of *semota*. This is, however, slight evidence upon which to base a case against the Casiquiare race.

## Family TROCHILIDAE: Hummingbirds

THRENETES LEUCURUS LEUCURUS (Linnaeus): *White-tailed Barbed-throat*

*Trochilus leucurus* LINNAEUS, Systema naturae, ed. 2, vol. 1, 1766, p. 190 (“America Meridionale” = Surinam).

## SPECIMENS COLLECTED

1 ad. ♂, 1 —, Brazil, São Gabriel, Rio Negro, December 29, 1930, January 3, 1931.



Cucuhy, Brazil, from the south.



The Cerro Yapaana, Upper Orinoco, Venezuela. This remarkable isolated mountain rises precipitously from the banks of the Orinoco. It has never yet been climbed and may well have undescribed kinds of birds on its higher parts.



The Casiquiare, looking out through the intake to the Orinoco, Venezuela.



The Casiquiare, looking downstream from Cerro Guanari, Venezuela.



The unsexed bird is immature and was molting into adult plumage when collected. It is much paler below than the adult male, and also is smaller; it may be a female.

As Gilliard has shown (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 469) that this bird occurs north to Mount Auyán-tepui in Venezuela; so far it seems not to have been recorded from the Mount Duida—Upper Orinoco region).

**GLAUCIS HIRSUTA HIRSUTA** (Gmelin): *Hairy Hermit*

*Trochilus hirsutus* GMELIN, Systema naturae, vol. 1, 1788, p. 490 (Brazil).

SPECIMEN COLLECTED

1 im. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

The subspecific identification here used for this immature specimen is based on the usage of Pinto (Rev. Mus. Paulista, vol. 22, 1938, p. 248) and Todd (Annals Carnegie Mus., vol. 29, 1942, p. 275). Cory (Catalogue of the birds of the Americas, pt. 2, No. 1, 1918, p. 152) refers specimens from our area to *G. h. affinis*.

**PHAETHORNIS SUPERCILIOSUS SUPERCILIOSUS** (Linnaeus): *Guiana Hermit*

*Trochilus superciliosus* LINNAEUS, Systema naturae, vol. 1, ed. 12, 1766, p. 189 ("Cayenne").

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♀, Brazil, São Gabriel, Rio Negro, December 29, 1930-January 1, 1931.

1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.

4 ad. ♂, 1 ad. ♀, 1 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, March 29–April 26, 1931.

Two of the Cerro Yapacana birds were noted as being in breeding condition when collected.

In the absence of adequate comparative material we accept Todd's conclusion (Ann. Carnegie Mus., vol. 29, 1942, p. 278) that *saturator* Simon, described from the Upper Orinoco, is not distinct from *superciliosus*.

**PHAETHORNIS BOURCIERI** (Lesson): *Bourcier's Hermit*

*Trochilus bourcierii* LESSON, Les Trochilidae, 1832, p. 62, pl. 18 ("Bresil" = Rio Tapajóz, Griscom and Greenway, Bull. Mus. Comp. Zool., vol. 88, 1941, p. 168).

SPECIMENS COLLECTED

1 im. —, Brazil, Rio Cauabury, below Cachoeira Thomaz, November 2, 1930.

1 —, Brazil, Salto do Huá, Rio Maturacá, November 24, 1930.

1 ad. ♂, Venezuela, Chapazon, right bank of Brazo Casiquiare, January 30, 1931.

1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 28, 1931.

The adult male was in breeding condition when collected.

The two unsexed birds appear to be females by plumage characters.

The genus *Ametrornis* proposed for this species because of its nearly straight bill seems too slightly characterized to be maintained as distinct from *Phaethornis*.

Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, pp. 168-169) consider the birds of the Guianas and Mount Duida as a different race, *whitelyi* Boucard, 1891, distinguished by its more uniformly pale mouse brown underparts. If this be maintained by further material, our Venezuelan birds, coming from fairly near to Mount Duida, would have to be considered *whitelyi*. The problem then would be to place the Brazilian specimens. They are not in plumage condition to allow for subspecific identification, but are less uniform below than are the Venezuelan birds. If the usual distributional pattern apply in this species the Upper Rio Negro population would be the same as the Upper Orinoco one. In that event *whitelyi* would include these northwestern Brazilian birds. Griscom and Greenway mention an intermediate example from Caquetá, Colombia, which would be in keeping with such an arrangement.

Apparently the only previous Brazilian records for the species are Natterer's one from Marabitanas on the Rio Negro, and a male from Caxiricatuba, Rio Tapajóz, listed by Griscom and Greenway. If we accept the restriction of the type locality to the Rio Tapajóz (why not make it Caxiricatuba to be more exact, while about it?) the range of the nominate form, if *whitelyi* were to be recognized, would be: the Tapajóz to the Lower Rio Negro and westward to eastern Ecuador and Peru; and *whitelyi* would extend from the Guianas to southern Venezuela and possibly to adjacent areas of the Upper Rio Negro in Brazil.

**PHAETHORNIS RUBER EPISCOPUS** Gould: *Bishop Hermit*

*Phaethornis episcopus* GOULD, Proc. Zool. Soc. London, 1857, p. 14 (Demerara, British Guiana).

**SPECIMENS COLLECTED**

- 1 im.—, Venezuela, Chapazon, right bank Brazo Casiquiare, January 30, 1931.
- 1 ad. ♀, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.
- 1 im. ♂, 1 im.—, Venezuela, Brazo Casiquiare below mouth of Río Pacila, February 13, 1931.
- 1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930.

The adult male was noted as being in breeding condition when collected.

The total comparative material available for study when identifying these specimens has been rather meagre, and the results arrived at by Hellmayr (Nov. Zool., vol. 14, 1907, pp. 75-76) have been followed as best fitting the material seen. The present examples are mostly in poor condition, making it impossible to study them very critically.

CAMPYLOPTERUS LARGIPENNIS (Boddaert): *Broad-shafted Saberwing*

*Trochilus largipennis* BODDAERT, Table des planches enluminées . . . , 1783, p. 41 (Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♀, 1 ad. —, Brazil, Serra Imeri, Rio Maturacá, November 26–December 2, 1930.  
 1 ad. ♂, Venezuela, Chapazon, right bank Brazo Casiquiare, January 30, 1931.  
 1 im. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 13–28, 1931.

The unsexed bird from Serra Imeri differs from all the others in that it has a pale brown "horn-colored" mandible, not a blackish one. It seems not unlikely that *obscurus* and *aequatorialis* will prove to be conspecific with *largipennis*; in fact, they have been so considered by some authors, such as Berlioz, Griscom, and Greenway, although Todd, Pinto, and others keep them as specifically distinct.

FLORISUGA MELLIVORA MELLIVORA (Linnaeus): *Jacobin Hummingbird*

*Trochilus mellivorus* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 121 ("India," errore=Guiana, Brabourne and Chubb, The birds of South America, vol. 1, 1912, p. 111).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Rio Cauabury, Cachoeira Caranguejo, October 25, 1930.  
 1 im. ♀, Brazil, Rio Cauabury, Panela de Onca, November 1, 1930.  
 1 im. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare at mouth of Caño Atamoni, February 6, 1931.

The adult male was in breeding condition when shot. The immature bird taken on January 30 is nearly in adult plumage; the one collected on November 1 is entirely in juvenal dress.

AGYRTRINA VERSICOLOR MILLERII (Bourcier): *Miller's Emerald*

*Trochilus millerii* Lodd; MSS. ined., BOURCIER, Proc. Zool. Soc. London, 1847, p. 43 (Rio Negro).

## SPECIMENS COLLECTED

- 1 im. —, Venezuela, Solano, Brazo Casiquiare, February 2, 1931.  
 1 ad. ♂, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.  
 1 im. —, Venezuela, San Antonio, Upper Orinoco, March 5, 1931.  
 1 im. ♂, 1 —, Venezuela, Cerro Yapacana, Upper Orinoco, April 7–14, 1931.

The adult male was noted as being in breeding condition.

AGYRTRINA FIMBRIATA FIMBRIATA (Gmelin): *Lesson's Emerald*

*Trochilus fimbriatus* GMELIN, Systema naturae, vol. 1, 1788, p. 493 (Cayenne).

## SPECIMENS COLLECTED

- 1 ad. — (♀), Venezuela, Cerro Yapacana, Upper Orinoco, April 29, 1931.  
 1 ad. ♂, 1 ad. ♀, 1 im. ♀, 1 ad. — (♀), Venezuela, Puerto Ayacucho, Río Orinoco, May 8–19, 1931, and January 2, 1930.

These specimens agree with others from British Guiana.

No material of *apicalis* (Gould) has been available for direct comparison, but the close agreement of the present birds with examples from British Guiana suggests that *apicalis* is restricted to more western parts of Venezuela and eastern Colombia, and that the nominate race comes up from the south into the Upper Orinoco Valley.

**SAUCEROTTIA TOBACI CAURENSIS** Berlepsch and Hartert: *Caura Valley Hummingbird*

*Saucerottia erythronotus caurensis* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 84 (Suapure, Caura River, Venezuela).

SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, Venezuela, Ciudad Bolívar, June 8-10, 1931.

In the original description of this race specimens are listed from Ciudad Bolívar, which strengthens the identifications of the present examples from that locality.

**HYLOCHARIS SAPPHIRINA** (Gmelin): *Guiana Sapphire*

*Trochilus sapphirina* GMELIN, Systema naturae, vol. 1, 1788, p. 496 (Guiana).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Manáos, Amazonas, October 2, 1930.

1 im. -, Brazil, San Carlos, Rio Negro, January 28, 1931.

This hummingbird ranges across the country traversed by the expedition but was met with only once, at Manáos.

**HYLOCHARIS CYANUS VIRIDIVENTRIS** Berlepsch: *Green-vented Sapphire*

*Hylocharis viridiventris* BERLEPSCH, Ibis, 1880, p. 113 (Merida).

SPECIMENS COLLECTED

2 im. ♂, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.

2 im. ♂, 1 ad. ♀, 1 im. -, Venezuela, Cerro Yapacana, Upper Orinoco, April 16-23, 1931.

The two "immature" males from Cerro Yapacana were probably adult birds, as one of them was noted as having active, enlarged gonads, and both were in adult plumage. The Tamatama birds show signs of body molt.

**CHLOROSTILBON CARIBAEUS** Lawrence: *Caribbean Emerald*

*Chlorostilbon caribaeus* LAWRENCE, Ann. Lyc. Nat. Hist. New York, vol. 10, 1874, p. 13 (Curaçao).

SPECIMENS COLLECTED

3 ad. ♂, 1 - (♀), Venezuela, Ciudad Bolívar, June 10, 1931.

Two of the males were noted by the collectors as being in breeding condition.

After comparison of a large series, including the specimens in the U. S. National Museum and the Carnegie Museum, Dr. Wetmore

informs me that he could see no differences between birds from the Orinoco region that had been separated as the subspecies *nanus* by Berlepsch and Hartert and those from northern Venezuela, including Curaçao. Todd previously came to the same conclusion. Simon's race *orinocensis* is likewise a synonym of *caribaeus*.

**THALURANIA FURCATA FISSILIS** Berlepsch and Hartert: *Venezuelan Wood Nymph*

*Thaluria furcata fissilis* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 87 (Caura River, Venezuela).

SPECIMENS COLLECTED

14 ad. ♂, 5 im. ♂, 9 ad. ♀, 2 im. ♀, 2 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, March 18–April 23, 1931.

According to Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 472) birds from Caicara, Suapure, Guanoco, Mount Auyán-tepuí and Mount Roraima, and from British Guiana are *fissilis*, and the race *orenocensis* Hellmayr, from Nericagua, differs from *fissilis* in having the crown lighter, more coppery green, less dusky green, and by having the iridescent band across the shoulders broader and richer, deeper purplish blue, less violet. Out of 14 adult males (and only the males show the subspecific characters) from Cerro Yapacana five would have to be called *orenocensis* and nine *fissilis* on these characters. Furthermore, as intimated under *T. f. nigrofasciata*, a few of them are hardly separable from that race. The extreme upper stretches of the Orinoco Basin seem to be the meeting place of *nigrofasciata* and *fissilis*, and the name *orenocensis* is based on the resulting conglomerate. It is considered most adequately treated as a synonym of *fissilis*. The intermediate nature of the *orenocensis* population is further suggested by the fact that years ago Hellmayr (Nov. Zool., vol. 14, 1907, p. 78) wrote that they closely resembled the Peruvian race *tshudii*.

**THALURANIA FURCATA NIGROFASCIATA** (Gould): *Black-banded Wood Nymph*

*Trochilus* (– ?) *nigrofasciata* GOULD, Proc. Zool. Soc. London, 1846, p. 89 (Rio Negro).

SPECIMENS COLLECTED

- 1 ad. ♂ (= ♀), 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 3–8, 1930.
- 1 im. – (♂), Brazil, Cachoeira Manajó, Rio Cauabury, October 30, 1930.
- 1 im. ♂, 1 im. – (♀ ?), Brazil, Rio Cauabury, above mouth of Rio Já, November 4–5, 1930.
- 1 im. ♂, Brazil, Rio Cauabury, November 7, 1930.
- 1 – (♂), Brazil, Rio Maturacá, November 12, 1930.
- 2 ad. ♂ (1 = ♀), 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 14–26, 1930.
- 1 im. – (♂), 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, November 29–December 4, 1930.
- 1 ad. ♂, 1 im. ♂, Brazil, São Gabriel, Rio Negro, January 6, 1931.
- 1 im. ♀, Colombian bank of Rio Negro opposite San Carlos, January 29, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

1 im. (ad. ?) ♂, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

Some of the November and February birds were noted by the collectors as being in breeding condition.

The two birds from the Brazo Casiquiare and the one from San Antonio are the northernmost records for the race and appear to be the first ones from Venezuela as far as published records go. As is noted under the first form, a few of the males from as far north as Cerro Yapacana on the Upper Orinoco, here referred to *T. f. fissilis*, differ very slightly indeed from *nigrofasciata*. Their present allocation is due to the fact that the majority of the specimens from that locality are *fissilis*.

SMARAGDITES THERESIAE THERESIAE (Da Silva Maia): *Goldenthroat*

*Ornismya theresiae* DA SILVA MAIA, Minerva Brasil, 1843, p. 2 (Pará).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Manáos, October 1, 1930.

The only example obtained is unfortunately in somewhat ruffled plumage and has a broken bill.

SMARAGDITES THERESIAE LEUCORRHOUS (Sclater and Salvin): *White-vented Goldenthroat*

*Polytmus leucorrhous* SCLATER and SALVIN, Proc. Zool. Soc. London, 1867, p. 584 (Cobati, Rio Negro).

SPECIMENS COLLECTED

1 im. ♀, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.

3 ad. ♂, 2 im. ♂, 1 im. -, Venezuela, Cerro Yapacana, Upper Orinoco, April 12-29, 1931.

These specimens appear to be the first ones recorded from Venezuela and constitute a sizable northward extension of the known range of the form. All have white under tail coverts (the nominate form, which ranges from the Guianas and lower Amazonia westward to eastern Venezuela, has these feathers greenish). The race was previously known from northwestern Brazil from the Upper Rio Negro west to eastern Peru.

HELIODOXA XANTHOGONYNS Salvin and Godman: *Yellow-cheeked Hummingbird*

*Heliodoxa xanthogonyns* SALVIN and GODMAN, Ibis, 1882, p. 80 (Merume Mountains).

SPECIMEN COLLECTED

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 7, 1930.

I am indebted to Dr. J. T. Zimmer for the identification of this specimen.

This species is stated in literature to occur from British Guiana

west as far as southern Venezuela (Mount Duida); I have come across no previous record of it from Brazil.

**HELIOTHRYX AURITA AURITA** (Gmelin): *Black-eared Fairy*

*Trochilus auritus* GMELIN, Systema naturae, vol. 1, pt. 1, 1788, p. 493 ("Cayenna").

SPECIMENS COLLECTED

- 1 ad. ♀, 1 ad. —, Brazil, Rio Maturaca, November 9, 1930.  
 1 im. ♂, Brazil, São Gabriel, Rio Negro, January 16, 1931.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 7, 1931.

Strangely enough, the adult male is the only one of the four specimens collected that lacks the long tail. The female and the young male have dusky flecks on the chin and throat, these flecks being larger and darker in the female.

**DISCOSURA LONGICAUDA** (Gmelin): *Racket-tail*

*Trochilus longicauda* GMELIN, Systema naturae, vol. 1, 1788, p. 496 (Cayenne).

SPECIMEN COLLECTED

- 1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 5, 1931.

This specimen lacks the long spatulate rackets on the tail. It also differs from adult birds in having the pale band across the lower back much more orange-tawny, less whitish. It was in process of getting the green goret when collected.

Family TROGONIDAE: Trogons

**PHAROMACHRUS PAVONINUS PAVONINUS** (Spix): *Pavonine Trogon*

*Trogon pavoninus* SPIX, Avium species novae . . . Brasiliam . . ., vol. 1, 1825-1826, p. 47, pl. 35 ("in sylvis Tabatingue et Marabitanas," Brazil).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 9, 1931.  
 1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 14, 1930.  
 1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, December 1, 1930.

No material of *P. p. viridiceps* Griscom and Greenway has been available for comparison, but the present birds are clearly of the nominate race. Furthermore, Todd (Proc. Biol. Soc. Washington, vol. 56, 1943, p. 4) finds that *viridiceps* is of doubtful validity.

This trogon appears to be rather scarce in collections; it occurs in Upper Amazonia west to Colombia, eastern Ecuador, and Eastern Peru and north to the Upper Rio Negro. It has not been reported from the Upper Orinoco.

**TROGON RUFUS RUFUS** Gmelin: *Yellow-bellied Trogon*

*Trogon rufus* GMELIN, Systema naturae, vol. 1, 1788, p. 404 (based on Daubenton, Planches enluminées . . ., p. 736: Cayenne).

SPECIMENS COLLECTED

- 3 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 21, 1930.

1 "ad." ♂ (=subadult), Venezuela, Brazo Casiquiare below mouth of Río Pacila, February 12, 1931.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 18, 1931.

The literature of this species is confusing because of the divergent nomenclatural usages employed. The nomenclature here used is that adopted by Zimmer (Publ. Field Mus., Nat. Hist., Zool. Ser., vol. 17, 1930, p. 295-6) and Todd (Proc. Biol. Soc. Washington, vol. 56, 1943, p. 9) and not that of Hellmayr, Griscom and Greenway, Pinto, and others.

The male, although labeled as an adult, still has the cheeks, chin, throat, and breast as in the female plumage and is obviously a subadult bird.

One of the females has the outer rectrices much more abundantly barred, i. e., the white interspaces between the black bars narrower than the others. If they were not all from the same locality one would be inclined to see in it a possible racial character, as it is just the sort of variation that is so often subspecific.

The adult male collected on March 18 was in breeding condition when shot.

**TROGON STRIGILATUS STRIGILATUS** Linnaeus: *Green-backed Trogon*

*Trogon strigilatus* LINNAEUS, Systema naturae, ed. 12, 1766, p. 167 (Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 11, 1930.

1 im. ♂, Brazil, Rio Negro at mouth of Rio Cauabury, October 22, 1930.

1 ad. ♀, Brazil, Rio Maturacá, November 12, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 16, 1931.

1 im. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, below Playa de Candela, February 9, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.

2 ad. ♂, 1 im. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, February 28-March 2, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13-15, 1931.

8 ad. ♂, 2 im. ♂, 3 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 19-April 27, 1931.

1 ad. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930, and May 11-13, 1931.

Some of the February, March, and April birds were noted as being in breeding condition when collected. Signs of molt are to be found in birds collected in October and February.

This appears to be the commonest and most ubiquitously distributed of the trogons in the areas covered by the expedition.

A specimen taken on the Brazo Casiquiare below the Río Pacila, February 13, was preserved in alcohol.



TROGON MELANURUS MELANURUS Swainson: *Black-tailed Trogon*

*Trogon melanurus* SWAINSON, Animals in menageries, pt. 3, 1838, p. 329 (Demarara, British Guiana).

## SPECIMENS COLLECTED

- 1 ad. ♂, 1 im. ♂, Brazil, Salto do Huá, Rio Maturacá, November 22–26, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, November 30–December 7, 1930.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 3 ad. ♂, 1 im. ♂, 2 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 7–17, 1931.

The immature males have the three outer pairs of the rectrices tipped and externally barred with white. The two "immature" females are probably fully adult as they have adult rectrices.

In his notes on this species Todd (Proc. Biol. Soc. Washington, vol. 56, 1943, p. 5) records that the width of the white pectoral band is geographically variable, being narrow and even obsolete in Bolivian examples, but wide and well developed in specimens from both the Lower and the Upper Amazon. The present series of Upper Amazonian birds have this band quite well developed but in sufficiently varying degrees as to make one cautious in using the character for further splitting of the species.

TROGON VIOLACEUS RAMONIANUS Deville and Des Murs: *Deville's Trogon*

*Trogon ramonianus* DEVILLE and DES MURS, Rev. Zool., 1849, p. 331 (Sarayacu, eastern Peru).

## SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below Río Pacila, February 11, 1931.  
 1 im. ♂, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.  
 1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 21, 1931.

As Todd has pointed out (Proc. Biol. Soc. Washington, vol. 56, 1943, p. 12) females of this subspecies cannot be distinguished from those of typical *violaceus*, but the males are identifiable by having the upper wing coverts and secondaries with little or no light vermiculations. Two of the males listed above have these feathers solid black; the third has very faint whitish vermiculations, which are noticeable only on close examination.

The limits of the range of *ramonianus* are still to be worked out. Thus, toward the east, Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 182) write that their specimens of *T. v. crissalis* from the Tapajóz, Rio Acará, and Benevides, all in lower Amazonia, "agree with *ramonianus*, and differ from the *violaceus-caligatus* series, in having the blackish, very minutely freckled wing-coverts. They differ from true *ramonianus* . . . in having smaller bills. This is

one of the characters assigned by Ridgway to *crissalis* . . . The character of the relative amount of freckling on the wing coverts is reversed in our specimens, so it is apparently worthless . . ." They write that there is no authentic record of the species south of the Amazonian drainage, but Pinto (Rev. Mus. Paulista, vol. 22, 1937, p. 292) records it from the Rio Guaporé, northern Matto Grosso. In the north, Hellmayr (Abh. Königl. Bay. Akad. Wiss., math.-phys. Kl., vol. 26, No. 2, 1912, pp. 61-62) writes that typical *violaceus* occurs in eastern Venezuela (Caura and Orinoco region). The present examples from San Antonio and Cerro Yapacana are indications that *ramonianus* and not *violaceus* is the form of the upper Orinoco at least. The subspecies appears to have been unrecorded previously from Venezuela.

### Family ALCEDINIDAE: Kingfishers

**MEGACERYLE TORQUATA TORQUATA** (Linnaeus): *Great-ringed Kingfisher*

*Alcedo torquata* LINNAEUS, Systema naturae, ed. 12, 1766, p. 180 (Mexico).

#### SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Perro de Agua, February 18, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Pamoni, February 19, 1931.

The earlier of these two specimens shows signs of molt in the wings.

This large kingfisher ranges over a tremendous area from northern Mexico to Argentina.

**CHLOROCERYLE AMAZONA AMAZONA** (Latham): *Amazon Kingfisher*

*Alcedo amazona* LATHAM, Index ornithologicus, vol. 1, 1790, p. 257 (Cayenne).

#### SPECIMENS COLLECTED

1 im. ♀, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 7, 1930.

1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 19, 1931.

These specimens all have the white mark in front of the eye well developed. In the one male the wing measures 122 mm., and in three females it is 127, 132, and 132 mm., respectively.

**CHLOROCERYLE AMERICANA AMERICANA** (Gmelin): *Green Kingfisher*

*Alcedo americana* GMELIN, Systema naturae, vol. 1, 1788, p. 451 (Cayenne).

#### SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.

Like the other kingfishers, the present species occurs throughout the countries traversed by the expedition.

**CHLOROCERYLE INDA** (Linnaeus): *Green and Rufous Kingfisher*

*Alcedo inda* LINNAEUS, *Systema naturae*, ed. 12, vol. 1, 1766, p. 179 (Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Cucuhy, Rio Negro, February 7, 1930.  
 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 19, 1930.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 2, 1931.

The November bird shows signs of molt.

**CHLOROCERYLE AENEA AENEA** (Pallas): *Least Green Kingfisher*

*Alcedo aenea* PALLAS, in Vroeg's *Catalogus: Adumbratiunculæ*, vol. 1, 1764, No. 54 (Surinam).

## SPECIMENS COLLECTED

- 1 ad. ♂, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 9, 1931.  
 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.  
 1 ad. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 4-27, 1931.

Immaturity in this species is indicated by a brownish wash on the upper surface and by an increase in the amount of light markings on the webs of the secondaries and inner primaries. This must be taken into account in comparing specimens, as immature examples of true *aenea* show a fair amount of the light wing spotting and so suggest the northern form *stictoptera*, which is marked mainly by the presence of light marks across the secondaries and inner primaries.

The typical race ranges north through Panama to the Canal Zone and beyond. The northern form comes south from Mexico through Central America into northern Costa Rica, intergradation between the two apparently taking place in central and southern Costa Rica.

## Family MOMOTIDAE: Motmots

**MOMOTUS MOMOTA MOMOTA** (Linnaeus): *Common Motmot*

*Ramphastos momota* LINNAEUS, *Systema naturae*, ed. 12, vol. 1, 1766, p. 152 (Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Cachoeira Thomaz, Rio Cauabury, October 26, 1930.  
 1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 16, 1931.  
 1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 19, 1930.  
 1 ad. —, Brazil, Serra Imeri, near Salto do Huá, November 30, 1930.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 9, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Durutumoni, February 19, 1931.  
 7 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 1-21, 1931.

The Cerro Yapacana specimens are mostly in fresh plumage; six of the nine do not have the webs of the rectrices worn away to form the terminal rackets. There is a great deal of purely individual variation in color, some birds being very brownish green on the breast and abdomen while others have no brownish admixture at all.

## Family GALBULIDAE: Jacamars

UROGALBA DEA DEA (Linnaeus): *Paradise Jacamar*

*Alcedo dea* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 116 (Surinam).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Manáos, October 1, 1930.  
 1 ad. ♂, 1 im. -, Venezuela, Brazo Casiquiare, Chapazon, right bank, January 31, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Río Pacila, February 13, 1931.  
 2 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 1-3, 1931.  
 1 ad. ♂, Venezuela, right bank Upper Orinoco, opposite Corocoro Island, March 13, 1931.

Two of the January and one of the March birds show signs of molt.

The nominate race of this jacamar occurs eastward along the north bank of the Amazon at least as far as Obidos, whence Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 186) record 10 specimens. No specimens of *U. d. brunneiceps* Todd have been available for study, but while Todd gives the range of *brunneiceps* as the "north bank of the Amazon, from the Rio Negro west to Peru, and on the south bank between the Rio Madeira and the Rio Tapajoz" (Ann. Carnegie Mus., vol. 30, 1943, p. 6) he assigns Manáos examples to the nominate race (p. 4) on the basis of Hellmayr's notes (Nov. Zool., vol. 14, 1907, p. 27).

GALBULA GALBULA (Linnaeus): *Common Jacamar*

*Alcedo galbula* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 182 ("Brasilia, Cayania" = Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below Playa de Candela, February 9, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 10, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11-12, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.  
 1 ad. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.  
 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.  
 3 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 12-14, 1931.

Several of the specimens were noted as being in breeding condition when collected.

GALBULA RUFICAUDA RUFICAUDA Cuvier: *Rufous-tailed Jacamar*

*Galbula ruficauda* CUVIER, Règne animal, vol. 1, 1817, p. 420 ("Colombia").

## SPECIMENS COLLECTED

- 2 ad. ♂, 2 ad. ♀, Venezuela, Soledad, Anzoátegui, December 10, 1929, and June 11, 1931.

One of the males is large, about the maximum size for the form; it measures: wing 84.2, tail 120, culmen from base 60.7, tarsus 15.3 mm.

GALBULA LEUCOGASTRA LEUCOGASTRA Vieillot: *White-bellied Jacamar*

*Galbula leucogastra* VIEILLOT, Nouv. Dict. Hist. Nat., vol. 16, 1817, p. 444 ("Amerique meridionale" = Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 3, 1930.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 15, 1931.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 10, 1931.

The April bird shows signs of molt.

GALBULA ALBIROSTRIS ALBIROSTRIS Latham: *White-billed Jacamar*

*Galbula albirostris* LATHAM, Index ornithologicus, vol. 1, 1790, p. 245 ("America Austral" = Cayenne).

## SPECIMENS COLLECTED

5 ad. ♂, 2 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2-23, 1931.

The immature female resembles the adults.

The extreme Upper Orinoco and northernmost reaches of the Upper Rio Negro seem to be the meeting place of this race and of the southern form with the completely dusky maxilla, *chalcocephala*. As may be noted under the discussion of the latter, we have a perfectly typical example from the Upper Orinoco near Isla Temblador, the northernmost record for *chalcocephala*, while Hellmayr (Nov. Zool., vol. 14, 1907, p. 36) writes that two females from Barra do Rio Negro (Wallace and Natterer coll.) showed all the characters of typical *albirostris* but were smaller in size. Pinto (Rev. Mus. Paulista, vol. 22, 1937, p. 303) gives these as the southernmost limits of *albirostris* on the basis of Hellmayr's statement.

GALBULA ALBIROSTRIS CHALCOCEPHALA Deville: *Bronze-headed Jacamar*

*Galbula chalcocephala* DEVILLE, Rev. et Mag. Zool., 1849, p. 55 (Sarayacu, Ecuador).

## SPECIMENS COLLECTED

1 ad.-(♀), Brazil, Camanáos, December 23, 1930.

1 im. ♀, Brazil, Cucuhy, Rio Negro, February 5, 1930.

2 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 14-19, 1930.

1 ad. ♂, 1 ad.-(♂), Brazil, Serra Imeri, near Salto do Huá, December 4, 1930.

1 ad. ♂, Venezuela, Upper Orinoco near Isla Temblador, February 25, 1931.

The Orinoco example is the first one of this race to be recorded from Venezuela. It is darker brown on the breast and has a longer bill than any of the others but agrees in both respects very closely with Ecuadorian (typical) *chalcocephala*. The smaller bill size in the present Rio Negro birds is hardly significant, as there is so much variation even in this small series:

JACAMEROPS AUREA RIDGWAYI Todd: *Amazonian Great Jacamar*

*Jacamerops aurea ridgwayi* TODD, Ann. Carnegie Mus., vol. 30, 1943, p. 2 (Miritituba, Rio Tapajóz, Brazil).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Cucuhy, Rio Negro, February 6, 1930.

1 ad. ♂, 3 ad. ♀, 1 im. ♀, Brazil, São Gabriel, Rio Negro, January 6-14, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 3-17, 1931.

Todd's revision of this species (*cit. supra*, pp. 1-3) has been found to hold for the total material in the U. S. National Museum, although, as might be expected, characters of iridescent colors are only average ones. The present series agrees with *ridgwayi* and not with typical examples of *aurea* from Demerara, and constitutes a northwestern extension of the known range of the race into the Upper Río Negro and the Upper Orinoco Valley in southern Venezuela.

One of the females from São Gabriel was in breeding condition when collected.

The immature female is very much more pinkish purple, less green on the back than are any of the adults. It also has the superciliaries, sides of head, chin, and malar area more pinkish purple, less green, than any of the others.

## Family BUCCONIDAE: Puffbirds

BUCCO CAPENSIS Linnaeus: *Collared Puffbird*

*Bucco capensis* LINNAEUS, Systema naturae, vol 1, 1766, p. 168 (Guiana).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.

1 ad. ♂, Brazil, Panela de Onca, Rio Cauabury, November 1, 1930.

1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 22-April 25, 1931.

One of the Cerro Yapacana birds was in molt when collected.

This is one of the many birds that ranges unchanged from the Amazonian (Rio Negro) drainage basin into that of the Orinoco.

The Panela de Onca bird is not fully adult; it has the feathers of the auricular area and the area immediately behind it barred with blackish.

NOTHARCHUS MACRORHYNCHOS HYPERRHYNCHUS (Selater): *Bonaparte's Puffbird*

*Bucco hyperrhynchus* SCLATER, Proc. Zool. Soc. London, 1855, p. 193, pl. 105 (Upper Amazons).

## SPECIMEN COLLECTED

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 2, 1930.

Pinto (Rev. Mus. Paulista, vol. 22, 1937, p. 308) considers the Rio Negro birds *giganteus* (Pelzeln), but the material examined in the present study and the data in the literature suggest that *giganteus* is

not recognizable as distinct from *hyperrhynchus*. In considering *hyperrhynchus* a race of *macrorhynchus*, I am following the arrangement of Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 189), but it must be pointed out that the last word on the subject is yet to be said. Pinto records typical *macrorhynchus* as well as *N. hyperrhynchus giganteus* from the Rio Negro! Certainly the present example, with a broad white frontal area extending backward to the middle of the eye, is clearly *hyperrhynchus* and not typical *macrorhynchus*.

NOTHARCHUS ORDII (Cassin): *Ord's Puffbird*

*Bucco ordii* CASSIN, Proc. Acad. Nat. Sci. Philadelphia, vol. 5, 1851, p. 154, pl. 8 (Venezuela).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 3, 1930.

3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 21-24, 1931.

The April birds show signs of molt, especially in the rectrices.

Although Venezuela was given as the type locality in the original description of this puffbird, there appear to be no published records of its occurrence in that country, although other specimens have been collected there; the American Museum of Natural History, for example, has examples from the base of Mount Duida. Because of the lack of Venezuelan records in print Cory (Catalogue of the birds of the Americas, vol. 2, No. 2, 1919, p. 393) questioned the inclusion of Venezuela in the range, and Pinto (Rev. Mus. Paulista, vol. 22, 1937, p. 308) gives the type locality as "Venezuela, *errore*." Possibly because of the doubt as to the Venezuelan distribution of the bird, Stone (Proc. Acad. Nat. Sci. Philadelphia, 1899, p. 33) in his catalog of the bird types in the Philadelphia collection gives the type locality as Rio Negro and makes no mention of the original description given by Ord. In answer to my request, Mr. de Schauensee has reexamined the type specimen and informs me that it has an original label marked "no. 27. *Bucco* sp.? *Bucco ordii* Cassin Rio Negro (Venezuela)."

One of the Cerro Yapacana specimens appears to be younger than the other two, as it has the upper parts more brownish and the scapulars and upper wing coverts tipped with pale tawny-buff. It also has the brown pectoral band slightly darker than the other two but agrees in this respect with the Cucuhy adult. It is possible that more extensive series may reveal that the Upper Orinoco birds are separable from those of the Rio Negro in having the brown pectoral band slightly paler in the adult plumage. A bird from "Cayenne?" is pale like the birds from the Upper Orinoco, but one from Playa del Río, at the base of Mount Duida, is almost as dark as our Cucuhy, Rio Negro, example.

NYSTACTES TAMATIA TAMATIA (Gmelin): *Cayenne Spotted Puffbird*

*Bucco tamatia* Gmelin, *Systema naturae*, vol. 1, 1788, p. 405 (Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, San Antonio, March 1-5, 1931.

3 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, Cerro Yapacana, April 5-27, 1931.

Some of the April birds were in breeding condition when collected. All the present specimens are in worn plumage; the March birds from San Antonio are extremely abraded.

Todd (*Ann. Carnegie Mus.*, vol. 30, 1943, pp. 13-14) has recently studied the geographic variations of this species with results with which the material seen in the present connection is in good agreement. This material has been limited to two races—*tamatia* and *hypnaleus*.

HYPNELUS BICINCTUS BICINCTUS (Gould): *Two-banded Puffbird*

*Tamatia bicincta* GOULD, *Proc. Zool. Soc. London*, 1836, p. 80 ("Cayenne" = Venezuela).

SPECIMENS COLLECTED

2 ad. ♂, 1 im. ♂, 1 ad. ♀, Venezuela, Río Orinoco, Puerto Ayacucho, January 3-6, 1930, and May 11-19, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Soledad, Anzoátegui, November 29, December 4, 1929.

The immature bird has the tail little more than half grown.

NONNULA RUBECULA DUIDAE Chapman: *Duida Nonnula*

*Nonnula duidae* CHAPMAN, *Bull. Amer. Mus. Nat. Hist.*, vol. 33, 1914, p. 195 (foot of Mount Duida, altitude 700 feet, southern Venezuela).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.

4 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 23-28, 1931.

Pinto (*Rev. Mus. Paulista*, vol. 22, 1937, p. 315) considers birds from the Rio Negro as *N. r. cineracea*, but it would seem that they are better referred to *duidae*. Todd (*Ann. Carnegie Mus.*, vol. 30, 1943, p. 18) has extended the known range of *duidae* south to Tonantins on the north bank of the Amazon.

MONASA ATRA (Boddaert): *Black Nunbird*

*Cuculus niger* BODDAERT, *Table des planches enluminées . . .*, 1783, p. 30 (Cayenne).

SPECIMENS COLLECTED

2 ad. ♂, Brazil, Rio Cauabury, November 6-7, 1930.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 9, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila February 11, 1931.





Atures Rapids, Río Orinoco, above Puerto Ayacucho, Venezuela.



Puerto Ayacucho, Venezuela.



San Fernando de Atabapo, Río Orinoco, Venezuela.



Soledad, Venezuela.

1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.

6 ad. ♂, 6 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 28-April 27, 1931.

1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 8, 1930.

Several of the Cerro Yapacana birds were noted as being in breeding condition; one of the females had an egg ready for the shell in its oviduct.

Collin and Hartert (Nov. Zool., vol. 34, 1927, p. 51) consider that Boddaert's name *atra*, 1783, should be used for this bird, as *Cuculus niger* Müller, 1776, is preoccupied by *Cuculus niger* Linnaeus, 1758. This has been accepted by Pinto (Rev. Mus. Paulista, vol. 22, 1937, p. 317) but has not been followed by Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 475).

This bird has been recorded from the Rio Negro, but it must be a relatively scarce bird there in contrast to the Casiquiare and the Upper Orinoco.

**MONASA MORPHOEUS PERUANA** Sclater: *Peruvian White-bearded Nunbird*

*Monasa peruana* SCLATER, Proc. Zool. Soc. London, 1855, p. 194 (Chamicuro, eastern Perú).

SPECIMEN COLLECTED

1 ad. ♀, Brazil, Rio Maturacá, November 9, 1930.

The present specimen is from the extreme northeastern limit of the range of the subspecies. Judged by the few records in literature, it would seem to be an uncommon bird in the Rio Negro area.

**CHELIDOPTERA TENEBROSA TENEBROSA** (Pallas): *Swallow-wing*

*Cuculus tenebrosus* PALLAS, Neue Nord. Beytr., vol. 3, 1782, p. 3 (Surinam).

SPECIMENS COLLECTED

1 ad. ♂, 2 ad. ♀, Brazil, Manaus, September 26-30, 1930.

1 im. ♂, Brazil, Barcellos, Rio Negro, October 6, 1930.

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 17, 1930.

1 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, December 29, 1930-January 3, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 31, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 14, 1931.

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 27, 1931.

1 ad. ♂, 1 im. ♂, 1 ad. ♀, 1 ad.-, Venezuela, Puerto Ayacucho, Río Orinoco, May 16-19, 1931, and January 6, 1930.

Immature birds resemble the adults.

One of the January birds shows signs of molt.

This form occurs from the Guianas and eastern Colombia south to northern Brazil and Amazonian Peru. In the coastal area of northwestern Venezuela the birds are paler gray on the midabdomen and

have the gray anterior and the brown posterior abdominal areas separated by a whitish band. A few of the present specimens vaguely suggest such a band but are nearer to typical *tenebrosa* than to the coastal race *pallida*. A slightly larger, pale-bellied race, *brasiliensis*, occurs in southeastern Brazil.

A set of two eggs was collected at Chapazon, January 31, 1931.

### Family CAPITONIDAE: Barbets

#### CAPITO AURATUS AURANTIICINCTUS Delmas: *Yellow-throated Barbet*

*Capito aurantiicinctus* DELMAS, Bull. Soc. Zool. France, 1900, p. 178 (Caura River, Venezuela).

#### SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, Raudal Corocoro, below Playa de Candela, February 9, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12-13, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 5, 1931.

9 ad. ♂, 3 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 29-April 24, 1931.

The southward limit of the range of this race is unknown. It must be rare, if not absent, on the Upper Rio Negro, or the expeditions would have collected some specimens, judged by the fine series they took farther north. Pinto (Rev. Mus. Paulista, vol. 22, 1937, pp. 321) records *aurantiicinctus* from Barcellos, Río Negro, with a query as to whether the specimen collected there by Natterer may not really have been *C. a. hypochondriacus* Chapman, which ranges to the Lower Rio Negro. Judged by our present series from São Gabriel southward to Santa Isabel, it would certainly seem that Barcellos birds would be not *hypochondriacus* but *transilens*.

From the specimens studied and from the literature it seems that *intermedius* Berlepsch and Hartert is not separable from *aurantiicinctus*. If the two were to be recognized the present series, while partly from the range of each, would have to be called *intermedius*, as none of the birds have any orange or cadmium edgings on the feathers of the rump or flanks.

#### CAPITO AURATUS TRANSILENS Friedmann: *Rio Negro Red-throated Barbet*

*Capito auratus transilens* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 58, 1945, p. 113 (Santa Isabel, Rio Negro, Amazonas, Brazil).

#### SPECIMENS COLLECTED

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 16, 1930.

1 ad. ♂, Brazil, Rio Negro at mouth of Rio Cauabury, October 22, 1930.

2 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 2-3, 1931.

As pointed out in the original description of this form, the combination of its characters and its range support the assumed mutational origin of the subspecies of this barbet as suggested by Chapman (Amer. Mus. Nov., No. 335, 1928). It is a scarlet-throated race, nearest to *amazonicus*, but comes from an area between two yellow-throated forms, *aurantiicinctus* to the north of it and *hypochondriacus* to the south of it. It differs from *amazonicus*, Tefe on the Amazon, in having the forehead and crown more streaked and suffused with ochraceous-orange to xanthine orange, less yellowish, and with the two large yellowish stripes on the interscapulars and upper back primuline to light cadmium yellow, as opposed to strontian to lemon yellow in *amazonicus*, and the sides and flanks more heavily flecked with blackish. Females of the two races are very similar to each other.

Chapman found that his series of topotypical *auratus* from the Ucayali varied greatly, in fact so extensively as to include birds that matched examples of *amazonicus* as well. According to information received from Dr. J. T. Zimmer this series seems to cover the range of variation in the Rio Negro birds (*transilens*) but part of this may be an approach to the orange-throated form *novaolindae*. However unstable *auratus* may be in its terra typica, there is no such variability in the Rio Negro series. It seems possible that further material and study may indicate that *auratus* is merely an intermediate group between *transilens*, *amazonicus*, and *novaolindae* and not a fixed race.

Pinto (Rev. Mus. Paulista, vol. 23, 1938, p. 511) has recorded specimens of this barbet from São Gabriel and Taracua as *C. a. nitidior*.

### Family RAMPHASTIDAE: Toucans

#### RAMPHASTOS TUCANUS CUVIERI Wagler: *Cuvier's Toucan*

*Ramphastos cuvieri* WAGLER, Systema avium, Ramphastidae, 1827, p. 5 (Amazon River region, Brazil).

#### SPECIMENS COLLECTED

1 ad. ♂, 2 ad. ♀, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 7, 1930.

1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 18, 1930.

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 4, 1930.

1 ad. ♀, Venezuela, Brazo Casiquiare, February 6, 1931.

Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 81, 1937, pp. 427-430) have reviewed the present and closely allied toucans in what seems to be a satisfactory arrangement, which is here followed, although the dissenting comments of Todd's paper (Proc. Biol. Soc. Washington, vol. 56, 1943, pp. 155-157) and of Gyldenstolpe (Kungl. Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, pp. 112-113) have been duly considered. The species name *tucanus* is apparently the correct one rather than *monilis*.

The Brazo Casiquiare bird is a typical *cuvieri*; it shows no approach to *tucanus*, thereby agreeing with what Todd found for Duida birds and differing from the observations of Griscom and Greenway on south Venezuelan specimens.

Two examples collected at Playa de Candela, Brazo Casiquiare, February 8, 1931, were preserved in alcohol.

**RAMPHASTOS VITELLINUS CULMINATUS** Gould: *Culminated Toucan*

*Ramphastos culminatus* GOULD, Proc. Zool. Soc. London, 1833, p. 70 (Mexico=Río Solimões, Brazil, Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 101).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 18, 1930.

1 ad. ♂, 1 im. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 14, 1931.

The January birds were all in molt when collected.

The color of the lower throat is so variable in these four birds that it makes one wonder as to its reliability as a taxonomic character in other forms of the group. The adult male from São Gabriel has the lower throat pure white; the female from there has a small area of lemon yellow there; the immature male from the same locality has a much more extensive area colored lemon yellow; while the Salto do Huá bird has this area strongly suffused with cadmium yellow on a lemon-yellow background. It also has the red pectoral band broader than in any of the others and fits the description of *Ramphastos osculans* Gould. Todd, the most recent author to have investigated the status of *osculans* (Proc. Biol. Soc. Washington, vol. 56, 1943, p. 160) considers the name to be based on hybrids between *R. culminatus* and *R. vitellinus*. However, inasmuch as both of the latter are considered here, as by other writers, to be conspecific, this "hybrid" character may eventually prove to be racial, and to occupy a range between the other two races.

**PTEROGLOSSUS FLAVIROSTRIS FLAVIROSTRIS** Fraser: *Yellow-billed Aracari*

*Pteroglossus flavirostris* FRASER, Proc. Zool. Soc. London, 1840, p. 61 ("Rio Janeiro").

SPECIMENS COLLECTED

2 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, January 5-12, 1931.

3 ad. ♂, 6 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 20-April 19, 1931.

Several of the specimens from both localities were noted as being in breeding condition when collected.

On the average the Venezuelan birds have longer bills than do the Rio Negro examples, although in their other dimensions they are alike. Thus, the two Brazilian females have bills of 72 and 76.2 mm., while the six Venezuelan ones have bills of 75.2, 81, 82, 86.1, 86.2, and 87.3 mm., respectively. In the males the difference is less marked,

the two Brazilian specimens having bills of 92 and 93.2 mm., while in the Venezuelan birds the bills measure 89.1, 94.4, and 97.3 mm.

**PTEROGLOSSUS PLURICINCTUS** Gould: *Many-banded Aracari*

*Pteroglossus pluricinctus* GOULD, Proc. Zool. Soc. London, 1835, p. 157 ("Brasilia").

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 3, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 6–24, 1931.

The male has the occiput and nape and upper wing coverts and the outer webs of the outer primaries much tinged with dark brownish and is probably subadult. It is in extremely abraded plumage. The two females show no brownish on the auriculars.

**SELENIDERA NATTERERI** (Gould): *Natterer's Toucanet*

*Pteroglossus nattereri* GOULD, Proc. Zool. Soc. London, 1835, p. 157 ("Brasilia").

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 8, 1930.

3 ad. ♂, 1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 2–26, 1931.

Todd has recently (Proc. Biol. Soc. Washington, vol. 56, 1943, p. 162) recorded this toucanet from Tonantins, on the upper Amazon, a new southern limit for the known range of the species. Apparently of local distribution throughout its range, this bird has been collected rather seldom and so has remained a scarce bird in museums.

The immature male is in a state of molt; the rectrices are only partly grown, and large areas of the sides and flanks and the center of the breast are bare. The plumage is identical in color and pattern with that of the adult, and the bill has the adult pattern as well.

Family PICIDAE: Woodpeckers

**CENTURUS RUBRICAPILLUS RUBRICAPILLUS** Cabanis: *Red-crowned Woodpecker*

*Centurus rubricapillus* CABANIS, Journ. für Orn., vol. 10, 1862, p. 328 (Barranquilla, Colombia).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, 1 ad. ♀, 1 im. ♀, 1 im. —, Venezuela, Puerto Ayacucho, Río Orinoco, May 9–21, 1931.

1 im. ♂, Venezuela, Soledad, Anzoátegui, December 7, 1929.

The immature female, taken on May 19, had "active gonads," according to the collector.

**TRIPSURUS CRUENTATUS EXTENSUS** Todd: *Multicolored Woodpecker*

*Tripsurus cruentatus extensus* TODD, Ann. Carnegie Mus., vol. 25, 1937, p. 251 (Arimá, Rio Purús, Brazil).

SPECIMENS COLLECTED

2 ad. ♂, ♀, 1 Brazil, Santa Isabel, Rio Negro, October 9–17, 1930.

4 ad. ♂, ♀, 3 ad. Brazil, São Gabriel, Rio Negro, January 9–14, 1931.

As Todd says in his description of this race, it is a poorly marked form, discernible only in series. The size of the red ventral patch is a character that is too easily affected by the "make" of the skin to

be one of great reliability, and the variations of the present material in this regard are not inconsiderable. It is possible that longer and more complete series from all parts of the range of the species may indicate the existence of an unnamed western race (Colombia to Peru) in which the whitish bars on the inner webs of the inner primaries are broader than in Amazonian ones.

Rio Negro birds are very variable in size, thus, two extreme males from São Gabriel have the following dimensions: Wing 109.2–120; culmen from base 26.3–28.4 mm.

One of the males may be not quite fully adult. It has only a few reddish specks on the crown instead of a solid patch of that color, which it may be in process of acquiring. If this is the case, then it would seem that the presence of the pale yellowish superciliaries and nape markings (which are fully developed in this specimen, and which are also present in females) may be more basic phylogenetically than the red patch. This, in turn, would suggest that they constitute a real, trenchant specific character and that, therefore, their absence in the otherwise similar *T. rubrifrons* is indicative of full specific distinction. Todd (*cit. supra*) records intermediate specimens, some with no superciliaries or only incomplete ones, others without the nuchal collar. These he interprets as possible hybrids between *cruentatus* and *rubrifrons*. Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, pp. 201, 202) incline to the belief that "*rubrifrons* is an imaginary species, a mere color phase of *cruentatus*, which is losing its white postocular and yellow nuchal collar in the northeastern part of its range. The chief arguments against the hybrid theory are that there is no region where only *rubrifrons* occurs, and its characters are purely negative."

An additional specimen from São Gabriel, January 12, 1931, was preserved in alcohol.

**PICULUS CHRYSOCHLORUS CAPISTRATUS** (Malherbe): *Bonaparte's Green Woodpecker*  
*Chloropicus capistratus* MALHERBE, Monographie des Picedées, vol. 2, 1862, p. 140,  
pl. 83 ("Bresil" = Rio Negro).

#### SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Rio Cauabury, above mouth of Rio Já, November 5, 1930.
- 1 ad. ♀, Brazil, mouth of Rio Maturacá, November 8, 1930.
- 2 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 11–27, 1931.

The two Cerro Yapacana birds are sufficiently dissimilar to indicate a wide range of individual variation, which, in turn, causes one to wonder at the wisdom of describing races of this species on single specimens such as Todd's *P. c. guianensis*. He described this form from French Guiana as differing from *capistratus* in being "darker colored throughout, the upper parts and wings externally near olive



green (instead of dark citrine); the sides of the head (postocular region) olivaceous black . . . , mystacial stripe dull olive green . . . and the barring of the under parts darker (dark greenish olive to blackish) . . ." This description practically fits the differences between the two Cerro Yapacana specimens.

As far as available data indicate, this bird has not been recorded before from the Orinoco Basin of southern Venezuela.

**PICULUS FLAVIGULA FLAVIGULA** (Boddaert): *Yellow-throated Green Woodpecker*

*Picus flavigula* BODDAERT, Table des planches enluminées . . . , 1783, p. 49 (Cayenne).

SPECIMENS COLLECTED

- 2 ad. ♂, 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 2-7, 1930.  
 1 ad.-(♂), Brazil, Cachoeira Manajó, Rio Cauabury, October 30, 1930.  
 1 im. ♂, Brazil, Rio Cauabury, above mouth of Rio Já, November 5, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Rio Maturacá, Salto do Huá, November 14-22, 1930.  
 1 im. ♀ (= ♂), Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 25, 1931.

Two of the February birds and one of the April ones show signs of molting in the tail and wings and body plumage.

This series presents some variations that can better be recorded than explained at the present time. Males vary in the amount of red on the gular area but never seem to have a really well developed band there. One from Cucuhy (labeled ♀, but with the whole forehead, crown, and occiput red) has none; the immature male from the Rio Cauabury has a faint trace; the other Cucuhy male has a better-defined short gular band; the Cachoeira Manajó example has just a trace. The color of the lower back and rump of the females varies from dark greenish olive to old gold. The two Cucuhy males have very dissimilar bills, one having a culmen length (from base) of 24, the other of 21 mm., although the wing and tail lengths are about the same in both.

Two additional specimens, now preserved in alcohol, were taken, one at São Gabriel, and one on the Brazo Casiquiare below the mouth of the Río Pacila.

**CHRYSOPTILUS PUNCTIGULA PUNCTIPECTUS** Cabanis and Heine: *Spot-breasted Woodpecker*

*Chrysoptilus punctipectus* CABANIS and HEINE, Museum Heineanum, vol. 4, 1863, p. 163 (Venezuela).

SPECIMENS COLLECTED

- 1 ad. ♂, 4 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 3, 1930 and May 8-15, 1931.

One of the May birds was in breeding condition when collected. Though these specimens have been labeled *punctipectus*, it is possible that with more material a distinct race may be segregated in this interior area. The birds listed have the spots on the lower surface small, one bird being nearly immaculate. The throat also is blacker than the average in *punctipectus*, resembling *guttatus*. The races of this bird will be understood only when more material is available. Dr. Wetmore has examined the series in the Chicago Natural History Museum and the American Museum of Natural History, in addition to the specimens in Washington, but found these collections too poor in material from the Orinoco and Amazon Basins to allow any definite conclusions as to the form inhabiting this area.

**CELEUS JUMANA JUMANA** (Spix): *Spix's Amazonian Woodpecker*

*Picus jumana* SPIX, *Avium species novae* . . . Braziliam . . . , vol. 1, 1824, p. 57, pl. 47 ("in sylvis flum. Amazonum").

SPECIMENS COLLECTED

- 2 ad. ♂, Brazil, São Gabriel, Rio Negro, December 29, 1930–January 5, 1931.
- 1 ad. ♂, Brazil, Rio Maturacá, November 9, 1930.
- 1 ad. ♂, 2 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 17–19, 1930.
- 2 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, November 29–December 4, 1930.
- 1 ad. ♂, Venezuela, Brazo Casiquiare, Chapazon, January 31, 1931.
- 1 -, Venezuela, Brazo Casiquiare, Solano, February 2, 1931.
- 1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.
- 1 ad. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 1–3, 1931.
- 1 ad. ♂, one ad. ♀, Venezuela, Upper Orinoco, right bank, opposite Corocoro Island, March 14–15, 1931.
- 3 ad. ♂, 3 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 30–April 21, 1931.
- 2 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930, and May 8–18, 1931.

The three most northern examples (Puerto Ayacucho) have much paler yellow rumps and upper tail coverts than do the other specimens. They are large (♂ wings 162.5–163; ♀ wings 159 mm.) but are matched in this respect by examples from Diamantina, near Santarem, Brazil. In fact, one of the Puerto Ayacucho males has the rump and upper tail coverts paler and purer yellow (less tinged with ochraceous or tawny) than any of a very large series from all parts of the range.

Thanks to the kind cooperation of the officials of the American Museum of Natural History, the Academy of Natural Sciences of Philadelphia, and the Carnegie Museum, I have been able to amass a series of about 150 specimens of *jumana*, *citreopygius*, and the various races of *elegans*. The color of the rump and upper tail coverts is apparently a matter of individual variation—almost pure yellow, ochraceous, dusky tawny, orange-citrine, or even dark ochraceous-

olive. Likewise, birds may vary regardless of geography, season, sex, or age, in the darkness of the general upper and under parts, the range being from ochraceous-hazel to rufescent Van Dyke brown mixed to some extent with dark olive-green. The width of the dusky bars on the inner webs of the primaries is also variable in a purely individual fashion, a fact that adds emphasis to the stability achieved in this regard in the unbarred western race *citreopygius*. Some of the variations seen foreshadow to some extent the unbarred pattern of *citreopygius*. Thus, in several examples, the pale yellowish bars are marginally confluent and form a broad edging to the inner web, thereby reducing the length of their transverse indentations, which give rise to the barred pattern of the feathers. The color of the pale under wing areas is another purely individual variable, being correlated with the color of the rump and upper tail coverts. In examples where the latter areas are greenish we find this color tinging the under side of the wings; where the rump is yellowish or ochraceous, the underwing areas are paler and yellower.

These color variations are not peculiar to *Celeus jumana jumana* but occur also in *C. j. citreopygius* and in the forms of *C. elegans*. With regard to the latter group, it seems best to continue to consider it as a specifically distinct entity with its markedly pale crest easily setting it off from the *jumana* group.

As far as size is concerned the results of the present survey indicate that although there is a tendency for the more northern *jumana* to be larger than those from farther south this is not constant, and the extremes in the two areas are about the same. *Celeus jumana* and its close relative *elegans* give the impression of a very variable mass that has not settled down into component variants geographically.

*Celeus jumana saturata* Carriker appears to be a doubtful form. It can be matched by specimens from the Amazon which occur together with others that are typical *jumana*.

**CELEUS GRAMMICUS GRAMMICUS** (Malherbe): *Rio Negro Barred Woodpecker*

*Picus grammicus* MALHERBE, Mem. Soc. Roy. Liège, 1845, p. 69 ("Bresil" = Marabitanas, Rio, *fide* Naumburg, Bull. Amer. Mus. Nat. Hist., vol. 60, 1930, p. 183).

SPECIMENS COLLECTED

- 1 —, Brazil, Rio Negro, mouth of Rio Cauabury, October 21, 1930.
- 1 ad. ♂ (= ♀ ?), Brazil, Cachoeira Thomaz, Rio Cauabury, October 26, 1930.
- 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.
- 2 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 28–April 27, 1931.

Although the material available for comparison has been slight (one specimen each of the two other races *subcervinus* and *latifasciatus*) the variations presented by the present series are such as to raise some

doubt as to the validity of *C. g. undulatus* Todd of the Río Caura, Venezuela. This form, described from a single female, is said to differ from the nominate race in being smaller (wing 117, tail 68, bill 21 mm.), in having the barring of the upperparts and underparts much reduced, and in having the rump, flanks, inner webs of the remiges, and under wing coverts more yellowish (the rump between yellow-ochre and primuline yellow, the under wing coverts mustard yellow, and the inner webs of the remiges Naples yellow). One of the males from Cerro Yapacana has the barring of the upperparts and underparts noticeably reduced, especially above; while two of the females from the same locality show a divergence in the color of the under wing coverts and inner margins of the remiges that almost bespeaks dichromatism. In one of them these parts are exactly as in the description of the type of *undulatus*, while in the other they are much duskier and more olive—between yellow-ochre and old gold. In the former example the rump is more yellowish than in the latter, but not quite so light as in the description of *undulatus*. However, in the specimen with these critical areas most like *undulatus* the blackish barring is very strongly developed both above and below, and the birds are larger than *undulatus* (wing 125.1–125.2; tail 74–74.1; culmen from base 22.2–24 mm.), but in view of the variability in coloration and of the meagre material of *undulatus* it seems that the status of the latter is at least uncertain.

Some of the March and April examples were noted as being in breeding condition when collected. The October 26 specimen from the Rio Cauabury, Brazil, is in extremely worn plumage, quite the reverse of the one taken five days earlier on the Rio Negro. The latter bird has the rump much more yellowish or olive ocher than the former. The Orinoco birds have the feathers of the crown and crest uniformly rufous with no blackish medial streaks, while the Brazilian birds have blackish shaft streaks in these feathers. The unstreaked head condition in south Venezuelan birds has been noted by previous students, notably by Hellmayr (Nov. Zool., 1907, p. 80). It apparently means nothing very significant however, as Hellmayr found these streaks present in one and absent in another female from the Río Madeira (Calana and Alliana; Nov. Zool., 1910, p. 384). Berlepsch and Hartert (Nov. Zool., 1902, p. 94) write that birds from the Orinoco, north of our present area (Munduapo and Nericagua), have shorter bills than in others from upper Amazonia and that males from the Orinoco have shorter wings and tails as well. If we may look upon Rio Cauabury birds as similar to upper Amazonian ones, this distinction does not hold.

**CROCOMORPHUS FLAVUS FLAVUS** (P. L. S. Müller): *Chestnut-winged Yellow Woodpecker*  
*Picus flavus* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 91 (Cayenne).

## SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Brazo Casiquiare, Raudal Corocoro, below Playa de Candela, February 7, 1931.

1 im. ♀, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.

1 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 17–27, 1931.

2 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930, and May 16, 1931.

One of the April birds was noted as being in breeding condition when collected. A number of the birds taken in March and April show signs of molt.

These birds present a curious variation in color, for which no apparent explanation is available. Two of them, an adult male and an adult female, lack the bright light apricot yellow on the chin, throat, breast, and abdomen, having these parts between cream-buff and chamois. All the birds have the rectrices considerably matted with some yellowish powdery substance, probably derived from the trees on which they had been feeding.

Another example from Puerto Ayacucho was preserved in alcohol.

**CEOPHLOEUS LINEATUS LINEATUS** (Linnaeus): *Lineated Woodpecker*

*Picus lineatus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 174 (based on Daubenton, Planches enluminées . . . , pl. 717: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 8–18, 1931.

1 ad. ♀, Venezuela, Laguna Icacal, Bolívar, December 8, 1929.

**PHLOEOCEASTES RUBRICOLLIS** (Boddaert): *Red-necked Woodpecker*

*Picus rubricollis* BODDAERT, Table des planches enluminées . . . , 1783, p. 37 (based on Daubenton, Planches enluminées . . . , pl. 509: Cayenne).

## SPECIMENS COLLECTED

1 ad. —, Brazil, Camanãos, Rio Negro, December 23, 1930.

1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 3, 1931.

1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 19, 1930.

2 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, December 4–5, 1930.

1 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 18–26, 1931.

One of the April birds was noted as being in breeding condition.

The depth of the cinnamon color of the under surface is somewhat deeper in freshly plumaged than in worn birds.

**PHLOEOCEASTES MELANOLEUCOS MELANOLEUCOS** (Gmelin): *Black and White Woodpecker*

*Picus melanoleucos* GMELIN, Systema naturae, vol. 1, 1788, p. 426 (based on "Buff-crested Woodpecker" Latham: Surinam).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Cauabury, above Cachoeira Manajó, October 31, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 9, 1931.

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 18, 1931.

1 ad. ♂, 2 ad. ♀, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 9–May 11, 1931, and January 10, 1930.

The series is fairly uniform except for the bird from the Rio Cauabury, which is distinctly lighter, more whitish below, and has the dark cross bars of the lower surface considerably restricted.

The identification of these skins as typical *melanoleucos* agrees with the findings of Pinto (Rev. Mus. Paulista, vol. 23, 1938, p. 515) for skins from São Gabriel and elsewhere in Amazonas, Brazil.

**VENILIORNIS AFFINIS ORINOCENSIS** Berlepsch and Hartert: *Orinoco Woodpecker*

*Veniliornis orinocensis* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 98 (Angostura and Munduapo, Orinoco region, Venezuela = Munduapo).

SPECIMENS COLLECTED

2 im. ♂, 1 im. – (♂), 1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 31, 1930–January 13, 1931.

1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 23, 1930.

1 im. ♀, 1 im. – (♀), Brazil, Serra Imeri, near Salto do Huá, December 7, 1930.

1 im. ♀, Venezuela, Chapazon, right bank Brazo Casiquiare, January 30, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Paçila, February 13, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 1–3, 1931.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 7, 1931.

1 im. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.

The unsexed (but probably female) bird from Serra Imeri is more richly golden on the upperparts than any of the others and has sagittate whitish basal marks on the interscapulars and feathers of the upper back.

Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 203) consider *cassini* a race of *affinis*. In spite of the admittedly close similarity, this cannot be maintained, as both *cassini* and *orinocensis* occur together on the Caura and the Upper Orinoco. It follows, therefore, that *cassini* must be treated as a distinct species, differing from *orinocensis* (its geographic neighbor) in having prominent triangular spots of buff on most of the upper wing coverts and in having the ventral barring more black and white, less olivaceous. I am indebted to W. H. Phelps for this information.

**PICUMNUS BUFFONI UNDULATUS** Hargitt: *Undulated Piculet*

*Picumnus undulatus* HARGITT, Ibis, 1889, p. 354 (Mount Roraima, British Guiana).

SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, Tamatama, February 23, 1931.

1 im. ♀, Venezuela, Upper Orinoco, San Antonio, March 4, 1931.

2 im. ♂, 1 im. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.

1 ad. ♂, 1 im. ♀, Venezuela, Upper Orinoco, Cerro Yapacana, April 29, 1931.

1 ad. ♂, 2 ad. ♀, Venezuela, Río Orinoco, Puerto Ayacucho, May 14, 1931, and January 3–4, 1930.

Although no specimens of this piculet were obtained on the Rio Negro and the Casiquiare, the form does occur there. Pinto (Rev. Mus. Paulista, vol. 22, 1937, p. 365) records it from the Rio Negro and the Rio Branco. No specimens of *P. buffoni exilis* have been seen in the present connection and the trinomial nomenclature here used is based on Pinto's treatment of these two forms.

Another specimen from Puerto Ayacucho was preserved in alcohol.

Recently Zimmer and Phelps (Am. Mus. Nov., No. 1312, 1946, p. 6) have recorded *clarus* for many localities in central and south-eastern Venezuela—Mount Auyán-tepuí, La Unión, Suapure, Nericagua, and Upper Paragua River localities, among others.

### Family DENDROCOLAPTIDAE: Woodhewers

#### DENDROCOLAPTES CERTHIA CERTHIA (Boddaert): *Buffon's Woodhewer*

*Picus certhia* BODDAERT, Table des planches enluminées . . . , 1783, p. 38 (Cayenne).

#### SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 5, 1930.

1 ad. ♂, Brazil, Rio Cauabury, November 3, 1930.

1 ad. ♂, 1 ad. ♀, 1 im. —, Brazil, Salto do Huá, Rio Maturacá, November 20–22, 1930.

1 ad. ♀, Venezuela, Brazo Casiquiare, Caño Atamoni, February 6, 1931.

2 ad. ♂, Venezuela, Brazo Casiquiare, at mouth of Río Pacila, February 13, 1931.

7 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 1–28, 1931.

The Cerro Yapacana birds, collected in April, were noted as having enlarged gonads.

Though there is some variation in this excellent series, this appears to be wholly individual, and all are identified as *certhia*, although it may be noted that all average slightly grayer on the sides than do three skins from British Guiana. Hellmayr (Catalogue of the birds of the Americas, pt. 4, 1925, p. 262) reports a specimen from Marabitanas on the Rio Negro as *D. c. juruanus* Ihering. Skins in the present collection from the Brazilian localities listed above show some tendency to vary in the direction of *juruanus* but on the whole are nearer *certhia*.

#### XIPHOCOLAPTES PROMEROPHIRHYNCHUS ORENOCENSIS Berlepsch and Hartert: *Orinocoan Woodhewer*

*Xiphocolaptes orenocensis* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 65 (Nericagua, Río Orinoco).

#### SPECIMENS COLLECTED

1 ad. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 8–9, 1931.

The male was noted as being in breeding condition when collected. It is slightly darker above and below than the two females. Inas-

much as some of the races of this species are based on slight color differences, it would seem desirable to keep in mind a possible sexual dimorphism when making comparisons.

**DENDROPLEX PICUS PICUS** (Gmelin): *Picine Woodhewer*

*Oriolus picus* GMELIN, *Systema naturae*, vol. 1, pt. 1, 1788, p. 384 (based on "Le Talapiot" Daubenton, *Planches enluminées* . . . , pl. 605: Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Soledad, Anzoátegui, June 11, 1931, and December 7, 1929.

1 im. ♂, Venezuela, Laguna Icacal, near Ciudad Bolívar, December 8, 1929.

The two adult birds were in breeding condition.

These specimens are slightly less tawny, more dusky, below than are examples from French and British Guiana. Zimmer (*Amer. Mus. Nov.*, No. 753, 1934, pp. 16-17) noted a similar condition in his series, but concluded that without still larger series of Orinocoan birds, he could not "do more than suggest the strong possibility of the intergradation of *picus* and *picirostris* somewhere between Ciudad Bolívar and Caicara."

An additional specimen, taken in Estado Bolívar, December 30, 1929, was preserved in alcohol.

**DENDROPLEX PICUS DUIDAE** Zimmer: *Duida Picine Woodhewer*

*Dendroplex picus duidae* ZIMMER, *Amer. Mus. Nov.*, No. 753, 1934, p. 15 (Caño León, Mount Duida, Venezuela, altitude 325 feet).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 10-17, 1930.

2 ad. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 2-5, 1931.

1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.

3 ad. ♂, 4 ad. ♀, Venezuela, Puerto Ayacucho, Upper Orinoco, January 2, 1930, and May 8-12, 1931.

This race has the chin and throat purer white, less washed with buffy and less strongly streaked with dusky, than does the nominate form. It ranges from the Upper Orinoco and Mount Duida to the Upper Rio Negro.

**XIPHORHYNCHUS GUTTATUS GUTTATOIDES** (Lafresnaye): *Spotted Woodhewer*

*Nasica guttatoides* LAFRESNAYE, *Rev. Mag. Zool.*, vol. 2, 1850, p. 387 (Loretto, Rio Marañon, Peru, and "Colombie"=Bogotá; Bogotá is the type locality, according to Zimmer, *Amer. Mus. Nov.*, No. 756, 1934, p. 1).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 15, 1930.

1 ad. ♀, Brazil, Rio Maturacá, Amazonas, November 9, 1930.

1 ad. ♂, Brazil, Serra Imeri, Venezuelan border, December 2, 1930.

2 ad. ♂, 1 im. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 1-13, 1931.

2 ad. ♂, Brazil, Cucuhy, Rio Negro, February 7, 1930.

1 ad. ♂, Venezuela, Brazo Casiquiare, Caño Atamoni, February 6, 1931.



3 ad. ♂, 1 im. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11–13, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, Caño Mabinagui, February 20, 1931.

1 ad. ♂, Venezuela, Capibara, February 16, 1931.

1 ad. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

2 ad. ♂, 1 im. ♂, Venezuela, Upper Orinoco, right bank, opposite Corocoro Island, March 13–16, 1931.

Some of the January and February birds were noted as in breeding condition when collected.

This fine series bears out Zimmer's contentions as to the variability of this race (Amer. Mus. Nov., No. 756, 1934, pp. 1–4).

**XIPHORHYNCHUS GUTTATUS POLYSTICTUS** (Salvin and Godman): *Spotted Woodhewer*  
*Dendroornis polysticta* SALVIN and GODMAN, Ibis, 1883, p. 210 (Bartica Grove, British Guiana).

SPECIMENS COLLECTED

2 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 2–3, 1930, and May 14, 1931.

Zimmer (Amer. Mus. Nov., No. 754, 1934, p. 1) has pointed out that *polystictus* Salvin and Godman is an earlier name for *sororius* Berlepsch and Hartert.

This race differs from *X. g. guttatoides* in being less rusty below and in having more pronounced dark edgings to the pale streaks on the breast.

The May bird was in breeding condition.

**XIPHORHYNCHUS PARDALOTUS** (Vieillot): *Levaillant's Woodhewer*

*Dendrocopus pardalotus* VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., vol. 26, 1818, p. 117 (based on "Le Grimpar flambé" Levaillant, Histoire naturelle des promérops . . . , p. 74, pl. 30: Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 2 ad. ♀, Brazil, Cucuhy, Rio Negro, February 2–8, 1930.

1 im. ♂, 1 ad. ♀, Brazil, Panela de Onca, Rio Cauabury, Amazonas, November 1, 1930.

1 ad. ♂, 1 ad. ♀, Brazil, Rio Maturacá, November 9, 1930.

2 ad. ♂, 2 ad. ♀, 1 im. -, Brazil, Salto do Huá, Rio Maturacá, November 12–20, 1930.

7 ad. ♂, 1 im. ♂, 2 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, November 27–December 6, 1930.

10 ad. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 18–April 29, 1931.

Some of the birds collected in November, December, March, and April were noted as being in breeding condition.

This woodhewer is found from the three Guianas west to southern Venezuela and south in Brazil to the north bank of the lower Amazon. The present series from the Rio Negro and the extreme southern part of Venezuela, immediately to the north, appear to constitute a slight extension southwestward of the known limits of the range of the

species. Though it seems to be a widely distributed form in the low country, it also ascends to as high as 1,100 meters in suitable places. Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 477) records it from altitudes of from 460–1,100 meters on Mount Auyan-tepui.

**XIPHORHYNCHUS OBSOLETUS NOTATUS** (Eyton): *Upper Orinocoan Woodhewer*

*Picolaptes notatus* EYTON, Contr. Orn., 1852, p. 26 (no locality given).

SPECIMENS COLLECTED

- 1 im. ♀, Brazil, Santa Isabel, Rio Negro, October 9, 1930.  
 1 ad. ♀, Brazil, Panela de Onca, Rio Cauabury, November 1, 1930.  
 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 20, 1930.  
 1 im. ♂, Brazil, São Gabriel, Rio Negro, January 6, 1931.  
 2 ad. ♀, Brazil, Cucuhy, Rio Negro, February 5–8, 1930.  
 1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.  
 1 ad. ♂, 1 ad. ♀, 1 ad. –, Venezuela, Brazo Casiquiare, Caño Atamoni, February 6, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 9, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12–13, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Caño Matipin, February 18, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, Caño Durutomoni, February 19, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, Buenos Aires, February 21, 1931.  
 1 ad. ♀, Venezuela, Upper Orinoco, Tamatama, February 23, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, Isla Temblador, February 25, 1931.  
 1 ad. ♂, 2 ad. ♀, 1 ad. –, Venezuela, Upper Orinoco, San Antonio, February 28–March 9, 1931.  
 3 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13–16, 1931.  
 5 ad. ♂, 2 ad. ♀, Venezuela, Upper Orinoco, Cerra Yapacana, March 18–April 27, 1931.  
 3 ad. ♂, 1 ad. ♀, Venezuela, Río Orinoco, Puerto Ayacucho, May 9–14, 1931, and January 2, 1930.

Birds in breeding condition were taken in November, February, April, and May.

This race ranges from the Rio Negro northward to the Casiquiare and the upper stretches of the Orinoco at least as far as Suapure. Zimmer (Amer. Mus. Nov., No. 756, 1934, p. 11) found that specimens from farther down the Orinoco (Caicara, Rio San Feliz, Sacupana) were closer to *obsoletus*.

**CAMPYLORAMPHUS PROCURVOIDES SANUS** Zimmer: *Duida Sicklebill*

*Campyloramphus procurvoides sanus* ZIMMER, Amer. Mus. Nov., No. 728, 1934, p. 12 ("Campamento del Medio," Mount Duida, Venezuela, altitude 350 feet).

SPECIMENS COLLECTED

- 1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.  
 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.

These specimens agree with the parotypical series in the American Museum of Natural History.

Both examples were noted as in breeding condition when collected.

**NASICA LONGIROSTRIS** (Vieillot): *Long-billed Woodhewer*

*Dendrocopus longirostris* VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., vol. 26, 1818, p. 117 (based on "Le Grimpar Nasican" Levaillant, Histoire naturelle des promérops . . ., p. 65, pl. 24: "Brésil").

SPECIMENS COLLECTED

- 1 im. ♀, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 16, 1931.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 27, 1931.  
 2 im. ♀, Venezuela, Puerto Ayacucho, Orinoco, May 16, 1931, and January 6, 1930.

Material is not at hand to investigate the status of *N. l. australis* Griscom and Greenway, but even if it should prove valid (which, according to Zimmer is doubtful) the present birds would belong to the nominate form found to the north of the Amazon.

The immature birds are paler and more abundantly transversely flecked with dusky on the abdomen than are the adults.

**GLYPHORHYNCHUS SPIRURUS RUFIGULARIS** Zimmer: *Rufous-throated Wedgebill*

*Glyphorhynchus spirurus rufigularis* ZIMMER, Amer. Mus. Nov., No. 757, 1934, p. 3 (Mount Duida (Campamento del Medio), Venezuela; altitude 350 feet).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 10, 1930.  
 1 ad. ♂, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 7, 1930.  
 2 ad. ♂, Brazil, mouth of Rio Maturacá, November 8, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Rio Maturacá, November 9–12, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, Venezuelan border, November 16–20, 1930.  
 1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 17, 1931.  
 2 ad. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.  
 1 im. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Caño Caripo, February 22, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
 2 ad. ♂, 3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 1–21, 1931.

A number of the birds collected from January 31 to April 19 were noted as being in breeding condition.

This fine series adds nothing either in addition to or by way of a modification or refutation of the comments given by Zimmer (*cit. supra*).

**SITTASOMUS GRISEICAPILLUS AMAZONUS** Lafresnaye: *Amazonian Woodcreeper*

*Sittasomus amazonus* LAFRESNAYE, Rev. Mag. Zool., ser. 2, vol. 2, 1850, p. 590 (Upper Amazon, Perú).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 19, 1930.

1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, November 27, 1930.

The first of these two specimens has the under wing coverts and the axillars definitely tinged with ochraceous. In the second the under wing coverts are practically white. There seems thus some approach in these two which are from a rather outlying region, to the form that Zimmer has described from São Jose, near Faro, on the Rio Jamundá, under the name *S. g. axillaris* (Amer. Mus. Nov., No. 757, 1934, p. 9).

DECONYCHURA STICTOLAEMA SECUNDA Hellmayr: *Ecuadorian Deconychura*

*Deconychura secunda* HELLMAYR, Bull. Brit. Orn. Club, vol. 14, 1904, p. 51 (Coca, Upper Río Napo, Ecuador)

## SPECIMENS COLLECTED

2 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 4, 1930.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 28, 1931.

The two December birds were in breeding condition when collected; one of them and the April bird show signs of molting in the wings.

DENDROCINCLA FULIGINOSA PHAEOCHROA Berlepsch and Hartert: *Orinocoan Dendrocincl*

*Dendrocincl* *phaeochroa* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 67 (Munduapo, Río Orinoco).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 27, 1930.

1 ad. ♂, Venezuela, Puerto Ayacucho, Orinoco, January 4, 1930.

2 ad. ♂, Venezuela, Upper Orinoco, right bank, opposite Corocoro Island, March 16, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 10-20, 1931.

Two of the birds (March and April) were noted as being in breeding condition.

The present series bears out Zimmer's contention (Amer. Mus. Nov., No. 728, 1934, p. 19) that birds from the Rio Negro are the same as those of southwestern Venezuela.

DENDROCINCLA MERULA BARTLETTI Chubb: *Chestnut-winged Dendrocincl*

*Dendrocincl* *bartletti* CHUBB, Bull. Brit. Orn. Club, vol. 39, 1918, p. 5 (Chamicuros, Peru).

## SPECIMENS COLLECTED

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.

2 ad. ♂, 1 im. ♂, 3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 9-23, 1931.

One of the April birds is in molt in the wings. The March specimen and the one taken April 9 were found to be in breeding condition when collected. The immature bird is like the adults but has the entire bill

(both maxilla and mandible) dusky, whereas in the adult birds the mandible is pale.

In the absence of adequate material to enable us to come to an independent conclusion, we follow Zimmer (Amer. Mus. Nov., No. 728, 1934, pp. 14–15) in separating *bartletti* from typical *merula*.

### Family FURNARIIDAE: Ovenbirds

*SYNALLAXIS ALBESCENS TRINITATIS* Zimmer: *Venezuelan White-throated Spinetail*

*Synallaxis albescens trinitatis* ZIMMER, Amer. Mus. Nov., No. 819, 1935, p. 2 (Prinestown, Trinidad Island).

#### SPECIMENS COLLECTED

2 im. ♂, 1 im. ♀, Venezuela, Soledad, Anzoátegui, December 1–7, 1929, and June 11, 1931.

One of the males and the female resemble the adult plumage; the other male, a much younger bird, has the entire top of the head buffy olive-brown with no chestnut cap. The chestnut patch on the bend of the wing is also paler and is much reduced in extent, comprising only the outer margins of the feathers; the tail is only two-thirds grown, and the bill is also considerably smaller than in a full-grown specimen.

This race is said to range south to the middle Orinoco. A specimen collected at Puerto Ayacucho, January 3, 1930, and preserved in alcohol, may belong to this race, but it is not certainly identifiable in its present condition.

*CRANIOLEUCA VULPINA ALOPECIAS* (Pelzeln): *Northern Ruby-backed Spinetail*

*Synallaxis alopecias* PELZELN, Sitzungsber. math. nat. Kl. Akad. Wiss. Wien, vol. 34, 1859, pp. 101, 122 (Rio Branco).

#### SPECIMEN COLLECTED

1 im. ♀, Venezuela, Puerto Ayacucho, Upper Orinoco, January 5, 1930.

This record helps to bridge the gap between the Amazonian and the previous Venezuelan ones (Orinoco Valley from the delta to beyond the falls of Maipures; upper Sarare).

Two specimens were collected—Estado Bolívar, December 30, 1929—and were preserved in alcohol.

*SYNALLAXIS RUTILANS DISSORS* Zimmer: *Rio Negro Red Spinetail*

*Synallaxis rutilans dissors* ZIMMER, Amer. Mus. Nov., No. 819, 1935, p. 4 (Campos Salles, Manáos, Brazil).

#### SPECIMENS COLLECTED

1 im. ♀, Brazil, São Gabriel, Rio Negro, January 9, 1931.

2 im. ♂, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Matipin, February 18, 1931.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 5, 1931.

6 ad. ♂, 1 im. ♂, 2 ad. ♀, 2 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 19–April 23, 1931.

One of the immature males from the Brazo Casiquiare presents an extreme plumage variation—in it the feathers of the upper half or more of the abdomen have conspicuous pale buffy to hazel shafts edged with hazel to auburn; the other immature birds resemble the adults.

Several of the April birds were noted as being in breeding condition when shot.

This race occurs along the eastern side of the Rio Negro from Manáos up to southwestern Venezuela, crossing the Casiquiare and the Upper Orinoco, and also along the Rio Branco to French and Dutch Guiana.

**CRANIOLEUCA GUTTURATA** (Lafresnaye and D'Orbigny): *D'Orbigny's Spinetail*

*Anabates gutturus* LAFRESNAYE and D'ORBIGNY, Synopsis avium, pt. 2, in Mag. Zool., vol. 8, 1838, cl. 2, p. 14 (Yuracares, Bolivia).

SPECIMENS COLLECTED

- 1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.  
 1 im. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.  
 1 ad. ♀, 1 im. ♀, Venezuela, Upper Orinoco, Cerro Cariche, February 24, 1931.

Carriker (Proc. Acad. Nat. Sci. Philadelphia, vol. 86, 1934, pp. 322–323) considered birds from Rioja and Moyobamba, Peru, and from Río Simo, eastern Ecuador, as *C. g. peruviana* (Cory) and later identified the present examples as of this race. Aside from the fact that he had no truly topotypical *gutturata* (he considered south-eastern Peruvian examples from Puno as such) and therefore could not definitely prove the validity of Cory's race, it follows that if the present birds are also of this form, the name to be applied to them would have to be *hyposticta* (Pelzeln) based on Rio Negro material. This name, proposed in 1859 (Sitzungsb. math. nat. Kl. Akad. Wiss. Wien, vol. 34, pp. 102, 123) has 60 years' priority over *peruviana* Cory. However, two questions still remain unsettled—first, is *peruviana* distinct from *gutturata*, and second, if so, are Rio Negro and south Venezuelan birds (*hyposticta*) the same as *peruviana* or *gutturata* or are they different from both (*hyposticta*)?

Four specimens from eastern Ecuador are somewhat less brownish, more grayish olive above, than are our birds. Chapman (Bull. Amer. Mus. Nat. Hist., vol. 55, 1926, p. 435) found Ecuadorian birds (including two of the four here examined) to be more "olive above than four from Bolivia, but the latter are matched by one from the upper Orinoco (Mt. Duida) and another from the lower Orinoco (Caura). Pelzeln's *hyposticta* was based on a Rio Negro specimen, and until the status of the interior form can be determined, it seems unwise to

describe the Ecuadorean bird. The more northern birds are slightly smaller than those from Bolivia." From this it would seem that Rio Negro and Venezuelan birds (*hyposticta*) agree with Bolivian *gutturata* in color, and not with Ecuadorean (*peruviana*?) specimens. Carriker found toponotypical *peruviana* to be darker than *gutturata* above, especially on the nape and upper back, the nape brownish slate (olive-brown in Puno "*gutturata*"), the underparts paler, more whitish, less ochraceous, in all of which characters the present series would be *gutturata*, yet he considered them as *peruviana*. This confusion suggests that *peruviana* may either be less well defined than Carriker believed or that it must be regarded as a purely Peruvian-Ecuadorian race. The latter seems unlikely as the birds from eastern Ecuador might then be expected to agree with the Bolivian-Brazilian-Venezuelan interior form and not with that of central northern Peru. Until further material becomes available it seems wisest to recognize no races of this spintail. This, in effect, is a corroboration of Hellmayr's earlier judgment (Catalogue of the birds of the Americas, pt. 4, 1925, p. 131).

The two immature birds are slightly dusker below than the adults.

**CRANIOLEUCA MÜLLERI** (Hellmayr): *Müller's Spintail*

*Siptornis mülleri* HELLMAYR, Rev. Franç. Orn., vol. 2, 1911, p. 1 (Fazenda Nazareth, Mexiana Island, Brazil).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Fazenda Marinha, São Joaquim, Rio Amazonas, Pará, September 18, 1930.

This is a bird of the Lower Amazon and does not occur in the Rio Negro-Orinoco drainage areas.

**HYLOCTISTES SUBULATUS SUBULATUS** (Spix): *Amazonian Hyloctistes*

*Sphenura subulata* SPIX, Avium species novae . . . Brasiliam . . ., vol. 1, 1824, p. 82, pl. 83 ("in sylvis fluminis Amazonum").

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Maturacá, November 9, 1930.

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 8, 1930.

1 ad. ♂, 1 im. ♀, Brazil, São Gabriel, Rio Negro, January 15, 1931.

Compared, and found to agree with, specimens from Río Suno, above Avila, Ecuador.

The immature bird is darker above than the adults.

**PHILYDOR PYRRHODES** (Cabanis): *Cinnamon-rumped Philydor*

*Anabates pyrrhodes* CABANIS, in Schomburgk's Reisen in British-Guiana . . ., pt. 3, "1848," p. 689 (coast of British Guiana).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 12, 1931.

The lone example of this widely ranging bird obtained by the expedition was in breeding condition when shot. There are no geographic variations of any account, according to Zimmer (Amer. Mus. Nov., No. 785, 1935, p. 6).

**AUTOMOLUS OCHROLAEMUS TURDINUS** (Pelzeln): *Pelzeln's Automolus*

*Anabates turdinus* PELZELN, Sitzungsber. math. nat. Kl. Akad. Wiss. Wien, vol. 34, 1859, p. 110, 131 (Borba, Rio Madeira; Barra do Rio Negro; Manáos designated by Hellmayr, Catalogue of the birds of the Americas, vol. 4, 1925, p. 220).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 16, 1930.  
2 ad. ♂, 4 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2-28, 1931.

This series is quite uniform in appearance; the birds are in fairly fresh plumage.

Another specimen, collected at São Gabriel, January 12, 1931, is preserved in alcohol.

**AUTOMOLUS INFUSCATUS BADIUS** Zimmer: *Zimmer's Automolus*

*Automolus infuscatus badius* ZIMMER, Amer. Mus. Nov., No. 785, 1935, p. 15 (Playa del Río Base, Mount Duida, Venezuela; altitude 550 feet).

SPECIMENS COLLECTED

1 im. ♂, Brazil, Panela de Onca, Rio Cauabury, November 1, 1930.  
2 ad. ♂, Brazil, Rio Maturacá, November 9-12, 1930.  
4 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, November 28-December 4, 1930.  
2 im. ♂, 1 ad. ♀, Brazil, Saõ Gabriel, Rio Negro, December 27, 1930-January 13, 1931.  
1 ad. ♂, Colombian bank of Río Negro opposite San Carlos, January 29, 1931.  
1 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12, 1931.  
1 ad. ♀, Venezuela, Brazo Casiquiare, below Caño Durutomoní, February 19, 1931.  
1 ad. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.  
1 ad. ♂, 1 ad. ♀, 1 im. -, Venezuela, Cerro Yapacana, Upper Orinoco, March 18-April 23, 1931.

Birds in breeding condition were taken in November, January, and April.

This fine series bears out the distinctions made for the race by Zimmer (*cit. supra*). This is another of the many birds that range from the Amazonian (Rio Negro) Basin into that of the Upper Orinoco without change.

The Venezuelan examples are somewhat more ashy, less buffy on the breast and abdomen, than are the Brazilian specimens. The former average slightly less rufescent above as well.



**AUTOMOLUS RUFIPLEATUS CONSOBRINUS** (Sclater): *Northern Chestnut-crowned Automolus*

*Philydor consobrinus* SCLATER, Proc. Zool. Soc. London, 1870, p. 328 ("Nova Granada int."—"Bogota"); Villavicencio suggested by Chapman, 1917).

SPECIMENS COLLECTED

- 2 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.  
1 im. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

The two adults were noted as being in breeding condition.

The immature bird is slightly darker above and below than the adults and has narrow dusky edges and tips on the feathers of the throat and breast.

**XENOPS MINUTUS RUFICAUDUS** (Vieillot): *Guianan Xenops*

*Xenopo ruficaudus* VIEILLOT, Analyse d'une nouvelle ornithologie élémentaire, 1816, p. 68 (Cayenne).

SPECIMENS COLLECTED

- 1 im. ♀, Brazil, Rio Maturacá, November 12, 1930.  
1 ad. ♂, 2 im. ♂, 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 18-22, 1930.  
1 ad. ♂, Brazil, Serra Imeri, December 2, 1930.  
1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.  
1 ad. ♂, Venezuela, Brazo Casiquiare, at Caño Durutomoni, February 19, 1931.  
1 ad. ♂, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.  
1 im. ♂, 2 ad. ♀, 1 ad. —, Venezuela, Cerro Yapacana, Upper Orinoco, April 6-27, 1931.

The male collected at San Antonio, March 9, was noted as being in breeding condition.

The series from the Upper Orinoco agrees with birds from Cayenne and Surinam in being brighter and lighter in color and more definitely streaked. The Brazo Casiquiare specimens are similar to the Orinoco birds. In the Brazilian part of the series the birds from the western foothills of Serra Imeri and one from Rio Maturacá are like *ruficaudus*, while the four from Salto do Huá on the Maturacá are decidedly intermediate toward *remoratus*.

**XENOPS MINUTUS REMORATUS** Zimmer: *Zimmer's Xenops*

*Xenops minutus remoratus* ZIMMER, Amer. Mus. Nov., No. 819, 1935, p. 7 (Tatú, right bank of Rio Negro, Brazil).

SPECIMENS COLLECTED

- 1 im. —, Brazil, Santa Isabel, Rio Negro, October 10, 1930.  
1 ad. ♀, Brazil, Rio Negro at mouth of Rio Cauabury, October 22, 1930.  
1 ad. ♂, Brazil, Rio Cauabury below Cachocira Destacamento, October 28, 1930.  
1 im. —, Brazil, Rio Cauabury, above mouth of Rio Já, November 5, 1930.  
1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.  
1 ad. —, Venezuela, San Carlos, Río Negro, January 28, 1931.  
1 ad. ♂, 1 im. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11-13, 1931.

These birds have the duller color above and below and the somewhat less accentuated streakings on the neck, foreneck, and upper breast that mark this rather indefinitely characterized subspecies.

**XENOPS TENUIROSTRIS ACUTIROSTRIS** Chapman: *Sharp-billed Xenops*

*Xenops acutirostris* CHAPMAN, Amer. Mus. Nov., No. 86, 1923, p. 16 (Zamora, Prov. Loja, Ecuador).

SPECIMEN COLLECTED

1 ad. -, Venezuela, Cerro Yapacana, Upper Orinoco, April 27, 1931.

Zimmer (Amer. Mus. Nov., No. 861, 1936, p. 17) was the first to record this race from extreme southern Venezuela (Río Huaynia, an affluent of the Casiquiare). The present example appears to be the northernmost one yet recorded.

**MICROXENOPS MILLERI** Chapman: *Miller's Xenops*

*Microxenops milleri* CHAPMAN, Bull. Amer. Mus. Nat. Hist., vol. 33, 1914, p. 196 (foot of Mount Duida, Venezuela).

SPECIMENS COLLECTED

1 im. ♀, Brazil, Rio Cauabury, Amazonas, October 31, 1930.

Although known from southern Venezuela (Mount Duida) and from northern Brazil, this bird does not seem to have been recorded before from the Rio Negro Basin.

**SCLERURUS RUFIGULARIS FULVIGULARIS** Todd: *Ochreous-throated Leafscaper*

*Sclerurus rufigularis fulvigularis* TODD, Proc. Biol. Soc. Washington, vol. 33, 1920, p. 74 (Tamanoir, French Guiana).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 6, 1930.

2 ad. ♂, 1 im. ♂, 3 ad. ♀, 1 ad. -, Venezuela, Cerro Yapacana, Upper Orinoco, March 23-April 26, 1931.

Two of the April birds were noted as being in breeding condition when collected.

Family FORMICARIIDAE: Ant-thrushes

**CYMBILAIMUS LINEATUS INTERMEDIUS** Hartert and Goodson: *Amazonian Bush-shrike*

*Cymbilaimus lineatus intermedius* HARTERT and GOODSON, Nov. Zool., vol. 24, 1917, p. 495 (Humaythá, Rio Madeira, Brazil).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 30, 1930.

1 ad. ♂, Brazil, Rio Maturacá, November 9, 1930.

1 ad. ♂, 1 im.-Brazil, Salto do Huá, Rio Maturacá, November 19-20, 1930.

1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 30, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

2 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corcoco, below Playa de Candela, February 9, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, Caño Caripo, February 22, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.

There is considerable variation in the crown of the males; in some it is solid black, while in others it is thinly barred with white. Inasmuch as these bars are not terminal on the feathers, it is obviously not a matter of abrasion when they are absent. Zimmer (Amer. Mus. Nov., No. 584, 1932, p. 2) concluded from his study of this variation that "males just reaching maturity are more extensively white than old birds; at least, the lightest examples at hand from any locality usually show some traces of juvenal plumage not yet lost in molt . . ."

TARABA MAJOR SEMIFASCIATUS (Cabanis): *Pará Great Ant-shrike*

*Diallactes semifasciatus* CABANIS, Journ. für Orn., vol. 20, 1872, p. 234 (Pará, Guiana, and Venezuela"—Pará accepted as type locality, auct. Hellmayr, Nov. Zool., vol. 12, 1905, p. 283).

SPECIMENS COLLECTED

1 ad. ♂, 5 ad. ♀, Brazil, São Gabriel, Rio Negro, December 26, 1930–January 9, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, Raudal San Sebastián, February 1, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, below Playa de Candela, February 9, 1931.

3 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.

1 ad. ♀, Venezuela, Capibara, Piedra Pintada, February 16, 1931.

1 ad. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

Some of the December birds are in molt.

The Rio Negro females average very slightly darker than the Venezuelan specimens, but one of the latter (from Capibara) is just as dark as the São Gabriel birds.

SAKESPHORUS CANADENSIS INTERMEDIUS (Cherrie): *Cherrie's Crested Ant-shrike*

*Hypolophus canadensis intermedius* CHERRIE, Bull. Mus. Brooklyn Inst. Sci., vol. 2, 1916, p. 277 (Caicara, Venezuela).

SPECIMENS COLLECTED

3 ad. ♀, Venezuela, Soledad, Anzoátegui, June 11–12, 1931, and December 7, 1929.

1 ad. ♂, Venezuela, near Soledad, December 1, 1929.

1 ad. ♂, Venezuela, Ciudad Bolívar, June 8, 1931.

The males have the under tail coverts white and an extensive line of white along each side of the somewhat restricted black of the breast, while the brown of the back is paler than in *trinitatis*. There is considerable white in the lores. The females are paler than *trinitatis* above and below.

Another specimen, taken in Estado Bolívar, December 30, 1929, was preserved in alcohol.

**SAKESPHORUS CANADENSIS LORETOYACUENSIS** (Bartlett): *Bartlett's Crested Ant-shrike*  
*Thamnophilus loretoyacuensis* BARTLETT, Proc. Zool. Soc. London, 1882, p. 374  
(Loretoyacu, Río Marañon, northeast Peru).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Providencia, Rio Negro, October 7, 1930.  
2 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 13, 1930.

This species is one of the few in which the birds of the Rio Negro are racially distinct from those of the Casiquiare and the Upper Orinoco.

The Santa Isabel bird, while not wholly typical, seems best placed with this race. Its back is dark brown with rather indistinct shaft streaks of black. The tibia are black and the sides and flanks very dark gray; the lower breast has a line of black but this does not extend on to the abdomen; the under tail coverts are white with dark gray bases. The bird appears to be somewhat intermediate toward *fumosus*.

**SAKESPHORUS CANADENSIS FUMOSUS** Zimmer: *Zimmer's Crested Ant-shrike*

*Sakesphorus canadensis fumosus* ZIMMER, Amer. Mus. Nov., No. 668, 1933, p. 10  
(Lalaja, Río Orinoco, Venezuela, altitude 325 feet).

SPECIMENS COLLECTED

- 2 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.  
1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 10, 1931.  
1 ad. ♂, Venezuela, Upper Orinoco, San Antonio, March 5, 1931.  
1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.  
8 ad. ♂, 8 ad. ♀, 1 ad. "♂" (= ♀), Venezuela, Puerto Ayacucho, Río Orinoco, May 8-20, 1931.

The examples from the Casiquiare and from San Antonio are typical *fumosus*; the others from farther north are intermediate in their characters between *fumosus*, *intermedius*, and *pulchellus*. Zimmer (Amer. Mus. Nov., No. 668, 1933, p. 16) records a similar state of intermediacy for his material from the same area.

This is one of the rather few cases in which the subspecies inhabiting the Rio Negro (*loretoyacuensis*) is different from the one of the Casiquiare and the Upper Orinoco.

**THAMNOPHILUS DOLIATUS FRATERCULUS** Berlepsch and Hartert: *Venezuelan White-barred Ant-shrike*

*Thamnophilus doliatus fraterculus* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 70 (Altgracia, Venezuela).

## SPECIMENS COLLECTED

- 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 12, 1931.  
 1 ad. ♂, Venezuela, Soledad, Anzoátegui, December 10, 1929.  
 1 im. ♂, Venezuela, Ciudad Bolívar, November 27, 1929.

The immature male shows signs of molting.

The Cerro Yapacana bird is identified with this race with no real feeling of certainty. The locality is far to the south of the previous geographic limits of the race; it is far to the north of *T. d. signatus* Zimmer; in fact, the species does not seem to have been recorded from that area before, at least in print. A lone female specimen is obviously difficult to place, especially in a species where the best racial characters are those of the male plumage.

**THAMNOPHILUS NIGROCINEREUS CINEREONIGER** Pelzeln: *Pelzeln's Cinereous Ant-shrike*

*Thamnophilus cinereoniger* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 76, 143 (above Ayrão, near Villa de Moura, Marabitanas, etc. . . . ; type from Rio Amajau).

## SPECIMENS COLLECTED

- 1 ad. ♀ (= ♂?), Brazil, Rio Negro, near Muirapinima, October 4, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, Rio Negro, Cucuhy, February 3–7, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, Rio Negro, Santa Isabel, October 13, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Rio Negro, São Gabriel, January 16–19, 1931.  
 1 ad. ♂, Venezuela, Río Negro, below San Carlos, January 27, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 30–31, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Cerro Guanari, February 4, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11–13, 1931.  
 1 im. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, February 28–March 9, 1931.  
 5 ad. ♂, 3 ad. ♀, Venezuela, Upper Orinoco, right bank, opposite Corocoro Island, March 13–16, 1931.

One of the specimens taken in March was noted as being in breeding condition; birds in molt were shot in October and January.

This race is restricted to the Upper Rio Negro and the Upper Orinoco, northward at least to Altagracia.

**THAMNOPHILUS AETHIOPS POLIONOTUS** Pelzeln: *Natterer's Ant-shrike*

*Thamnophilus polionotus* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 77, 147 (Marabitanas, Rio Negro, Brazil).

## SPECIMENS COLLECTED

- 2 ad. ♂, Brazil, Cucuhy, Rio Negro, February 5–8, 1930.  
 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 15, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Cachoeira Manajó, Rio Cauabury, October 30, 1930.  
 1 ad. ♂, Brazil, Rio Cauabury, above mouth of Rio Já, November 4, 1930.  
 1 ad. ♂, Brazil, Rio Maturacá, November 11, 1930.  
 2 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 17–24, 1930.

- 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, December 6, 1930.  
 3 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 2-13, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 30, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.  
 4 ad. ♂, 5 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 18-April 25, 1931.

One of the São Gabriel males and the female from there have a concealed white patch on the interscapulars.

Some of the examples collected in January and in April show signs of molt.

This form ranges from the Río Negro to the Upper Orinoco and to the Caura in Venezuela.

**THAMNOPHILUS MURINUS MURINUS** Sclater and Salvin: *Mouse-colored Ant-shrike*  
*Thamnophilus murinus* SCLATER and SALVIN, Proc. Zool. Soc. London, 1867, pp. 750, 756 (Barra do Rio Negro = Manáos, accepted as type locality, Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 69).

SPECIMENS COLLECTED

- 2 ad. ♂, 1 im. ♀, Brazil, Cucuhy, Rio Negro, February 7-8, 1930.  
 2 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 9-10, 1930.  
 1 ad. ♀, Brazil, Rio Negro, mouth of Rio Cauabury, October 21, 1930.  
 1 ad. ♂, 2 ad. ♀, Brazil, Rio Cauabury, October 28-November 7, 1930.  
 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 17, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 5-7, 1930.  
 3 ad. ♂, 1 im. ♂, 3 ad. ♀, Brazil, São Gabriel, Rio Negro, December 29, 1930-January 16, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.  
 1 im. ♂, 2 ad. ♀, 1 ad.-(♂), Venezuela, Cerro Yapacana, Upper Orinoco, March 30-April 25, 1931.

One of the April birds was noted as being in breeding condition when collected.

This ant-shrike ranges along both banks of the Rio Negro and north to the Upper Orinoco and thence eastward to British Guiana and Surinam. Zimmer has noted (Amer. Mus. Nov., No. 647, 1933, p. 8) that the British Guiana males are a very little darker than typical *murinus*, thereby slightly approaching *cayennensis*. Only one male from British Guiana has been available for study in the present connection, and it fails to bear out this observation agreeing with those other specimens noted by Zimmer that are indistinguishable from Rio Negro examples.

**THAMNOPHILUS AMAZONICUS CINEREICEPS** Pelzeln: *Gray-capped Ant-shrike*  
*Thamnophilus cinereiceps* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, p. 77, 145 (Marabitanas, Upper Rio Negro).

SPECIMENS COLLECTED

- 2 ad.—(1 ♂, 1 ♀), 1 ad. ♀. Brazil, Salto do Huá, Rio Maturacá, November 18-23, 1930.

1 ad. —, (♀), 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, December 4, 1930.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 30, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 5, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Id., March 15, 1931.

14 ad. ♂, 1 im. ♂, 6 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 20–April 29, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 2, 1930, and May 14, 1931.

This series shows a great deal of variation, extreme individuals looking as if they might well belong to separate subspecies. However, these variations appear to be individual, not geographic. It may be recalled that Zimmer (Amer. Mus. Nov., No. 647, 1933, p. 19) found similar variability in his much longer series. His comments might have been based on the present material, so well do they apply.

**PYGIPTILA STELLARIS OCCIPITALIS** Zimmer: *Venezuelan Spotted-winged Bushbird*

*Pygiptila stellaris occipitalis* ZIMMER, Amer. Mus. Nov., No. 558, 1932, p. 3 (right bank of Río Casiquiare, Venezuela, opposite El Merey).

SPECIMENS COLLECTED

2 ad. ♂, 3 ad. ♀, Brazil, São Gabriel, Rio Negro, December 31, 1930–January 15, 1931.

1 ad. ♂, Venezuela, Raudal Corocoro, below Playa de Candela, February 9, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, Caño Durutomoni, February 19, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

1 im. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

1 ad. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

The male from the Brazo Casiquiare, at Caño Durutomoni, although labeled as adult is either immature or wrongly sexed, as it has the female type of plumage, but has small white spots at the tips of some of the lesser upper wing coverts and has the posterior crown as well as the occiput gray.

The characters on which this race is founded are not wholly constant but are only average ones. Thus, two of the females in the present series have the occiput as brown as a female from Peru (*P. s. maculipennis*) and have the back with considerable olive-brownish tinge. On the whole, however, *occipitalis* appears to be a readily recognizable form.

Two other specimens from São Gabriel, January 12, 1931, were saved in alcohol.

**MEGASTICTUS MARGARITATUS** (Sclater): *Pearly Bushbird*

*Myrmeciza margaritata* SCLATER, Proc. Zool. Soc. London, vol. 22, 1855, p. 253, pl. 71 (Chamicuros, northern Peru).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Rio Negro, mouth of Rio Cauabury, October 21, 1930.

1 ad. ♂, 1 ad. ♀, 1-, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.

1 ad. ♀, Brazil, Rio Cauabury, November 2, 1930.

This bird is apparently locally rare or absent in many parts of its range, as the members of the expeditions met with it only during a period of less than two weeks, although it is known to occur from eastern Peru and eastern Ecuador to western Amazonia and adjacent southwestern Venezuela. Zimmer (Amer. Mus. Nov., No. 558, 1932, p. 6) considers it possible that "there is an actual continuity of range over an extensive area but that the bird is locally rare or subject to ecological restrictions that are not yet understood."

**DYSITHAMNUS ARDESIACUS OBIDENSIS** Snethlage: *Northern Slaty Ant-shrike*

*Dysithamnus ardesiacus obidensis* SNETHLAGE, Orn. Monatsb., vol. 22, 1914, p. 40 (Obidos, north bank of Lower Amazon, northern Brazil).

## SPECIMENS COLLECTED

1 im. ♂, 1 im. ♀, Brazil, São Gabriel, Rio Negro, December 26, 1930–January 3, 1931.

3 ad. ♂, 1 im. ♂, 1 ad. (♀), Brazil, Salto do Huá, Rio Maturacá, November 14–23, 1930.

1 ad. ♂, 1 im. ♂, 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, November 28–December 4, 1930.

3 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 18–April 25, 1931.

The immature males from Salto do Huá and São Gabriel are in adult plumage but have the throat pale as each of the black feathers is tipped with gray; the young male from Serra Imeri is, however, in the juvenal plumage. It is similar to the female in coloration but is considerably tinged with rufescent tawny both above and below. Immature females are like the adults.

An alcoholic specimen from Estado Bolívar, December 30, 1929, may belong here, but is not certainly identifiable in its present condition.

**THAMNOMANES CAESIUS GLAUCUS** Cabanis: *Guianan Slaty Bushbird*

*Thamnomanes glaucus* CABANIS, Arch. Naturg., vol. 13, 1847, p. 230 (Cayenne).

## SPECIMENS COLLECTED

3 ad. ♂, 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 1–8, 1930.

2 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 9–15, 1930.

1 ad. ♀, Brazil, Rio Cauabury, Cachoeira Thomaz, October 26, 1930.

1 ad. ♀, Brazil, Rio Cauabury, Destacamento, October 28, 1930.

2 ad. ♂, Brazil, Rio Cauabury, Cachoeira, Manajó, October 30–31, 1930.

1 ad. ♀, Brazil, Rio Cauabury, Panela de Onca, November 1, 1930.

1 ad. ♂, 1 ad. ♀, Brazil, Rio Cauabury, November 5–6, 1930.

5 ad. ♂, 2 im. ♂, 2 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 14–24, 1930.



- 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, December 6, 1930.  
 6 ad. ♂, 1 im. ♂, 4 ad. ♀, Brazil, São Gabriel, Rio Negro, December 26, 1930–January 14, 1931.  
 1 ad. ♀, Colombian bank of Río Negro opposite San Carlos, January 29, 1931.  
 1 ad. ♂, Venezuela, San Carlos, Río Negro, January 28, 1931.  
 2 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12, 1931.  
 1 ad. —, Venezuela, Brazo Casiquiare, Caño Caripo, February 22, 1931.  
 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.  
 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.  
 3 ad. ♂, 1 im. ♂, 3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 23–April 29, 1931.

One of the April birds was noted as being in breeding condition; some of the February examples show evidences of molt.

This fine series is remarkably uniform. The darkest examples are from Venezuela, but others from the same localities are not so dark; the extremes in variation are slight at best.

In addition to the specimens listed above, 5 others were preserved in alcohol; 2 were taken at São Gabriel, January 10–12, 1931; 3 were collected at Salto do Huá, November 20–21, 1930.

**MYRMOTHERULA BRACHYURA BRACHYURA** (Hermann): *Pygmy Ant-wren*

*Muscicapa brachyura* HERMANN, Tabula affinitatum animalium . . ., 1783, p. 299, note (based on "Le petit Gobe-mouche tacheté, de Cayenne" Buffon).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 3–9, 1931.  
 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 20, 1930.  
 1 ad. ♂, Colombian bank of the Río Negro opposite San Carlos, January 29, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

**MYRMOTHERULA AMBIGUA** Zimmer: *Zimmer's Ant-wren*

*Myrmotherula ambigua* ZIMMER, Amer. Mus. Nov., No. 523, 1932, p. 5 (Playa del Río Base, Mount Duida, Venezuela, altitude 550 feet).

SPECIMENS COLLECTED

- 1 im. ♀, Brazil, São Gabriel, Rio Negro, December 31, 1930.  
 1 ad. — (= ♀), Venezuela, Brazo Casiquiare, Caño Caripo, February 22, 1931.

These two specimens agree with the description of *M. ambigua*. The São Gabriel one constitutes a slight extension of the known range.

**MYRMOTHERULA SURINAMENSIS SURINAMENSIS** (Gmelin): *Surinam Ant-wren*

*Sitta surinamensis* GMELIN, Systema naturae, vol. 1, pt. 1, 1788, p. 442 (based on "Surinam Nuthatch" Latham, A general synopsis of birds, vol. 1, pt. 2, p. 654, pl. 28: Surinam).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 9, 1931.

Hellmayr (Catalogue of the birds of the Americas, vol. 3, 1924, p. 135, footnote) writes that a male of this form from Munduapo, Río Orinoco "(about two days by canoe, below S. Fernando de Atabapo) is more likely to pertain to *M. s. multostriata*, but the question cannot be satisfactorily settled until females come to hand . . ." The present female, from farther south still, is definitely of the nominate subspecies, having the sides of the head light cinnamon-rufous without any dusky streaks. It appears that *M. s. multostriata* does not cross to the north side of the Amazon but is a bird of the forest to the south of that river.

**MYRMOTHERULA CHERRIEI** Berlepsch and Hartert: *Cherrie's Ant-wren*

*Myrmotherula cherrieri* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 72 (Perico, Upper Orinoco, Venezuela).

SPECIMENS COLLECTED

1 ad. — (= ♂), Brazil, Rio Negro, near Muirapinima, October 4, 1930.

3 ad. ♂, 4 ad. ♀, Venezuela, Upper Orinoco, San Antonio, March 3-5, 1931.

3 ad. ♂, 2 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 12-13, 1931.

3 ad. ♂, 1 im. ♂, 2 ad. ♀, Venezuela, Upper Orinoco, Cerro Yapacana, April 10-29, 1931.

7 ad. ♂, 1 im. ♂, 5 ad. ♀, Venezuela, Río Orinoco, Puerto Ayacucho, January 2-3, 1930, and May 8-17, 1931.

The specimen from near Muirapinima appears to be the first record of this species outside of the drainage area of the Upper Orinoco and is therefore the first one from Brazil. Lest it be thought that it is *M. surinamensis* wrongly named, it may be stated that it has the longer bill and black mandible of *cherrieri*. By extending the known range southward to the Upper Rio Negro this specimen also helps to settle the possibility of *cherrieri* and *surinamensis* being conspecific; the overlap of the ranges of the two would seem to negative such a suggestion. None of the characters separating the males of the two species seem to hold except for the pale mandible and shorter bill of *cherrieri*. The females are far more distinct.

One of the March specimens was in molt when collected.

A pair collected at Puerto Ayacucho, January 4, 1930, was preserved in alcohol. These two are in addition to the skins listed above.

**MYRMOTHERULA GUTTATA** (Vieillot): *Rufous-bellied Ant-wren*

*Myrmothera guttata* VIEILLOT, La galerie des oiseaux . . . , vol. 2, ca. 1825, p. 251, pl. 155 (Cayenne).

SPECIMENS COLLECTED

1 im. ♂, Brazil, Rio Cauabury, below mouth of Rio Já, November 3, 1930.

2 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 20-22, 1930.

1 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, November 30-December 4, 1930.

1 im. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

There appear to be no published records from the Rio Negro, although the species has been taken at Manáos, and on the Upper Caura in Venezuela. The present specimens therefore fill a gap in the previously known range of this ant-wren.

**MYRMOTHERULA HAEMATONOTA PYRRHONOTA** Sclater and Salvin: *Rio Negro Rufous-backed Ant-wren*

*Myrmotherula pyrrhonota* SCLATER and SALVIN, Nomenclator avium neotropicalium, 1873, p. 160 (Marabitanas, Rio Negro; designated as restricted type locality by Hellmayr, Catalogue of the birds of the Americas, pt. 3, 1924, p. 147).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Rio Cauabury, October 28, 1930.  
 1 ad. ♂, Brazil, Cachoeira, Rio Cauabury, October 30, 1930.  
 2 im. ♂, 2 ad. ♀, Brazil, Rio Maturacá, November 9–11, 1930.  
 3 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 21–25, 1930.  
 2 im. ♂, 2 ad. ♀, Brazil, Serra Imeri, Rio Maturacá, November 27–December 2, 1930.  
 3 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, December 30, 1930–January 6, 1931.  
 1 ad. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.  
 1 ad. ♂, 2 ad. ♀, Venezuela Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ad. – (♂), 1 im. – (♂), Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
 1 ad. ♂, 2 im. ♂, 3 ad. ♀, Venezuela, Upper Orinoco, Cerro Yapacana, March 30–April 29, 1931.

These birds agree with Zimmer's observation (Amer. Mus. Nov., No. 523, 1932, p. 15) that *pyrrhonota* is a recognizable race, but with distinguishing characters other than those on which it was originally described. The males are brighter and purer mahogany red on the back, paler gray on the breast, and more brownish on the flanks than in the nominate race; the females are more orange-ochraceous below.

Some of the April birds were noted as being in breeding condition when collected.

**MYRMOTHERULA AXILLARIS MELAENA** (Sclater): *Black Ant-wren*

*Formicivora melaena* SCLATER, Proc. Zool. Soc. London, vol. 25, 1857, p. 239 (Bogotá).

SPECIMENS COLLECTED

- 2 ad. ♂, 2 –, Brazil, Cucuhy, Rio Negro, February 3–7, 1930.  
 1 ad. ♀, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.  
 1 ad. ♂, 2 im. ♂, 1 im. ♀, Brazil, Rio Cauabury, October 28–November 6, 1930.  
 1 ad. ♂, 1 im. ♂, Brazil, Rio Maturacá, November 9–11, 1930.  
 1 ad. ♂, 1 ad. ♀, 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 20–24, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 27–31, 1930.

- 1 ad. ♂, Colombian bank of Río Negro, opposite San Carlos, January 29, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, Cerro Guanari, February 4, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 7-9, 1931.  
 2 ad. ♂, 2 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 10-12, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
 2 ad. ♂, 2 im. ♂, 2 ad. ♀, 2 im. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13-16, 1931.  
 8 ad. ♂, 2 im. ♂, 4 ad. ♀ im. 2 ♀, Venezuela, Upper Orinoco, Cerro Yapacana, March 23-April 22, 1931.  
 4 ad. ♂, 1 ad. ♀, Venezuela, Río Orinoco, Puerto Ayacucho, January 2-4, 1930, and May 14, 1931.

Some of the birds taken in March and April were in breeding condition; molting specimens were collected in November.

This subspecies occurs from eastern Peru and eastern Ecuador, to eastern Colombia, southwestern Venezuela (the upper Orinoco and the Casiquiare), and to the Upper Rio Negro and its tributaries as far east as Santa Isabel. According to Zimmer's findings (Amer. Mus. Nov., No. 524, 1932, p. 6) the nominate race occurs on both banks of the Rio Negro east of the Rio Branco. We have here another instance of a river, such as the Branco, apparently demarcating the ranges of two geographically contiguous races, while the watershed between the Negro and the Orinoco systems appears to have no such effect.

A specimen preserved in alcohol was collected at Puerto Ayacucho, January 3, 1930, in addition to the skins listed above.

**MYRMOTHERULA LONGIPENNIS LONGIPENNIS** Pelzelin: *Long-winged Ant-wren*

*Myrmotherula longipennis* PELZELIN, Zur Ornithologie Brasiliens . . . , pt. 2, 1868, p. 82, 153 (Rio Negro, Marabitanas).

SPECIMENS COLLECTED

- 1 im. ♂, 1 im. ♀, Brazil, Cucuhy, Rio Negro, February 2-5, 1930.  
 1 ad. ♀ (= ♂), Brazil, Rio Cauabury, below Cachoeira, October 28, 1930.  
 1 ad. ♂, Brazil, Rio Cauabury, Cachoeira Manajó, October 30, 1930.  
 1 ad. ♂, 1 im. ♂, 2 ad. ♀, Brazil, Rio Cauabury, November 4-6, 1930.  
 3 ad. ♂, 3 im. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 17-23, 1930.  
 5 ad. ♂, 2 ad. ♀, 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, November 27-December 4, 1930.  
 1 ad. ♂, Colombian bank of Río Negro, opposite San Carlos, January 29, 1931.  
 1 ad. ♀, Venezuela, San Carlos, Río Negro, January 28, 1931.

Birds noted as being in breeding condition were collected in October and November; birds showing signs of molt were taken in November and January.



Gray-breasted tree ducks (*Dendrocygna discolor*) at Puerto Ayacucho, Venezuela.



Tame Orinoco geese (*Alopochen jubata*) at Carveiro, Rio Negro, Brazil.



Young collared plover (*Charadrius collaris*) near San Carlos, Upper Orinoco, Venezuela.



Nest depression and eggs of Schomburgk's nighthawk (*Hydropsalis climacocerca schomburgki*) at Cachoeira Destacamento, Brazil.

Immature females are more orange-ochraceous on the chin, throat, and breast than are adults of the same sex. Immature males are like the young females but somewhat duskier, washed with olive rather than with orange on their ochraceous throats and breasts.

**MYRMOTHERULA MENETRIESII PALLIDA** Berlepsch and Hartert: *Western Gray-throated Ant-uren*

*Myrmotherula cinereiventris pallida* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 74, pt. (Nericagua, Río Orinoco, Venezuela).

## SPECIMENS COLLECTED

- 2 im. ♀, Brazil, Cucuhy, Río Negro, February 1-8, 1930.  
 1 ad. ♂, Brazil, Santa Isabel, Río Negro, October 17, 1930.  
 1 ad. ♀, Brazil, Río Negro, mouth of Río Cauabury, October 22, 1930.  
 1 ad. ♂, Brazil, Panela de Onca, Río Cauabury, November 1, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Río Negro, December 31, 1930-January 1, 1931.  
 1 ad. ♂, 2 im. ♂, 1 ad. (= ♂), 1 im. ♀, Brazil, Salto do Huá, Río Maturacá, November 14-23, 1930.  
 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, Río Maturacá, December 4, 1930.  
 1 ad. ♂, 1 ad. ♀, Venezuela, San Carlos, Río Negro, January 28, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 30, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Durutomoni, February 19, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.  
 3 ad. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 21-25, 1931.

Birds in breeding condition were taken in April; specimens in molt in February.

This is another of the many forest birds that range unchanged from the Río Negro to the Upper Orinoco.

A specimen, preserved in alcohol, was taken at Salto do Huá, November 20, 1930. It is an addition to the skins listed above.

**HERPSILOCHMUS DORSIMACULATUS** Pelzelin: *Spotted-backed Antbird*

*Herpsilochmus dorsimaculatus* PELZELIN, Zur Ornithologie Brasiliens . . . , pt. 2, 1868, p. 60, 150 (Marabitanas, Upper Río Negro).

## SPECIMENS COLLECTED

- 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, November 29, 1930.  
 1 im. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 31, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

The spotted-backed antbird is one of the very few full species known only from the upper Río Negro and the adjacent portions of southern Venezuela (Upper Orinoco and Upper Caura Rivers).

**FORMICIVORA GRISEA GRISEA** (Boddaert): *Guiana Antbird*

*Turdus grieseus* BODDAERT, Table des planches enluminées . . ., 1783, p. 39 (based in "Le Grisin, de Cayenne" Daubenton, Planches enluminées . . ., pl. 643, fig. 1: Cayenne).

## SPECIMEN COLLECTED

1 ad. ♀, Brazil, Manáos, September 30, 1930.

It seems strange that but a single example of this antbird was obtained on the Rio Negro and so considerable a series of the next two forms in the Venezuelan territory farther north.

**FORMICIVORA GRISEA RUFIVENTRIS** Carriker: *Carriker's Antbird*

*Formicivora grisea rufiventris* CARRIKER, Auk, 1936, p. 316 (Cerro Yapacana, Upper Orinoco River, Venezuela).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 12, 1931.

6 ad. ♂, 1 im. ♂, 8 ad. ♀, 1 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, March 12–April 27, 1931.

This is the original series on which Carriker's studies leading to his description of the form were based. As he says, the male is very similar to that of *F. g. grisea* of the Guianas but averages slightly darker brown above and with shorter wings (52–54 mm. as against 57–59 mm.), but the female is much more richly colored, the underparts being rich rufescent or cinnamon-ochraceous instead of pale ochraceous, the upperparts more rufescent, the supraloral and superciliary streaks cinnamon-ochraceous instead of white, the wing coverts almost entirely black, only the inner greater series being slightly shaded with chocolate-brown, with the white tips more pronounced throughout.

A number of the birds were noted by the collectors as being in breeding condition.

The immature male resembles the female in plumage but is slightly paler ochraceous below, and is acquiring the black adult feathers on the chin, throat, and breast, and, to a lesser extent, on the abdomen.

**FORMICIVORA INTERMEDIA ORENOCENSIS** Hellmayr: *Orinoco Antbird*

*Formicivora orenocensis* HELLMAYR, Bull. Brit. Orn. Club, vol. 14, 1904, p. 54 (Altagracia, Río Orinoco, Venezuela).

## SPECIMENS COLLECTED

3 ad. ♂, 1 im. ♂, 2 ad. ♀, 1 —, Venezuela, Puerto Ayacucho, Upper Orinoco, January 3, 1930, and May 9–18, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Ciudad Bolívar, June 8–11, 1931.

1 im. ♀, Venezuela, Soledad, Anzoátegui, November 29, 1929.

1 ad. ♂, Venezuela, Laguna Icacal, Estado Bolívar, December 8, 1929.

Some of the May birds were noted as being in breeding condition when collected.



Carriker's arrangement of the *Formicivora grisea* and *F. intermedia* complex seems better than the older one he altered and is followed in this report, although it must be admitted that *hondae* does partly bridge the gap. However, inasmuch as *orenocensis* and *rufiventris* both occur at Puerto Ayacucho, it certainly seems better to regard them as specifically distinct.

This series has already been published on by Carriker (Auk, 1936, pp. 316-317).

An additional specimen from Puerto Ayacucho, taken January 3, 1930, was preserved in alcohol.

**TERENURA SPODIOPTILA SPODIOPTILA** Sclater and Salvin: *Ash-winged Ant-wren*

*Terenura spodioptila* SCLATER and SALVIN, Ibis, 1881, p. 270, pl. 9, fig. 1 (Bartica Grove, British Guiana).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, November 5, 1930.

1 im. ♂, Brazil, Cucuhy, Rio Negro, February 8, 1930.

1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.

It is unfortunate that no adult male was collected on either the Rio Cauabury or the Rio Negro, as it would have made more definite a comparison with the description of *T. s. signata* Zimmer, described from Mount Curucuryari, on the right bank of the Rio Negro. There is no chestnut on the lesser upper wing coverts of the immature male from Cucuhy (*signata* is said to have these feathers chestnut instead of gray as in *spodioptila*), and it seems better to call the specimen typical *spodioptila*. Furthermore, in support of this decision, it may be noted that the lower wing band (on the greater coverts) is as broad as in the two adult males from the Casiquiare and the upper Orinoco (whence Zimmer records *T. s. spodioptila*), while in the description of *signata* this wing band is described as narrower than in the nominate form. The female from the Rio Cauabury is assumed to be of the same subspecies as the Cucuhy male; no females have been available for comparison.

The present race appears to be an addition to the known avifauna of Brazil. It is not listed by Pinto (Catalogo Aves do Brasil, pt. 1, 1938, p. 490).

**RAMPHOCAENUS MELANURUS DUIDAE** Zimmer: *Duida Straight-billed Ant-wren*

*Ramphocaenus melanurus duidae* ZIMMER, Amer. Mus. Nov., No. 917, 1937, p. 15 (Esmeralda, Mount Duida, Venezuela).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, below Playa de Candela, February 9, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Durutomoni, February 19, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

The material available for comparison indicates that the dorsal coloration of this race is not particularly different from that of *R. m. trinitatis*, but that the present race may be identified by its more deeply ochraceous sides and flanks.

**MICROBATES COLLARIS COLLARIS** (Pelzeln): *Collared Ant-wren*

*Rhamphocaenus collaris* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 84, 157 (Barra do Rio Negro=Manáos).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, Brazil, Salto do Huá, Rio Maturacá, Venezuelan border, November 17-23, 1930.

1 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 4-5, 1930.

The immature male is brighter, more rufescent above than the adults.

**CERCOMACRA CINERASCENS CINERASCENS** (Sclater): *Gray Antbird*

*Formicivora cinerascens* SCLATER, Proc. Zool. Soc. London, vol. 25, 1857, p. 131 (Río Napo, eastern Ecuador).

SPECIMENS COLLECTED

1 im. ♂, Brazil, Barcellos, Rio Negro, October 6, 1930.

1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 16, 1930.

1 ad. ♀, Brazil, Rio Negro at mouth of Rio Cauabury, October 22, 1930.

The females have the lower back much more grayish, less brownish than the mantle. Zimmer (Amer. Mus. Nov., No. 558, 1932, p. 21) noted the same in his birds from the Upper Rio Negro and the Upper Orinoco, but writes that most of them are not distinguishable from Ecuadorian examples.

**CERCOMACRA TYRANNINA TYRANNINA** (Sclater): *Tyrannine Antbird*

*Pyriglena tyrannina* SCLATER, Proc. Zool. Soc. London, vol. 23, 1855, p. 90, pl. 98 ("Bogotá," eastern Colombia).

SPECIMENS COLLECTED

2 ad. ♀, Brazil, São Gabriel, Rio Negro, January 14-16, 1931.

There is a possibility that more extensive material from the area may indicate that the Upper Rio Negro is inhabited by an unnamed race of this antbird. Hellmayr (Catalogue of the birds of the Americas, vol. 3, 1924, p. 218, footnote) writes that "three birds from Marabitanas, Rio Negro, . . . appear to belong to *tyrannina*, although the female has the underparts nearly as deep ochraceous tawny as *crepera* . . ." That is true of the present examples as well.

**CERCOMACRA NIGRICANS** Sclater: *Black Tyrannine Antbird*

*Cercomacra nigricans* SCLATER, Proc. Zool. Soc. London, vol. 26, 1858, p. 245, (Santa Marta).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Soledad, Anzoátegui, December 10, 1929.

The specimen is molting the wing feathers.

Material has not been available to investigate the status of *C. n. atratus* Todd or *C. n. maculosa* (Sclater), but inasmuch as most recent authors appear to agree in referring to *nigricans* binomially the same method has been followed here.

**MYRMOBORUS LEUCOPHRYS ANGSTIROSTRIS** (Cabanis): *Schomburgk's Antcreeper*

*Conopophaga angustirostris* CABANIS, in Schomburgk's *Reisen in British-Guiana*, pt. 3, 1848, p. 685 (coastal forests of British Guiana).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

3 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, below Playa de Candela, February 9, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.

1 ad. ♂, Venezuela, Capibara, Piedra Pintada, February 16, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Matipin, February 18, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

Apparently this form is the one found along the Rio Negro; also it has a wide range in the lowlands of the great Amazonian forest from Cayenne through southern Venezuela to the Casiquiare to Colombia, eastern Ecuador, eastern Peru, and northern Bolivia.

**MYRMOBORUS MYOTHERINUS ELEGANS** (Sclater): *Sclater's Black-faced Antcreeper*

*Hypocnemis elegans* SCLATER, Proc. Zool. Soc. London, vol. 25, 1857, p. 47 (based on *Hypocnemis*?—? Sclater, Proc. Zool. Soc. London, vol. 23, 1855, p. 147, "Bogota").

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Maturacá, November 8, 1930.

3 ad. ♂, 3 ad. ♀, Brazil, São Gabriel, Rio Negro, December 27, 1930–January 9, 1931.

Although this bird is known from southern Venezuela (Mount Duida and the Upper Orinoco) the present expedition failed to find it there, but only in the adjacent Rio Negro country of Brazil. It occurs south as far as São Gabriel, on the left bank of the Upper Rio Negro, but at Tabocal, on the right bank, not very far to the southeast, another subspecies, *M. m. ardesiacus* Todd, takes its place.

**HYPOCNEMIS CANTATOR FLAVESCENS** (Sclater): *Sulphur-breasted Antbird*

*Formicivora flavescens* SCLATER, Proc. Zool. Soc. London for 1864, 1865, p. 609 (Marabitanas, Rio Negro, northwestern Brazil).

SPECIMENS COLLECTED

2 ad. ♂, 1 ad. ♀, 1 ad. —, Brazil, Cucuhy, Rio Negro, February 3–7, 1930.

1 ad. ♀, 1 ad. —, Brazil, Santa Isabel, Rio Negro, October 9–10, 1930.

- 1 ad. ♂, 1 ad. ♀, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.  
 1 ad. ♀, 1 im. —, Brazil, Rio Cauabury, November 4–5, 1930.  
 2 ad. ♂, 1 ad. ♀, 1 ad. —, Brazil, São Gabriel, Rio Negro, November 9, December 31, 1930, and January 2–6, 1931.  
 1 ad. ♂, 1 im. ♂, 1 im. —, Brazil, Salto do Huá, Rio Maturacá, November 19–22, 1930.  
 1 ad. ♂, 1 ad. ♀, 1 ad. —, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 3–4, 1930.  
 1 ad. ♀, 1 ad. —, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.  
 1 im. —, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 1, 1931.  
 1 ad. ♂, Venezuela, Solano, Brazo Casiquiare, February 2, 1931.  
 1 ad. ♂, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.  
 1 ad. ♂, 1 ad. —, Venezuela, Brazo Casiquiare below mouth of Río Pacila, February 12, 1931.  
 2 ad. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 4–8, 1931.  
 10 ad. ♂, 7 ad. ♀, 3 ad. —, 3 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 18–April 27, 1931.

A common bird along the Rio Negro, the Casiquiare, and the Upper Orinoco. Females are more brownish, less grayish, on the upper back than are the males, and on the basis of this character it would be possible, if desired, to guess the sex of those specimens left without such determinations in the field. The variation in the dark markings is very considerable, the tendency to streaking and to barring being quite unequal in different specimens.

In addition to the skins listed above, four birds were preserved in alcohol—two from Santa Isabel, October 9–November 21, 1930; one from São Gabriel, January 10, 1931; and one from Cachoeira Carangué, Rio Cauabury, October 24, 1930.

**HYPOCNEMOIDES MELANOPOGON OCCIDENTALIS** Zimmer: *Zimmer's Antcreeper*

*Hypocnemoides melanopogon occidentalis* ZIMMER, Amer. Mus. Nov., No. 538, 1932, p. 21 (Puerto Indiana, Río Amazonas, Peru).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 im. ♂, 1 ad. ♀, Brazil, Cucuhy, Río Negro, February 3–4, 1930.  
 1 ad. ♀, Brazil, Rio Negro, October 4, 1930.  
 1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 13, 1930.  
 2 ad. ♀, Brazil, Rio Cauabury, November 4–5, 1930.  
 1 ad. ♂, Brazil, mouth of Rio Maturacá, November 8, 1930.  
 1 ad. ♀, 1 —, Brazil, Rio Maturacá, November 11, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, Venezuelan border, November 20–24, 1930.  
 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 19, 1931.  
 1 ad. ♀, Venezuela, Río Negro Islands, January 27, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 31, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 2 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8–10, 1931.  
 2 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11–13, 1931.

- 1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Pamoni, February 19, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.  
 2 ad. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
 3 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, San Antonio, February 28–March 2–9, 1931.  
 1 ad. ♂, 3 ad. ♀, Venezuela, Upper Orinoco, opposite Corocoro Island, right bank March 12–16, 1931.  
 2 ad. ♂, 2 ad. ♀, Venezuela, Upper Orinoco, Puerto Ayacucho, May 8–17, 1931.

One of the May specimens was noted as being in breeding condition when collected; some of the November, January, and February birds were in molt. One of the males from Playa de Candela is probably wrongly sexed, as it has the female plumage.

There is considerable variation in the darkness or paleness of the upperparts and breast and flanks, especially in the females from southern Venezuela. It should be kept in mind that Zimmer noted that south Venezuelan birds approach typical *melanopogon* in coloration and are in reality intermediate between the present race and the nominate form.

None of the present series has any concealed white patch on the interscapulars as Zimmer found in some Venezuelan birds, but quite a number have the basal portions of these feathers considerably paler gray than the exposed, more distal parts.

According to the specimens of the two races of this antcreeper listed by Zimmer (*cit. supra*, p. 24) the São Gabriel and, probably, the Cucuhy, birds should be *H. m. melanopogon*. I cannot distinguish them, however, from any of the Casiquiare or Orinoco birds. In fact, the female from São Gabriel is more in accord with the characters of *occidentalis* than are birds from the Upper Orinoco. Zimmer writes that typical *melanopogon* "approaches the range of *occidentalis* most closely on the Rio Negro in Brazil. Spreading northward from the Guianas, *melanopogon* extends westward along the left bank of the upper Rio Negro to São Gabriel, across the Negro from part of the area occupied by *occidentalis*. A series of both sexes from the right bank of the Negro near its mouth (Mirapinima and Igarapé Cacao Pereira) definitely belongs to *melanopogon* and shows that this form crosses the river somewhere between its mouth and the junction of the Branco . . . ." The influence of rivers as demarcating limits of subspecific ranges appears to be less marked in this than in many other species, as the nominate form crosses the Amazon itself between the Tocantins and the Xingú, and again between the Tapajóz and the Purús.

On December 30, 1929, two specimens were taken in Estado Bolívar, northern Venezuela, and were preserved in alcohol. It is not possible to identify them subspecifically in their present condition.

**PERCOSTOLA RUFIFRONS MINOR** Pelzeln: *Smaller Black-headed Fire-eye*

*Percnostola minor* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 86, 159 (São Isabel, Upper Rio Negro).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Cucuhy, Rio Negro, February 1, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Panela de Onca, Rio Cauabury, November 1, 1930.  
 2 ad. ♂, 3 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 6-8, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 29, 1930.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, near Caño Durutomi, February 19, 1931.

The Cucuhy male is considerably darker, less slaty, more blackish, above than are the other males. It is in slightly more abraded plumage, but there is not enough difference in this respect to explain the darker coloration.

As Zimmer has pointed out (Amer. Mus. Nov., No. 584, 1932, p. 8) this race ranges from the Upper Rio Negro northward to the southern slopes of Mount Duida and the Upper Orinoco, and westward across the Río Uaupés into extreme eastern Colombia.

**SCHISTOCICHLA LEUCOSTIGMA LEUCOSTIGMA** (Pelzeln): *Spotted-winged Antcatcher*

*Percnostola leucostigma* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, p. 86, 160 (Barra do Rio Negro=Manáos).

## SPECIMENS COLLECTED

- 1 im. ♂, Brazil, Salto do Huá, Venezuelan border, Rio Maturacá, November 18, 1930.  
 1 ad. ♂, Brazil, Serra Imeri, Venezuelan border, December 1, 1930.

These specimens appear to be the northwesternmost records for this antcatcher and help to close the rather large gap between the known ranges of this race and of *S. l. saturata* of Mount Roraima and of *S. l. obscura* of Mount Auyán-tepuí. They are definitely *leucostigma*; in fact, they show no tendency to vary in the direction of *S. l. saturata* or of *S. l. obscura*.

The immature bird is like the adult in plumage but has a few dark brownish feathers left on the scapulars, upper back, wings, sides, and flanks.

**SCLATERIA NAEVIA ARGENTATA** (Des Murs): *White-breasted Antcatcher*

*Herpsilochmus argentatus* DES MURS in Castelnau, Expédition dans les parties centrales de l'Amérique du Sud, pt. 7: Zoologie, sect. 1: Oiseaux, livr. 18, 1856, p. 56, pl. 17, fig. 2 (Nauta, northeastern Peru).

## SPECIMENS COLLECTED

- 1 im. ♀, Brazil, Serra Imeri, Rio Maturacá, November 27, 1930.  
 1 im. ♂, Brazil, São Gabriel, Rio Negro, January 9, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 14, 1931.

1 ad. ♂, 1 im. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 23–April 19, 1931.

With no comparative material other than a pair of adults of the nominate form the distinctness of *argentata* and *naevia* seems more than subspecific but lack of the other races, especially of *toddi*, and the comments in literature prevent any decision (*S. n. toddi* is said to form a connecting link between *naevia* and *argentata*. However, Todd (Proc. Biol. Soc. Washington, vol. 40, 1927, p. 165) considers *argentata* a full species, writing that "the yellow feet and nearly white (unstriped) under parts of this form are in my opinion good specific characters as compared with *S. naevia*, in spite of the somewhat intermediate character of the Tapajóz race."

**MYRMECIZA LONGIPES GRISEIPECTUS** Berlepsch and Hartert: *Gray-chested Antcatcher*  
*Myrmeciza swiansoni griseipectus* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 76 (Caicara, Venezuela).

## SPECIMENS COLLECTED

3 ad. ♂ 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 15–20, 1931.

The female was noted as being in breeding condition when collected.

**MYRMECIZA ATROTHORAX ATROTHORAX** (Boddaert): *Black-throated Antcatcher*  
*Formicarius atrothorax* BODDAERT, Table des planches enluminées . . . , 1783, p. 44 (based on "L'Alapi, de Cayenne" Daubenton, Planches enluminées . . . , pl. 701, fig. 2: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.

1 im. ♂, 1 im. ♀, Brazil, Serra Imeri, Salto do Huá, December 8, 1930.

8 ad. ♂, 3 ad. ♀, Brazil, São Gabriel, Rio Negro, December 31, 1930–January 19, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, Raudal Corocoro, February 9, 1931.

1 im. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 10, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

4 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 17–April 26, 1931.

One of the January males was noted as being in breeding condition when collected.

These birds vary considerably in size; thus the wing length varies from 54.8–60.1 mm. in males, from 55–59.1 mm. in females; the tail from 51–57.2 mm. in males, from 51–56.2 mm. in females; the culmen from the base from 17.3–19 mm. in males, 16.5–19.2 mm. in females.

**MYRMECIZA DISJUNCTA** Friedmann: *Yapacana Antcatcher*

*Myrmeciza disjuncta* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 58, 1945, p. 83 (Cerro Yapacana, Upper Orinoco, Venezuela).

## SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 10–19, 1931.

The male is the type of the species. As stated in the original description, the type is in molt, and the incoming adult feathers of the wings and back and underparts are similar to those of the immature plumage, indicating that the adult male will probably be found to resemble the type. The species is not too distantly related to *Myrmeciza atrothorax* but is clearly specifically distinct from that form. After examining the present two specimens Dr. Zimmer noted that the general plumage has about the texture of *Cercomacra carbonaria* and suggested that it is possible that a fully adult male, if markedly different from the type, might show a closer relationship to that genus than the present examples demonstrate. The pattern of the markings of the upper wing coverts is very like that of some forms of *Cercomacra* (*serva*, for example), but the bill is that of *Myrmeciza*. Dr. Zimmer was unable to feel certain that the type had been correctly sexed, but this cannot be checked. It is unfortunately true that a number of specimens in the present collection appear to have been wrongly sexed by the collectors.

MYRMECIZA PELZELNI Sclater: *Gray-bellied Antcatcher*

*Myrmeciza pelzelni* SCLATER, Catalogue of birds in the collection of the British Museum, vol. 15, 1890, p. 283 (Marabitanas, Rio Negro).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Cucuhy, Rio Negro, February 2, 1930.  
 1 ad. ♂, 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 24, 1930.  
 3 ad. ♂, 2 im. ♂, 3 ad. ♀, 1 ad. - (♂?), Brazil, Serra Imeri, November 26-December 2, 1930.

This is one of the very few birds that appears to be wholly restricted to the upper Rio Negro, not having been found yet on the adjacent portion of the Amazon or in the basin of the Casiquiare or the Upper Orinoco.

The immature males resemble the adults but have a few whitish or grayish feathers mixed in with the black of the breast; the immature female differs from adults of its sex in having the white of the throat less extensive, more encroached upon by feathers with squamate blackish markings, and in having the blackish margins of the pectoral feathers deeper, broader, and extending over more feathers posteriorly.

FORMICARIUS COLMA COLMA Boddaert: *Guianan Ant-thrush*

*Formicarius colma* BODDAERT, Table des planches enluminées . . . , 1783, p. 44 (based on "Le Colma, de Cayenne" Daubenton, Planches enluminées . . . , pl. 703, fig. 1: Cayenne).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.  
 1 ad. ♀, Brazil, Rio Maturacá, November 9, 1930.  
 1 im. ♂, Brazil, Salto do Huá, Rio Maturacá, November 22, 1930.  
 1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 9, 1931.



- 1 ad. ♀, Venezuela, Brazo Casiquiare, Chapazon, January 31, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, Caño Atamoni, February 6, 1931.  
 1 im. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, San Antonio, March 8, 1931.  
 2 ad. ♂, 3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 5–27, 1931.

This fine series and a smaller amount of comparative material bear out Zimmer's contention as to the conspecificity of *colma* and *ruficeps* (Amer. Mus. Nov., No. 584, 1932, pp. 10–12) and add nothing new to his discussion of *colma* and *nigrifrons*. The birds of the Upper Rio Negro, the Casiquiare, and the Upper Orinoco are an intermediate population showing tendencies to vary in the direction of *colma* and of *nigrifrons*, but are nearer to the former on the whole.

The April birds were noted as being in breeding condition when collected.

Two other specimens were preserved in alcohol; one was taken on the Rio Negro, February 9, 1931, and one at San Antonio, March 4, 1931.

**PITHYS ALBIFRONS ALBIFRONS** (Linnaeus): *White-faced Antcatcher*

*Pipra albifrons* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 339 (based on "The White-faced Manakin" Edwards, Gleanings of natural history, vol. 3, p. 280, pl. 344, fig. 1: "Guiana" = Cayenne).

SPECIMENS COLLECTED

8 ad. ♂, 1 im. ♂, 5 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 28–April 29, 1931.

The immature bird has the chin, throat, and forehead sooty like the back and lacks the crest. Most of the adults were noted as being in breeding condition when collected.

Hellmayr (Catalogue of the birds of the Americas, pt. 3, 1924, p. 297, footnote) writes that some specimens from the Upper Orinoco show evidences of transition from *albifrons* to *peruviana*. "Some are indistinguishable from typical *albifrons*; but three lack the white postocular streak and have more sooty gray on the lower throat . . ." One of the present series (a female) has the postocular streak suffused with chestnut but the others are typical *albifrons* in every way.

**GYMNOPITHYS RUFIGULA RUFIGULA** (Boddaert): *Rufous-throated Antcatcher*

*Turdus rufigula* BODDAERT, Table des planches enluminées . . ., 1783, p. 39 (based on "Petit Merle brun à gorge rousse, de Cayenne" Daubenton, Planches enluminées . . ., pl. 644, fig. 2: Cayenne).

SPECIMENS COLLECTED

- 1 im. ♀, Brazil, Rio Cauabury, Amazonas, November 3, 1930.  
 1 ad. ♀, Brazil, Rio Já, Amazonas, November 3, 1930.  
 1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, November 29, 1930.

These examples extend the known range of this form slightly in the Rio Negro area.

**GYMNOPITHYS RUFIGULA PALLIDA** (Cherrie): *Venezuelan Rufous-throated Antcatcher*  
*Anoplops rufigula palidus* CHERRIE, Bull. Mus. Brooklyn Inst. Sci., vol. 1, No. 16,  
 1900, p. 390 (Suapure, Caura River).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Rio Já, Amazonas, November 3, 1930.  
 1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, November 29, 1930.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni,  
 February 6, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 7-8, 1931.

This is a poorly differentiated race, the supposedly paler coloration being very slight and not even constant. The birds are slightly smaller than others from the Rio Negro and from the Guianas.

**GYMNOPITHYS LEUCASPIS LATERALIS** Todd: *Rio Negro Cinnamon Antcatcher*  
*Gymnopithys leucaspis lateralis* TODD, Proc. Biol. Soc. Washington, vol. 40, 1927,  
 p. 174 (Manacapurú, Brazil).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♀, Brazil, São Gabriel, Rio Negro, January 14, 1931.

The immature bird resembles the adult but has a few dark brown feathers among the white ones on the breast and has a darker mandible.

In the absence of comparative material, these examples are identified subspecifically in accordance with Zimmer's revision of the species (Amer. Mus. Nov., No. 917, 1937, pp. 3-6).

**HYLOPHYLAX NAEVIA CONSOBRINA** Todd: *Todd's Spotted-backed Antbird*  
*Hylophylax consobrina* TODD, Proc. Biol. Soc. Washington, vol. 26, 1913, p. 172  
 (Rio Mocho, upper Caura River, Venezuela).

SPECIMENS COLLECTED

1 ad. - (= ♂), Brazil, Rio Cauabury, below Cachoeira Destacamento, October 28, 1930.  
 1 ad. - (= ♂), Brazil, Rio Cauabury, above Cachoeira Manajó, October 31, 1930.  
 2 ad. ♂, 1 ad. ♀, 1 ad. - (= ♀), Brazil, Salto do Huá, Rio Maturacá, November 17-24, 1930.  
 4 ad. ♂, 3 im. ♂, 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, November 26-December 8, 1930.  
 1 ad. - (= ♀), Brazil, São Gabriel, Rio Negro, January 13, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Durutomoni, February 19, 1931.  
 3 ad. ♂, 1 im. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 4-25, 1931.

Carriker (Proc. Acad. Nat. Sci. Philadelphia, vol. 84, 1932, pp. 3-4) lists the present series in his material of *consobrina* in his review of the races of the spotted-backed antbird, and there is nothing new to be added to his remarks on the form. He incorrectly records 1 male and 3 females from Salto do Huá, whereas there are two of each sex. The Salto do Huá and Serra Imeri females are more ochraceous below than any of the others, as he says, but the difference is very slight.

**HYLOPHYLAX PUNCTULATA PUNCTULATA** (Des Murs): *Des Murs' Spotted Antbird*

*Rhopotera punctulata* DES MURS, in Castelnau, Expédition dans les parties centrales de l'Amérique du Sud, pt. 7: Zoologie, sect. 1: Oiseaux, livr. 18, 1856, p. 53 ("Haut Amazone" = Pebas, north bank of Marañon, northeastern Peru, Hellmayr, Catalogue of the birds of the Americas, pt. 4, 1924, p. 311).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Rio Maturacá, November 9, 1930.
- 1 ad. ♂, 1 im. ♂, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.
- 1 ad. ♂, Venezuela, Raudal Corocoro, below Playa de Candela, February 9, 1931.
- 3 ad. ♂, 2 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.
- 1 ad. ♀, Venezuela, near Cerro Cariche, Upper Orinoco, February 24, 1931.
- 1 ad. ♀, Venezuela, near Isla Temblador, Upper Orinoco, February 25, 1931.
- 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.

This bird appears to be absent from the Rio Negro itself, although it occurs along the Amajaú, an affluent of that stream below Barcellos, and on the Maturaca and the Casiquiare. Zimmer (Amer. Mus. Nov. No. 703, 1934, p. 1) notes that birds from Peru are the same as those from the upper Orinoco, the Casiquiare, and the Caura in southwestern Venezuela, "although there is a wide gap in their distribution which avoids northwestern Brazil."

**HYLOPHYLAX POECILINOTA DUIDAE** Chapman: *Rio Negro Scale-backed Antbird*

*Hylophylax lepidonota duidae* CHAPMAN, Amer. Mus. Nov., No. 86, 1923, p. 7 (foot of Mount Duida, Upper Orinoco, southern Venezuela).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 10, 1930.
- 1 ad. ♀, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.
- 1 ad. ♂, 1 ad. ♀, Brazil, Panela de Onca, Rio Cauabury, November 1, 1930.
- 1 ad. ♂, 1 ad. ♀, Brazil, Rio Cauabury, November 3, 1930.
- 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.
- 1 ad. ♂, 1 ad. ♀, 1 ad. - (= ♀), Brazil, Serra Imeri, near Salto do Huá, November 30-December 8, 1930.
- 2 ad. ♂, 3 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, Venezuelan border, November 17-24, 1930.
- 1 ad. ♂, 1 ad. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.
- 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, Buenos Aires, February 21, 1931.

10 ad. ♂, 10 ad. ♀, 1 im. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 20–April 25, 1931.

This fine series is identified in accordance with Zimmer's contention (Amer. Mus. Nov., No. 703, 1934, p. 4) that *duidae* is a recognizable race distinct from *lepidonota*, of which form only one specimen (a cotype), has been available for comparison. There is no appreciable difference between birds from the Rio Negro and the Brazo Casiquiare, on the one hand, and the Cerro Yapacana area on the Upper Orinoco on the other. Zimmer found that while *duidae* ranged from the western base of Mount Duida on the Rio Cucucunuma southward to the Casiquiare and to the Rio Negro, eastward to the vicinity of Santa Isabel, he recorded specimens from the Upper Orinoco (Nericagua) as typical *poecilinota*. Inasmuch as these Nericagua birds are *poecilinota* and our Yapacana birds are certainly *duidae*, and inasmuch as the two localities are only a little over a hundred miles apart, it would seem that we might have to return to the old specific concept that *poecilinota* is one species with a gray-breasted, gray-bellied female, and *lepidonota* is another (with *duidae* as a race) with a rufescent-tawny breasted and bellied female. The difference in the females is very great; the males are very similar. This is a condition of frequent occurrence, referred to by Hellmayr as "heterogynism," and need not be interpreted as an indication of conspecificity.

Through the kindness of Dr. Zimmer his series from Duida and Nericagua has been made available for comparison with our birds. There is no question that the present birds are of the same form as his *duidae* material. In the area to the south and southeast of Mount Duida the birds show a slight tendency to vary in the direction of *duidae*, although more of them are nearer to that form than to *poecilinota* and most of them are definitely typical *poecilinota*. The two probably meet somewhere near Nericagua, but it is quite possible that they may be found to overlap, in which case there would be no argument about the specific distinctness of the two.

MYRMOTHERA CAMPANISONA DISSORS Zimmer: *Zimmer's Ant-pitta*

*Myrmothera campanisona dissors* ZIMMER, Amer. Mus. Nov., No. 703, 1934, p. 11  
(Rio Casiquiare, Venezuela, right bank, opposite El Mercy).

SPECIMENS COLLECTED

2 ad. ♂, Brazil, Rio Maturacá, November 9–12, 1930.

1 im. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 20–25, 1930.

1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, December 6, 1930.

1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.

1 im. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

These birds bear out the characters of *dissors* as stated by Zimmer (*cit. supra*). The race is known from the Upper Orinoco area, the Casiquiare and the Rio Negro to southeastern Colombia and to the Lower Rio Madeira in northwestern Brazil.

**GRALLARIA VARIA CINEREICEPS** Hellmayr: *Ash-headed Ant-pitta*

*Grallaria varia cinereiceps* HELLMAYR, Verh. zool.-bot. Ges. Wien, vol. 53, 1903, p. 218 (Marabitanas, Rio Negro).

SPECIMENS COLLECTED

1 ad. —, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 5, 1930.

1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

As far as I have been able to ascertain from literature these are the first specimens of this race to be taken since the formerly unique type (female). Their measurements are as follows: ad. ♂ —wing 115.2, tail 39, culmen from base 30, tarsus 54.1 mm.; unsexed adult—wing 116.2, tail 39, culmen from base —, tarsus 50 mm. The unsexed bird has the chin and upper throat duskier and the small flecks on the upper abdomen also duskier than in the male.

These specimens agree with the characters of *cinereiceps*—bright ochraceous underparts, rufous-brown throat and foreneck (with the variation noted above), and rufescent sides of head. The back, however, is not russet brown as in the description of the type, but more olivaceous—dark Dresden brown.

**GRALLARIA MACULARIA DIVERSA** Zimmer: *Napo Spotted Ant-pitta*

*Grallaria macularia diversa* ZIMMER, Amer. Mus. Nov., No. 703, 1934, p. 19 (Puerto Indiana, Río Amazonas, mouth of Río Napo, Peru).

SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.

This species is one of the few in which the Rio Negro birds are different from those of the Casiquiare and Upper Orinoco. The present form, ranging from northeastern Peru, north of the Amazon, eastward and northeastward to the Casiquiare and the vicinity of Mount Duida, is more brownish, less olivaceous above, with the shaft streaks of the mantle less noticeable, than in *G. m. paraensis*, which occurs from the Lower Amazon west to the right bank of the Middle Rio Negro. The species has not been found as yet in the gap between the Middle Rio Negro and the Casiquiare.

Family CONOPOPHAGIDAE: Ant-pipits

**CORYTHOPIS TORQUATA SARAYACUENSIS** Chubb: *Amazonian Ringed Gnatcatcher*

*Corythopsis torquata sarayacuensis* CHUBB, Bull. Brit. Orn. Club, vol. 38, 1918, p. 48 (Sarayacu, eastern Ecuador).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil Salto do Huá, Venezuelan line, November 17, 1930.

3 ad ♂, 3 im. ♂, 3 ad. ♀, 1 im. ♀, 2 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, April 3–28, 1931.

The unsexed immature bird has the pectoral markings dark brownish olive instead of black and has the entire breast and abdomen streaked with the same. The other supposedly immature birds are like the adults; in fact two of them were noted as having enlarged gonads although they were marked "immature." A number of the April birds were in breeding condition when collected.

## Family COTINGIDAE: Chatterers

**PHOENICIRCUS NIGRICOLLIS** Swainson: *Black-necked Red Chatterer*

*Phoenicircus nigricollis* SWAINSON, in Richardson, Fauna Boreali-Americana, vol. 2, 1832, p. 491 (based on *Ampelis carnifex* Spix, Avium species novae . . ., Brasiliam . . ., vol. 2, p. 4, pl. 5: Barcellos, Rio Negro).

## SPECIMEN COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 16, 1930.

This specimen is very slightly darker above than a comparative series of females in the American Museum of Natural History.

**COTINGA COTINGA** (Linnaeus): *Purple-breasted Cotinga*

*Ampelis cotinga* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 298 (based on "Le Cotinga" Brisson: "Brésil").

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, Serra Imeri, Venezuelan border, December 3, 1930.

This specimen is unusually small, having a wing length of only 96 mm. Four males from British Guiana and two from Diamantina, near Santarém, Brazil, have wings of from 104–111 mm. A male from Camanãos, Rio Negro, in the American Museum of Natural History, has a wing length of 101 mm. Further material is needed to determine whether or not the Rio Negro population is constantly small.

**COTINGA CAYANA** (Linnaeus): *Cayenne Cotinga*

*Ampelis cayana* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 298 (based on "Le Cotinga de Cayenne" Brisson: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 10, 1930.

1 ad. ♂, 1 ad. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 30–31, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

Comparison of these 4 specimens with 10 others from British Guiana, Brazil, and Peru suggests that the species is unusually variable in size. Males from British Guiana (4) have wing lengths of 106–113.4 mm.; Amazonian and southern Venezuelan males (4) measure 105.2–112 mm., while a single male from the headwaters of the

Huallaga River, Peru, has a wing length of 120.5 mm. I have seen no females from Peru.

However, in response to a request, Dr. J. T. Zimmer has supplied additional mensural data that show that the Peruvian birds are not all large; his specimens from that country have wing lengths of 113–116 mm., while one of his Guianan birds is just as big as our Peruvian one, with a wing length of 120.5 mm.

**XIPHOLENA PUNICEA** (Pallas): *Pompadour Chatterer*

*Turdus puniceus* PALLAS, in Vroeg's Catalogus, Adumbratiunculæ, 1764, p. 2 ("Zuyd America"; restricted by Hellmayr, Catalogue of the birds of the Americas, pt. 6, 1929, p. 109, to Surinam).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, November 28, 1930.

1 im. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.

Both examples are in fairly fresh plumage. Study of comparative material indicates that the juvenal remiges are either retained in the first adult (nonbreeding) plumage or that they are not shed until the very end of the postjuvinal molt. Thus, a male from British Guiana is in adult plumage except for the remiges which still are very extensively dusky instead of white merely tipped with dusky as in the adults.

**ATTILA SPADICEUS SPADICEUS** (Gmelin): *Polymorphic Attila*

*Muscicapa spadicea* GMELIN, Systema naturæ, vol. 1, pt. 2, 1789, p. 937 (based on "Yellow-rumped Flycatcher" Latham, A general synopsis of birds, vol. 2, pt. 1, p. 354: Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Serra Imeri, Salto do Huá, Venezuelan border, December 4, 1930.

The specimen is in the brown phase with no green or yellow on the throat and breast. It is in fairly fresh plumage.

**ATTILA CITRINIVENTRIS** Sclater: *Citron-bellied Attila*

*Attila citriniventris* SCLATER, Proc. Zool. Soc. London, 1859, p. 40 (Rio Ucayali, eastern Peru).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 7, 1930.

1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, Venezuelan border, November 18, 1930.

2 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 29–April 27, 1931.

I am not aware of any published records from Venezuela prior to the Cerro Yapacana examples listed above.

Inasmuch as this species is still rather rare in collections, and not too well known, it may be well to append the measurements of the specimens obtained. The four males have wing lengths of from 85.0–88.1 (85.9); tail 63.2–67.2 (65.2); culmen from the base 22.1–23.5 (23.0 mm.).

**ATTILA CINNAMOMEUS CINNAMOMEUS** (Gmelin): *Cinnamomeus Attila*

*Muscicapa cinnamomea* Gmelin, *Systema naturae*, vol. 1, pt. 2, 1789, p. 937, (based on "Cinnamon Flycatcher" Latham, *A general synopsis of birds*, vol. 2, pt. 1, p. 354: Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 14, 1931.

The female is slightly paler above than the male.

**PSEUDATTILA PHOENICURUS** (Pelzeln): *Rufous-tailed Attila*

*Attila phoenicurus* PELZELN, *Zur Ornithologie Brasiliens*, pt. 2, 1868, pp. 96, 171 (banks of the Rio Parahyba near Mattodentro (São Paulo) = Mattodentro, Hellmayr, *Catalogue of the birds of the Americas*, pt. 6, 1929, p. 144).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 27, 1931.

This specimen is the first to be recorded from Venezuela and extends the known range of the species northward by a long distance. Previously it was known from southern Brazil (Matto Grosso, São Paulo, Goyáz, and Paraná) north to the Rio Madeira (Rosarinho) and the Rio Tapajóz (Tanary).

Our specimen has been compared with two males and a female in the American Museum of Natural History. The female in that collection (from Tanary, Rio Tapajóz) is slightly darker, more richly tawny-rufescent below than is the Venezuelan one, but it may be not fully adult, as it has a narrower, more pointed outermost primary than does our specimen.

Females appear to have darker, more blackish, less reddish brown bills (in dried skins) than do males.

Because of the rarity of this species in collections, the measurements of the material seen are here appended. Males (Chapada-Matto Grosso, and Rosarinho, Rio Madeira)—wing 89.5, 89; tail 76, 77; culmen from base 20, 21 mm.; females (Cerro Yapacana and Tanary)—wing 90, 88; tail 75.5, 77; culmen from base 21, 20 mm.

**LANIOCERA HYPOPYRRHA** (Vieillot): *Cinereous Mourner*

*Ampelis hypopyrra* VIEILLOT, *Nouv. Dict. Hist. Nat.*, nouv. éd., vol. 8, 1817, p. 164 ("la Gujane" = Cayenne).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 5, 1931.



1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Río Orinoco, March 20–April 9, 1931.

Zimmer's observations on the plumages of this species (Amer. Mus. Nov., No. 893, 1936, pp. 8–10) are borne out by the present series and other examples examined. On the basis of his contention that the orange-rufous patch on the belly with the feathers tipped with black is a sign of immaturity, our specimen from São Gabriel would have to be considered as subadult. This one and the Brazo Casiquiare example have the colored tufts on the upper flanks yellow; the four from farther north have them orange-tawny, but this is apparently an individual and not a geographic variation. Zimmer found no geographic correlation to the variations of this character.

**RHYTIPTERNA SIMPLEX FREDERICI** (Bangs and Penard): *Amazonian Grayish Mourner*

*Lipaugus simplex frederici* BANGS and PENARD, Bull. Mus. Comp. Zool., vol. 62, 1918, p. 71 (vicinity of Paramaribo, Surinam).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 12, 1931.

2 ad. ♀, Brazil, Cucuhy, Rio Negro, February 3, 1930.

There is considerable variation in even so small a series as three females. One of the Cucuhy birds is noticeably less yellowish green below and above, more sooty generally, than the other or the São Gabriel bird. It also has the gonydeal angle of the mandible paler than in the other two specimens. All the specimens are in abraded plumage.

An additional specimen was taken at Chapozoa, on the Brazo Casiquiare, Venezuela, January 30, 1931, and was preserved in alcohol.

**LIPAUGUS CINERACEUS** (Vieillot): *Gray Screaming Piha*

*Ampelis cineracea* VIEILLOT, Tabl. Enc. Méth., Orn., vol. 2, livr. 91, 1822, p. 761 (based on "Le Cotinga cendré" Levaillant: Cayenne).

SPECIMENS COLLECTED

4 ad. ♂, Brazil, Rio Negro, at mouth of Rio Cauabury, October 21, 1930.

1 ad. ♀, Brazil, Cachoeira Thomaz, Rio Cauabury, October 27, 1930.

3 ad. ♂, Brazil, Cucuhy, Rio Negro, February 1–8, 1930.

1 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, November 19, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 6, 1931.

1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 ad. ♀, Venezuela, Raudal Corocoro, Brazo Casiquiare, below Playa de Candela, February 9, 1931.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, February 28, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13, 1931.

1 ad. ♂, 1 im. –, Venezuela, Cerro Yapacana, Upper Orinoco, April 3–6, 1931.

A number of the specimens collected in October, November, and February were found to be in breeding condition at the time; some of those taken in January, February, and April show signs of molting; one obtained in March is in very worn plumage but shows no trace of molt.

Apparently a common bird in the Upper Rio Negro and the Upper Orinoco Basins.

Two additional specimens, taken at Salta do Huá, November 19–21, 1930, were preserved in alcohol.

**PACHYRAMPHUS RUFUS** (Boddaert): *Cinereous Becard*

*Muscicapa rufa* BODDAERT, Table des planches enluminées . . . , 1783, p. 27 (based on "Le Gobe-mouche roux de Cayenne" Daubenton, Planches enluminees . . . , pl. 453, fig. 1: Cayenne.)

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Manáos, September 26, 1930.

1 ad. ♀, Venezuela, Soledad, Anzoátegui, December 4, 1929.

The male has an unusually short wing (61.5 mm. as compared with 65.3–69 in other examples from Cayenne, Panama, Venezuela, and Colombia) and also a short tail (44 mm. as compared with 44–51 mm. in the other specimens seen). The female, on the other hand, is quite large (wing 68.3; tail 50.2 mm.). The male is not in molt and seems to have all its feathers.

**PACHYRAMPHUS POLYCHROPTERUS NIGER** (Spix): *Black-bellied Becard*

*Pachyrhynchus niger* SPIX, Avium species novae . . . Brasiliam . . . , vol. 2, 1825, p. 33, pl. 45, fig. 1 (no locality stated; "Amazonas, prope Fonteboa" designated by Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 56).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Puerto Ayacucho, January 4, 1930.

Puerto Ayacucho and Mount Duida appear to be about as far north in Venezuela as this race occurs, its place being taken in the more northern parts of the country by *P. p. tristis*. Two females of the latter race, from El Sombrero, Guárico, Venezuela, are slightly yellower, less washed with olive-green, below than the present example of *niger*, and have somewhat more tapering bills (seen from above), and are slightly smaller (wing shorter).

This is one of a number of species that has an Orinocoan race and an Amazonian race (or even more than one in Amazonia) but where the Amazonian-Rio Negro form extends into the upper drainage basin of the Orinoco; in other words, where the racial change takes place within the Orinocoan Basin, and not between the Orinocoan and the Amazonian systems.

The specimen is in fresh plumage.

**PACHYRAMPHUS MARGINATUS NANUS** Bangs and Penard: *Dwarf Black-capped Becard*

*Pachyrhamphus marginatus nanus* BANGS and PENARD, Bull. Mus. Comp. Zool., vol. 64, 1921, p. 395 (Xeberos, Peruvian Amazon, Peru).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 17, 1930.  
 1 im. —, Brazil, Cachoeira Manajó, Rio Cauabury, October 30, 1930.  
 1 im. ♀, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 6, 1930.

- 1 ad. ♂, Brazil, São Gabriel, Rio Negro, December 30, 1930.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 22, 1931.

The measurements of the present series agree very well with those given by Hellmayr (Catalogue of the birds of the Americas, vol. 6, 1929, p. 187, footnote) for this race. Several of the specimens, distributed from October to April, were found to be in breeding condition when collected.

The nominate form differs in being larger and in having a somewhat more swollen bill. A female from Diamantina, near Santarém, Brazil, agrees with *nanus* in size but has a swollen bill like typical *marginatus*. It is considered as *nanus*, in agreement with the finding of Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 261) who refer Tapajóz birds to *nanus*. The Diamantina bird is pale above like the nominate race; it is really an almost exact halfway intermediate between the two races.

PLATYPSARIS MINOR (Lesson): *Lesser Becard*

*Querula minor* LESSON, Traité d'ornithologie, livr. 5, 1830, p. 363 (Cayenne).

## SPECIMENS COLLECTED

- 1 ♂, Brazil, Rio Cauabury, below mouth of Rio Maturacá, November 6, 1930.  
 1 ad. ♂, Brazil, Rio Maturacá, November 12, 1930.

The specimen from Rio Cauabury is molting into adult plumage from a juvenal dress resembling that of the female. The parts in adult feathering are the rosy gular patch, the sides and top of the head, the nape and interscapulars, and the median pair of rectrices.

The small comparative series examined bears out Hellmayr's contentions (Catalogue of the birds of the Americas, pt. 6, 1929, pp. 198–199, footnote) as to the great variability of the females.

TITYRA CAYANA CAYANA (Linnaeus): *Cayenne Tityra*

*Lanius cayanus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 137 (based on "La Pie-griesche grise de Cayenne" Brisson: Cayenne).

## SPECIMENS COLLECTED

- 3 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, January 9–14, 1931.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 15, 1931.  
 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 5, 1930.  
 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

Some of the January birds were found to be in breeding condition when collected. None of the specimens obtained are in very worn plumage; the most abraded examples are January ones. Freshly

plumaged males are slightly more tinged with pale slate gray above than are birds with more worn feathering.

This is another of the many species that range from the Amazonian to the Orinocoan drainage basins without change.

**TITYRA INQUISITOR ERYTHROGENYS** (Selby): *Rufous-cheeked Tityra*

*Psaris erythrogenys* SELBY, Zool. Journ., vol. 2, 1826, p. 483 ("Pernambuco"; corrected to Cayenne, French Guiana, by Hellmayr, Catalogue of the birds of the Americas, pt. 6, 1929, p. 220).

SPECIMENS COLLECTED

3 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 5, 1930 and May 11-12, 1931.

One of the May birds was noted as being in breeding condition.

This species appears to be unknown from the Upper Rio Negro, a rather strange gap in its distribution as it occurs to the southeast, at Manáos, at the junction of the Negro and the Amazon and again to the southwest in eastern Peru (subsp. *albitorques*), and again to the north in the upper part of the Orinocoan system (*erythrogenys*).

**PERISSOCEPHALUS TRICOLOR** (Müller): *Capuchinbird*

*Corvus tricolor* MÜLLER, Natursystem, Suppl., 1776, p. 85 (based on "Choucas chauvre de Cayenne" Daubenton, Planches enluminées . . . , pl. 521: Cayenne).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.

As far as I have been able to learn, this is the first specimen of this bird recorded from the Casiquiare area of extreme southern Venezuela. Many years ago Wallace collected a specimen at Guia, on the Rio Negro, the nearest locality to the south of our present record, at which this bird has been taken, while a number of examples have been obtained at Mount Auyán-tepuí, the nearest locality to the east in southeastern Venezuela.

Our specimen has been compared with 27 others in the United States National Museum and the American Museum of Natural History and is the largest one seen. It has the following dimensions: Wing 236, tail 110, culmen from base 53, tarsus 45 mm. The next longest wing length, 223 mm., was found in a bird from Mount Auyán-tepuí (whence came also a male with a short wing of only 216 mm.). The tail length is almost matched by a bird from Faro, Amazon River, Brazil (109 mm.); the nearest culmen length to our bird's is a male from Faro, Brazil (50 mm.) and another from Paramaribo, Surinam (50 mm.). Our bird is not only the largest one seen but is also unusually richly colored, although it is matched in this respect by birds from Surinam and British Guiana. On the whole, it seems, strangely enough, that females are slightly more richly colored below, especially on the abdomen, than are males.

GYMNODERUS FOETIDUS (Linnaeus): *Bare-necked Grackle*

*Gracula foetida* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 108 ("America, Rolander"=Surinam, ex Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 58).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.

The single specimen collected is in an interesting plumage that indicates that the fully adult plumage may take two or more years to acquire. Although considered as adult by the collectors, our specimen has very little of the silvery gray in the wings ordinarily considered characteristic of the adult male. In fact, this pale tone is restricted to external margins of the outermost five secondaries, where it is mottled with dusky earth brown, and to the tips of the feathers, where it is almost whitish, and to a few of the median upper primary coverts. The rest of the wings are dull black, the bird resembling the female more than the male, but differing from the female in having what gray it does have on the wings. The only explanation I can even guess at is that it is a bird in its second year and that the fully adult plumage is not acquired until the next year. It is also smaller than a male from the Amazon River and another from Elvira, eastern Peru. The wing lengths are—the Venezuelan bird 205; Amazon River bird 217; Peruvian bird 222 mm.

RUPICOLA RUPICOLA (Linnaeus): *Cock-of-the-rock*

*Pipra rupicola* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 338 (based on "Rupicola" Brisson; "Surinam et toute la Guyani"; French Guiana, Hellmayr, Catalogue of the birds of the Americas, pt. 6, 1929, p. 242).

## SPECIMENS COLLECTED

4 ad. ♂, 3 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, November 28–December 8, 1930.

1 ad. ♀, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.

4 ad. ♂, 3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 22–April 18, 1931.

The birds collected at Serra Imeri, Brazil, in November and December were in breeding condition.

The cock-of-the-rock is a bird of wide but spotty, local distribution. Hellmayr (op. cit., pp. 242–243) writes that it occurs in "mountain ranges of French, Dutch, and British Guiana, southern Venezuela . . . and northern Brazil . . ." It is a bird of the lower slopes only, a truly tropical species. Its preference for hilly country is more a preference for rocky cliffs and slopes than for altitude.

Holt (Nat. Geogr. Mag., Nov. 1933, pp. 621–622) writes as follows of his observations of this splendid bird: "It is a shy bird and has chosen for its haunts the occasional isolated hills and the lower mountain slopes of the Guiana highlands—a region little disturbed by

white men and only thinly populated by Indians. We obtained several additional specimens, and found one nest, very much like a robin's fastened to the bare face of a huge split boulder; but it was empty." He then describes the remarkable dance of this species (from the accounts of other observers): ". . . a score of birds of both sexes gather on the bushes surrounding an open space while a male goes through an extraordinary performance on the ground. While the audience cheers approvingly, the bird, with lowered wings and outspread pumping tail, walks round and round, scratching the ground and springing into the air. When it tires, another male takes its place. There seem to be no data as to the duration of these marathons."

### Family PIPRIDAE: Manakins

#### PIPRITES CHLORIS TSCHUDII (Cabanis): *Tschudi's Manakin*

*Hemipipo tschudii* CABANIS, Journ. für Orn., vol. 22, 1874, p. 99 (Ninabamba, Dept. Junín, Peru).

#### SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, Brazil, Serra Imeri, near Salto do Huá, Brazil-Venezuela line, December 2-4, 1930.

Hellmayr (Catalogue of the birds of the Americas, pt. 6, 1929, pp. 6-7) records this race from the Upper Rio Negro, although noting that in that area it "passes gradually into *P. c. chlorion*." More recently Phelps (Bol. Soc. Venez. Cienc. Nat., No. 56, 1943, p. 309) records *tschudii* from western Venezuela (La Sabana). Bearing these records in mind, it seems best to refer the present specimens also to *tschudii*, especially so in the absence of comparative material. However, it may be mentioned that in his discussion of *P. c. chlorion* of northern Brazil from Manáos eastward to the Guianas, Hellmayr (*l. c.*, p. 5, footnote) writes that specimens from British Guiana "are conspicuous for their grayish hind neck and their uniform pale gray breast and abdomen, strongly contrasted with the yellow throat and tail coverts, while the rectrices are but indistinctly tipped with yellowish . . ." These remarks might well have been made of the present two birds except for the breast color, which is here definitely mixed with yellowish.

The immature bird has the lores brighter and more orange, less yellowish, and the chin and throat brighter yellow than the adult.

#### PIPIRA CORONATA CARBONATA Todd: *Coal-black Manakin*

*Pipra carbonata* TODD, Proc. Biol. Soc. Washington, vol. 38, 1932, p. 98 (Tocantins, north bank of Rio Solimões, Brazil).

#### SPECIMENS COLLECTED

2 ad. ♂, 2 ad. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 15-17, 1930.

- 1 ad. ♂, Brazil, Panela de Onca, Rio Cauabury, Amazonas, November 1, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, Rio Maturacá, Amazonas, November 9–11, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, November 20–24, 1930.  
 3 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, Brazil-Venezuela line, December 1–2, 1930.  
 6 ad. ♂, 3 ad. ♀, 1 im. —, Brazil, São Gabriel, Rio Negro, Amazonas, December 27, 1930–January 15, 1931.  
 2 ad. ♂, 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 2–8, 1930.  
 1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.  
 1 ad. ♀, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 A ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2–17, 1931.

The Venezuelan examples are very slightly smaller, and the females average slightly bluer, than the Brazilian specimens, but the differences are very slight indeed.

One of the January males from São Gabriel is molting into the black plumage.

Although no material of *P. c. hoffmansii* Hellmayr has been available for study, no variations toward the described characters of that form have been observed in the present series.

**PIPIRA SERENA SUAVISSIMA** Salvin and Godman: *Orange-bellied Manakin*

*Pipra suavissima* SALVIN and GODMAN, Ibis, 1882, p. 79, pl. 1 (Merumé Mountains and Bartica Grove, British Guiana).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 — [=ad. ♂], Brazil, Serro Imeri, near Salto do Huá, Brazil-Venezuela line, December 7, 1930.

These two specimens are more strongly tinged with orange on the abdomen than are a series of five from British Guiana, but the difference may be due to the great difference in the age of the specimens and the fact that the Guiana birds are not in too good condition. However, on the colored plate accompanying the original description the abdomen is represented as decidedly orange. This plate is a little misleading in that it shows no bluish posterior edging to the white coronal patch. This blue edging is found in specimens from British Guiana as well as in the present two. Chapman (Bull. Amer. Mus. Nat. Hist., vol. 63, 1931, p. 105) and Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 485) found that examples from Mounts Roraima, Duida, and Auyán-tepuí have richer orange underparts than others from British Guiana, but their Guianan birds, like those seen in the present study, were old.

**PIPIRA ERYTHROCEPHALA ERYTHROCEPHALA** (Linnaeus): *Golden-headed Manakin*

*Parus erythrocephalus* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 191 (Surinam).

SPECIMENS COLLECTED

- 2 ad. ♂, 1 [♀?] Brazil, Cucuhy, Rio Negro, February 4–8, 1930.

6 ad. ♂, 1 im. ♂, Brazil, Santa Isabel, Rio Negro, Amazonas, October 15-17, 1930.

1 im. ♂, Brazil, Rio Negro, mouth of Rio Cauabury, Amazonas, October 22, 1930.

2 ad. ♂, Brazil, Cachoeira Thomaz, Rio Cauabury, Amazonas, October 27, 1930.

1 im. ♀, Brazil, Serro Imeri, Rio Maturacá, Venezuelan border, near Salto do Huá, Venezuelan border, November 29, 1930.

5 ad. ♂, 4 im. ♂, 6 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, December 31, 1930-January 17, 1931.

1 ad. ♀, Venezuela, Colombian bank of Rio Negro, opposite San Carlos, January 29, 1931.

2 ad. ♂, Chapazon, Brazo Casiquiare, January 30, 1931.

1 ad. ♂, 1 im. ♂, Venezuela, Raudal, San Sebastián, Brazo Casiquiare, February 1, 1931.

1 ad. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco, San Antonio, March 4-5, 1931.

8 ad. ♂, 2 im. ♂, 8 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 30-April 25, 1931.

This fine series, together with a good number of specimens from the Guianas, the Lower Amazon, and Trinidad, bears out Hellmayr's contention (Catalogue of the birds of the Americas, pt. 6, 1929, p. 29, footnote) that further subdivision of this race appears to be impracticable. As a matter of fact, the race *berlepschi*, while recognizable, is not very trenchantly differentiated from the nominate form. Yet, on the other hand, there are some puzzling variations within the race. Thus, an adult male from Santa Lucia, Miranda, northern Venezuela, has a wing length of 63 mm.; an immature male from the same place 65 mm. All the other males examined, including the above listed birds, and others from other parts of the range have wing lengths of from 52-58 mm.; with an average of 55.1 mm. This is quite a striking difference. Another peculiar variational character is the color of the maxilla in adult males, this usually being light yellowish in dried skins, but in a number of instances from various parts of the range it is dusky brown. This is also true of immature males.

In addition to the skins listed above five birds were saved in alcohol, two from São Gabriel, January 10, 1931, and three from Chapazon Brazo Casiquiare, January 30, 1931.

**PIPIRA PIPRA PIPRA** (Linnaeus): *White-crowned Black Manakin*

*Parus pipra* LINNAEUS, *Systema naturae*, ed. 10, vol. 1, 1758, p. 190 (Surinam).

SPECIMENS COLLECTED

1 im. -, Brazil, Santa Isabel, Rio Negro, Amazonas, October 9, 1930.

1 ad. ♀, Brazil, Rio Cauabury, above Cachoeira Manajó, Amazonas, October 31, 1930.

1 ad. ♂, Brazil, Rio Maturacá, Amazonas, November 12, 1930.

2 ad. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, Brazil-Venezuela line, November 13-24, 1930.



5 ad. ♂, 1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, November 28–December 8, 1930.

1 ad. ♀, 1 im. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 3–12, 1931.

3 ad. ♂, Brazil, Cucuhy, Rio Negro, Amazonas, February 6–8, 1930.

10 ad. ♂, 4 im. ♂, 11 ad. ♀, 1 im. ♀, 1 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, March 29–April 29, 1931.

One of the Cucuhy (February) birds is in molt. In the series from the Upper Orinoco, two of the immature males are in process of molting into the black adult plumage; the unsexed immature bird likewise shows a few blackish feathers on the throat and is therefore probably a male. These three birds are generally darker and more grayish than the adult females or the young female which they otherwise resemble.

In identifying these birds occasion was taken to reidentify all the specimens of the species available and Zimmer's account (Amer. Mus. Nov., No. 889, 1936, pp. 7–16) was found to hold for all the material (five races) seen.

An additional specimen, preserved in alcohol, was taken on the Rio Negro, February 9, 1930.

**TELEONEMA FILICAUDA** (Spix): *Cirrhate Manakin*

*Pipra filicauda* SPIX, Avium species novae . . . Brasiliam . . . , vol. 2, 1825, p. 6, pl. 8, figs. 1, 2 (São Paulo de Olivença, Rio Solimões, Brazil).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Cauabury, below mouth of Rio Maturacá, Amazonas, November 6, 1930.

1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.

1 im. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Rio Pacila, February 11–13, 1931.

1 im. ♀, Venezuela, Upper Orinoco, near Isla Temblador, February 25, 1931.

6 ad. ♂, 4 ad. ♀, 1 im. ♀, Venezuela, San Antonio, Upper Orinoco, February 28–March 2, 1931.

Two of the San Antonio males are really subadult birds just starting to molt into adult plumage.

No material from the Venezuelan coastal districts has been available for study; Hellmayr's decision (Catalogue of the birds of the Americas, pt. 6, 1929, p. 39, footnote) that *T. f. subpallida* Todd is not separable from typical *filicauda* has been followed in using a binomial in this report.

**XENOPIPO ATRONITENS** Cabanis: *Black Manakin*

*Xenopipo atronitens* CABANIS, Arch. für Naturg., vol. 13, 1847, p. 235 (British-Guiana).

SPECIMENS COLLECTED

1 ad. ♂ [prob. ♀], Brazil, Santa Isabel, Rio Negro, Amazonas, October 13, 1930.

1 ad. ♂, Venezuela, Upper Orinoco, right bank, opposite Corocoro Island, March 14, 1931.

8 ad. ♂, 1 im. ♂, 2 ad. ♀, 2 ad. - [prob. ♀], Venezuela, Cerro Yapacana, Upper Orinoco, March 21-April 29, 1931.

1 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 15, 1931.

The present specimens appear to constitute an extension of known range of the species into the Upper Orinoco Basin. Previously the only Venezuelan records, as far as we have found, were from Mount Roraima. The species was known from the Río Negro, in the adjacent portion of Brazil to the south.

This series agrees with birds from British Guiana examined in the present study.

**TYRANNEUTES STOLZMANNI** (Hellmayr): *Stolzmann's Manakin*

*Pipra stolzmanni* HELLMAYR, Ibis, 1906, p. 44 (Marabitanas, Rio Negro, Brazil).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Serra Imeri, Rio Maturacá, Brazilian-Venezuelan line, December 1, 1930.

2 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 14-16, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

4 ad. ♂, Venezuela, Cerro Yapacana, Río Orinoco, April 11-28, 1931.

The eight specimens average slightly brighter yellow on the underparts than a male from Santarém, or a female from Pará.

**MANACUS MANACUS MANACUS** (Linnaeus): *White-bearded Manakin*

*Pipra manacus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 340 (Surinam).

SPECIMEN COLLECTED

1 ♀, Brazil, Manáos, Amazonas, September 26, 1930.

This specimen is identified to subspecies solely on geographic grounds as females are not racially diagnostic. Birds from Manáos have been identified as belonging to the nominate form by several recent investigators—Hellmayr, Zimmer, Pinto, and others.

**MANACUS MANACUS INTERIOR** Chapman: *Upper Amazonian Manakin*

*Manacus manacus interior* CHAPMAN, Bull. Amer. Mus. Nat. Hist., vol. 33, 1914, p. 624 (Villavicencio, eastern Colombia).

SPECIMENS COLLECTED

5 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 14-17, 1931.

These specimens agree with others from Bogotá, Colombia, and with the description, and with the comments of recent authors. Judged by published records this race extends northward in the Caura Valley of Venezuela but not in that of the Upper Orinoco, where it is replaced by the next form, *M. m. umbrosus*.

**MANACUS MANACUS UMBROSUS** Friedmann: *Orinoco Manakin*

*Manacus manacus umbrosus* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 57, 1944, p. 99 (Cerro Yapacana, Upper Orinoco, Venezuela).

## SPECIMENS COLLECTED

6 ad. ♂, 2 im. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 25–April 20, 1931.

This is the original series on which the description of this form was based. The Orinoco race differs from the Rio Negro form in being noticeably darker on the lower breast, abdomen, sides, flanks, thighs, and under tail coverts, and in having the white nuchal collar considerably suffused with grayish.

SCHIFFORNIS MAJOR DUIDAE Zimmer: *Duida Manakin*

*Schiffornis major duidae* ZIMMER, Amer. Mus. Nov., No. 889, 1936, p. 26 (right bank of Río Casiquiare, Venezuela, opposite El Mery).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.

This specimen, which represents a small westward extension of the known range of this manakin, agrees with the description of the race in having the gray of the upper surface of the head with no definite rufescence on the concealed portions of the feathers and in having the upper back less rufescent, more brownish, than specimens of the nominate form (in this case the available material was from Hyutanahan, Rio Purús, Brazil). It has a visibly weaker bill as well, a character not mentioned by Zimmer, but possibly one that a larger series would show to be inconstant. The specimen has the chin and upper throat quite grayish, agreeing in this respect with Zimmer's observations on birds from Mount Duida and its immediate environs. The dimensions of this example are wing 82, tail 56, culmen from the base 14.2 mm. This is slightly larger than Zimmer's figures for the type as far as wing length is concerned (type 80 mm.) and shorter in the culmen length (type 16 mm.).

SCHIFFORNIS TURDINUS AMAZONUS (Sclater): *Amazonian Manakin*

*Heteropelma amazonum* SCLATER, Proc. Zool. Soc. London, 1860, p. 466 (Chamicuros, Río Huallaga, Peru).

## SPECIMENS COLLECTED

1 im. –, Brazil, Salto do Huá, Rio Maturacá, Brazil-Venezuela line, November 23, 1930.

1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 16, 1931.

5 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 19–April 21, 1931.

No toptypical material has been available, but inasmuch as both Hellmayr (Catalogue of the birds of the Americas, pt. 6, 1929, p. 81) and, more recently Zimmer (Amer. Mus. Nov., No. 899, 1936, p. 24) list specimens from this area as agreeing with eastern Peruvian birds, there can be no doubt that they belong to this race. The develop-

ment of the tawny color on the throat is quite variable in the present series. None of the birds show any ventral pallor as in the more eastern, Lower Amazonian form, *wallacii*.

The range of the nominate race is given by Hellmayr as "eastern Brazil, in the southern section of the state of Bahia (exact limits unknown)"; Zimmer lists specimens from "Bahia," "Rio Janeiro," and "Brasilia." In view of the paucity of data it may be worth while to put on record an adult male taken at Pau Gigante, Espirito Santo, May 9, 1940, by Ernest G. Holt. It is a very large individual (wing 98; tail 74; culmen from base 18.2 mm.). The definite knowledge of the occurrence of *turdinus* so far to the south argues for the specific distinctness of this species and *S. virescens*, as the latter is a bird of southeastern Brazil.

The seven males of *amazonus* show the following variation in size: Wing 84-89 (average 86.2); tail 60-64 (62); culmen from the base 15-17 (16.2 mm.).

NEOPELMA CHRYSOCEPHALUM (Pelzeln): *Orange-crested Manakin*

*Heteropelma chrysocephalum* PELZELN, Zur Ornithologie Brasiliens, vol. 2, 1868 pp. 125, 185 (San Carlos, Rio Guainia, Venezuela).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Cauabury, above Cachoeira Manajó, Amazonas, October 31, 1930.

1 ad. ♂, 1 ad. ♀, Brazil, Rio Cauabury, Amazonas, October 31-November 3, 1930.

3 ad. ♂, Brazil, Salto do Huá, Rio Maturacá, Brazil-Venezuela line, November 18-30, 1930.

4 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, Brazil, November 26-December 5, 1930.

3 ad. ♂, 1 ad. ♀, Brazil, Cucuhy, Rio Negro, Amazonas, February 1-6, 1930.

The first specimen listed above and one from Serra Imeri have the coronal patch yellow with hardly a trace of orange; all the other specimens have the orange color strongly developed.

The present series agrees with material from British Guiana.

HETEROCERCUS FLAVIVERTEX Pelzeln: *Yellow-crowned Manakin*

*Heterocercus flavivertex* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 125, 186 (Rio Negro, Marabitanas, Rio Xié, Rio Içana, Rio Vaupé, and Barcellos, Brazil).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 17, 1930.

2 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, Brazil-Venezuela line, November 19-21, 1930.

2 ad. ♀, Brazil, Rio Maturacá, below Salto do Huá, December 11, 1930.

9 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 9-17, 1931.

1 im. ♂, Brazil, Cucuhy, Rio Negro, Amazonas, February 4, 1930.

1 im. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.

1 im. ♀, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.

1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.

2 ad. ♂, 3 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 12–14, 1931.

1 ad. ♀, 1 im. —, Venezuela, San Antonio, Upper Orinoco, March 3–4, 1931.

1 ad. ♀, Venezuela, Cerro Uapacana, Upper Orinoco, April 3, 1931.

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 17, 1931.

This fine series suggests that it may be necessary to reinstate Berlepsch and Leverkuhn's name *angosturæ* for the Venezuelan birds. Hellmayr (Catalogue of the birds of the Americas, pt. 6, 1929, p. 91, footnote) writes that "specimens from the upper Orinoco, including the type of *H. angosturæ* are perfectly similar to Natterer's original series from the Rio Negro . . ." It is unfortunate that the type of *angosturæ* is a female, inasmuch as there is no difference between Brazilian and Venezuelan birds in this sex. In the adult males, however, the Venezuelan birds (unfortunately only two, both from the right bank of the Upper Orinoco opposite Corocoro Island) are slightly darker, especially on the forehead, sides of crown, and occiput, than are Rio Negro examples. If more ample material should bear this out as a constant difference, we would have two races as follows: The typical one in the Rio Negro area of northern Brazil and *H. f. angosturæ* in the upper Orinoco Basin, east to Mount Duida, in Venezuela.

Females are very variable in the amount of rufescence on the breast and abdomen.

### Family TYRANNIDAE: Tyrant Flycatchers

#### KNIPOLEGUS ORENOCENSIS ORENOCENSIS Berlepsch: *Orinoco Tyrant*

*Cnipolegus orenocensis* BERLEPSCH, Ibis, 1884, p. 433, pl. 12 (Angostura, Orinoco River, Venezuela).

#### SPECIMEN COLLECTED

1 ad. ♀, Venezuela, near Soledad, Anzoátegui, December 1, 1929.

The female is somewhat paler than a male from Altagracia, the only other specimen available for examination. Apparently an uncommon, or at least an uncommonly collected, species.

#### FLUVICOLA PICA PICA (Boddaert): *White-shouldered Water-tyrant*

*Muscivora pica* BODDAERT, Table des planches enluminées . . . , 1783, p. 42 (based on Daubenton, Planches enluminées . . . , pl. 675, fig. 1: Cayenne).

#### SPECIMEN COLLECTED

1 im. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 6, 1930.

This specimen still has the brownish juvenal dress on the back. The rump and upper tail coverts are broadly white, while the white shoulder patches of the adult are indicated by the white traces of the scapular and adjacent feathers, visible when the plumes are parted.

**OCHTHORNIS LITTORALIS** (Pelzeln): *Natterer's Water-tyrant*

*Elainea littoralis* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 108, 180 (Cachoeira Guajar —guac , Rio Mamor ; Cachoeira de Bananeira and Borba, Rio Madeira).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Caman os, Rio Negro, December 23, 1930.
- 1 ad. ♀, Brazil, S o Gabriel, Rio Negro, January 14, 1931.
- 1 ad. ♀, Venezuela, Playa de Candela, Brazo Casiquiare, February 8, 1931.
- 1 ad. ♀, Venezuela, Brazo Casiquiare near Ca o Mabinagui, February 20, 1931.

All four specimens are in very abraded feathering; the male has the tail worn to a stump (possibly partly owing to shot?) not much more than half its normal length. There appears to be great variation in the stage of plumage at the same time of the year as three adults from the Rio Pur s, Brazil, taken between December 24 and February 7 are in fairly fresh plumage.

**MACHETORNIS RIXOSA FLAVIGULARIS** Todd: *Northern Fire-crowned Tyrant*

*Machetornis rixosa flavigularis* TODD, Ann. Carnegie Mus., vol. 8, 1912, p. 210 (Tocuyo, State of Lara, Venezuela).

SPECIMEN COLLECTED

- 1 ad. ♀, Venezuela, Soledad, Anzo tegui, June 11, 1931.

The single example collected is in worn plumage. According to the collector's notes the bird was in breeding condition.

**MUSCIVORA TYRANNUS TYRANNUS** (Linnaeus): *Southern Fork-tailed Flycatcher*

*Muscivora tyrannus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 325 (Surinam).

SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 10, 1930.
- 1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 8, 1931.
- 1 im. ♀, Venezuela, right bank Upper Orinoco, opposite Corocoro Island, March 12, 1931.

The male is in badly abraded plumage. All three specimens show the dark dorsal color of the southern race, which comes to our area as a migrant.

The type locality of this race was cited as Cayenne by Berlepsch and Hartert in 1902 (Nov. Zool., vol. 9, p. 52) but more recently has been restricted to Surinam by Zimmer (Amer. Mus. Nov., No. 962, 1937, p. 1), the latter seeming from the record to be the proper action. In the original description Linnaeus gives the habitat as "in Canada, Surinamo." He refers to Brisson's *Muscivora Tyrannus cauda bifurca*, that author stating that he had seen specimens from Canada and Cayenne. Linnaeus, however, seems to have seen some material of his own, as he goes on to list two varieties or kinds as *Surinamensi* and *Canadensi* with color characters for each. He does not mention Cayenne.

MUSCIVORA TYRANNUS MONACHUS (Hartlaub): *Hartlaub's Fork-tailed Flycatcher*

*Tyrannus (Milvulus) monachus* HARTLAUB, Rev. Zool., vol. 7, 1844, p. 214 (Guatemala).

## SPECIMEN COLLECTED

1 im. ♀, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.

This immature specimen is placed in this race because of the paler dorsal coloration it shows when compared with birds in a similar stage from the far south. Whether this race is resident or migrant in this region is still to be determined.

TYRANNUS MELANCHOLICUS MELANCHOLICUS Vieillot: *Azara's Kingbird*

*Tyrannus melancholicus* VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., vol. 35, 1819, p. 48 (based on Azara, No. 198: Paraguay).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Manáos, Amazonas, September 27, 1930.

2 ad. ♂, 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 9–10, 1930.

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 1, 1930.

1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Perro de Agua, February 18, 1931.

1 ad. ♂, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.

1 im. ♂, Venezuela, San Antonio, Upper Orinoco, February 28, 1931.

1 ad. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 15, 1931.

3 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 22–April 16, 1931.

2 ad. ♂, 2 ad. ♀, 1 ad. –, Venezuela, Puerto Ayacucho, Río Orinoco, May 12–20, 1931.

In identifying these specimens to the typical race, I am following the observations and conclusions reached by Zimmer (Amer. Mus. Nov., No. 962, 1937, 14–21) on the basis of an enormous series of some 750 specimens, rather than Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, pp. 106–107). Hellmayr's arrangement would lead us to call the present examples *T. m. despotes*. Zimmer truly says that the taxonomy of this species is still not very clear. Thus, the present birds have the pectoral area as in *despotes* in some individuals, and more grayish, as in the nominate form, in others. A male from Santa Isabel is the largest and darkest bird of the whole series, different enough to make one wonder if further "splitting" of the form may not some day be found advisable.

TYRANNUS MELANCHOLICUS CHLORONOTUS Berlepsch: *Berlepsch's Kingbird*

*Tyrannus chloronotus* BERLEPSCH, Ornith., vol. 14, 1907, p. 479 (Temax, Yucatán).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Ciudad Bolívar, November 25, 1929.

This specimen agrees with *chloronotus* in the pallor of the crown and anterior throat but is otherwise not very different from the nominate race, the pectoral coloration agreeing with several of the specimens of *T. m. melancholicus* recorded in this report. It may be noted in

support of the present identification that Zimmer (Amer. Mus. Nov., No. 962, 1937, p. 21) records *chloronotus* from Ciudad Bolívar as well.

**EMPIDONOMUS VARIUS RUFINUS** (Spix): *Amazonian Varied Flycatcher*

*Muscicapa rufina* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 22, pl. 31 ("in provincia fl. Amazonum").

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Manáos, Amazonas, September 26, 1930.

This example agrees with specimens from Bahia but is slightly darker on the sides of the breast.

**LEGATUS LEUCOPHAIUS LEUCOPHAIUS** (Vieillot): *Striped Flycatcher*

*Platyrhynchus leucophaeus* VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., vol. 27, 1818, p. 11 ("l'Amérique meridionale" = Cayenne).

SPECIMENS COLLECTED

2 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, December 31, 1930-January 1, 1931.

1 ad. ♂, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 2, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

The two Brazilian examples have the superciliaries and their connecting occipital band noticeably paler and broader than do the Venezuelan specimens. A series of some 25 birds from Brazil to Costa Rica, however, shows sufficient variability in this regard to make it seem an unlikely geographic character. The two Brazilian birds are in somewhat fresher plumage than the Venezuelan ones. The latter two are very similar to a skin from Cayenne (topotypes).

**MYIODYNASTES MACULATUS MACULATUS** (P. L. S. Müller): *Streaked Flycatcher*

*Muscicapa maculata* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 169 (Cayenne).

SPECIMEN COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 9, 1930.

This example has the heavily streaked breast and the dark coloration characteristic of the nominate subspecies. The dorsal surface is browner than in *M. m. solitarius*.

**MEGARHYNCHUS PITANGUA PITANGUA** (Linnaeus): *Boat-billed Flycatcher*

*Lanius pitangua* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 136 (based on Brisson; eastern Brazil).

SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 20-21, 1931.

The young male has a bill not much more than half as long as that of the adult but fully as broad. Its future growth is apparently chiefly a matter of increase in one direction.

The adult is in very worn feathering.



**CORYPHOTRICCUS PARVUS PARVUS** (Pelzeln): *Lesser Yellow-crowned Flycatcher*

*Ptilangus parvus* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 111, 181 (Marabitanas, Rio Negro).

## SPECIMEN COLLECTED

1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 29, 1931.

As far as I have been able to learn, this is the first specimen of this flycatcher recorded from Venezuela. It is slightly darker on the back than an adult female from British Guiana, which it otherwise resembles.

**MYIOZETETES CAYANENSIS RUFIPENNIS** Lawrence: *Lawrence's Rufous-winged Flycatcher*

*Myiozetetes rufipennis* LAWRENCE, Ann. Lyc. Nat. Hist. New York, vol. 9, 1869, p. 267 (Valencia, Venezuela).

## SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare near Mabinagui, February 20, 1931.

1 im. —, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 14–16, 1931.

These specimens are not typical *rufipennis* but are intermediate between it and true *cayanensis*. They seem, however, to be slightly closer to *rufipennis* and are therefore considered as variants of this race. The immature bird has no coronal patch and has the edges of the outer upper wing coverts as rufescent as in an adult *rufipennis* from northern Venezuela (Ocumare de la Costa), while the adults have practically no rufescent tinge on the margins of these feathers. Geographically, as well as in coloration, these birds are intermediate between the two races. Typical *cayanensis* has been recorded from the Rio Branco (Boa Vista), not very far to the east, and *rufipennis* is stated by Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, p. 139) to occur from the north coast of Venezuela south to the Orinoco Valley. Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 486) records *cayanensis* from southern Venezuela, farther to the east (Río Guarapiche, Mount Auyán-tepuí, and Mount Roraima).

**MYIOZETETES SIMILIS SIMILIS** (Spix): *Vermillion-crowned Flycatcher*

*Muscicapa similis* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 18 (Amazon River).

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, Manáos, September 29, 1930.

Manáos is fairly close to the northern limit of the range of this subspecies. Zimmer (Amer. Mus. Nov., No. 963, 1937, p. 21) records examples from Campos Salles and Manáos.

**MYIOZETETES SIMILIS COLUMBIANUS** Cabanis and Heine: *Colombian Vermillion-crowned Flycatcher*

*Myiozetetes columbianus* CABANIS and HEINE, Museum Heineanum, vol. 2, 1859, p. 62 (Puerto Cabello, Venezuela, and Cartagena, Colombia).

## SPECIMENS COLLECTED

- 1 ad. ♂, Ciudad Bolívar, Venezuela, June 8, 1931.  
 1 ad. ♀, Soledad, Anzoátegui, Venezuela, June 11, 1931.

Both specimens are in rather worn feathering. This race is noticeably smaller and paler than the nominate form.

**MYIOZETETES LUTEIVENTRIS** (Sclater): *Orange-vented Flycatcher*

*Elaenia luteiventris* SCLATER, Proc. Zool. Soc. London, 1858, p. 71 (Río Napo, Ecuador).

## SPECIMENS COLLECTED

- 2 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, December 30, 1930–January 9, 1931.  
 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 2, 1930.

These specimens agree in coloration and size with 15 others from Brazil, Colombia, Ecuador, and Peru, kindly lent me by Dr. J. T. Zimmer. Males average slightly larger than females: Wing, males 73.4–78 (75.8); females 66–75 (73.3 mm.).

This flycatcher does not range north across into the Orinoco drainage.

**TYRANNOPSIS SULPHUREA** (Spix): *Sulphury Flycatcher*

*Muscicapa sulphurea* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 16, pl. 20 (Brazil).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Manáos, September 26, 1930.  
 1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 16, 1930.  
 1 ad. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 31, 1931.

Through the kindness of the authorities of the American Museum of Natural History, the Academy of Natural Sciences of Philadelphia, and the Carnegie Museum, I have been able to assemble a series of some 87 specimens from Brazil, the three Guianas, Venezuela, and Trinidad.

Only two Trinidad birds, both females, have been seen (one from Aripa Savanna and one from La Brea), but both have broader, longer, and generally stouter bills than any of the continental birds and may represent a distinct, insular subspecies. According to Belcher and Smooker (Ibis, 1937, p. 233) this flycatcher is very rare and local in Trinidad. More material is necessary to determine the status of the local form. It is only in the bill that the two specimens are unusual; in all other parts they are matched by birds from various parts of the continental range of the species. There are no geographic variations among the continental birds.

**PITANGUS SULPHURATUS RUFIPENNIS** (Lafresnaye): *Rufous-winged Flycatcher*

*Saurophagus rufipennis* LAFRESNAYE, Rev. Mag. Zool., vol. 3, 1851, p. 471 (Caracas).

## SPECIMENS COLLECTED

3 ad. ♀, 2 im. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, January 4, 1930, and May 8-19, 1931.

1 ad. ♂, Venezuela, Soledad, Anzoátegui, December 4, 1929.

The birds from Puerto Ayacucho have the rufous margins of the remiges and their upper outer coverts slightly narrower than does the example from Soledad but are definitely nearer to *rufipennis* than to the nominate subspecies which occurs to the south in the valley of the Río Negro. This is in keeping with Zimmer's observation (Amer. Mus. Nov., No. 963, 1937, p. 25) that "two specimens from Ayacucho (Río Orinoco), Venezuela, are far from typical *rufipennis* although they appear to represent the extreme of variation in that form in the direction of *sulphuratus*."

PITANGUS SULPHURATUS SULPHURATUS (Linnaeus): *Bemtevi*

*Lanius sulphuratus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 137 (based on Brisson, Ornithologia . . ., vol. 2, 1760, p. 176, pl. 16: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Manáos, September 29, 1930.

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 10, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 16, 1931.

This form has much narrower rufescent edges on the remiges and their outer upper coverts and is also darker on the back than the preceding race.

MYIARCHUS TYRANNULUS TYRANNULUS (Müller): *Guianan Crested Flycatcher*

*Muscicapa tyrannulus* MÜLLER, Natursystem, Suppl., 1776, p. 169 (based on Daubenton, Planches enluminées . . ., pl. 571, fig. 1: Cayenne).

## SPECIMENS COLLECTED

1 im. ♀, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.

2 ad. ♂, 2 ad. ♀, 1 im. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 11-16, 1931.

1 ad. ♂, Venezuela, Soledad, Anzoátegui, November 29, 1929.

1 ad. ♂, Venezuela, Laguna Icacal, Estado Bolívar, December 8, 1929.

The November and December birds are in fresh plumage; the March and May ones are much abraded.

Zimmer (Amer. Mus. Nov., No. 994, 1938, pp. 1-3) has concluded that *chlorepsciscus* is not separable from the nominate race in spite of local variations. This is borne out by the material examined in the present study.

MYIARCHUS SWAINSONI SWAINSONI Cabanis and Heine: *Sordid Flycatcher*

*Myiarchus swainsoni* CABANIS and HEINE, Museum Heineanum, vol. 2, 1859, p. 79 (Brazil).

## SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, Venezuela, Bolívar, June 8-10, 1931.

These two birds are apparently migrants from the south. Both are in worn plumage, the adult showing active molt in the tail.

That this form, breeding in Paraguay to southeastern Bolivia and southeastern Brazil, migrates north to Venezuela has been recorded by Zimmer (Amer. Mus. Nov., No. 994, 1938, p. 4 and 8).

**MYIARCHUS SWAINSONI PHAEONOTUS** Salvin and Godman: *Whiteley's Flycatcher*

*Myiarchus phaeonotus* SALVIN and GODMAN, Ibis, 1883, p. 207 (Meruiné Mountains, British Guiana).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.  
 2 ad. ♂, 3 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 25–April 16, 1931.

The two specimens from Tamatama are not typical but are intermediate between *phaeonotus* and *amazonus*, being somewhat less sooty above and more yellowish in the abdomen than in the Cerro Yapacana birds.

It is still an unsolved question as to whether *swainsoni* and *ferox* are species, each with its own races, or are more closely related. Todd's revision (Proc. Biol. Soc. Washington, vol. 35, 1922, pp. 181–217) of the genus presents conclusions quite at variance with those of Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, pp. 158–187) and both differ from those of Zimmer (Amer. Mus. Nov., No. 994, 1938, pp. 1–26). For one working with a different series of specimens the points of agreement and of difference in these three reviews are exceedingly difficult to harmonize; let it be said that Zimmer's review has been taken as the most recent comprehensive study in guiding the identifications here used, but I have no feeling of certainty that *ferox* and *swainsoni* are really specifically distinct.

The Cerro Yapacana birds agree very well with material from Mount Duida.

**MYIARCHUS FEROX FEROX** (Gmelin): *Fierce Flycatcher*

*Muscicapa ferox* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 934 (primarily based on "Le Tyran, de Cayenne" Brisson, Ornithologia . . . , vol. 2, p. 398: Cayenne).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Manáos, September 29, 1930.  
 1 im. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 15, 1931.  
 1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 16, 1931.  
 3 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 12–20, 1931, and January 8, 1930.

Two of the Puerto Ayacucho examples have the gray of the breast much suffused with buff and pale olive-tawny.

Hellmayr (Catalogue of the birds of the Americas, vol. 5, 1927, p. 177) suggests that the birds of southern Venezuela, which would

include all these specimens, except the Manáos bird, are not separable from *australis* of Argentina, Bolivia, and southern Brazil. This is not corroborated by comparative material at hand; the southern birds (*australis*) are paler above. On the basis of geography it would be surprising if southern Venezuela was inhabited by the same form as Argentina, etc., since the typical race intervenes between the two areas.

Recently Zimmer and Phelps (Amer. Mus. Nov., No. 1312, 1946, p. 11) have described a more brownish-backed race, *M.f. brunnescens*, from the Apure River, and along the Orinoco from Altagracia to Puerto Ayacucho and across westward to Villavicencio. According to this all the above birds except the one from Manáos would be *brunnescens*, but I cannot see the characters of this race constantly enough in this material to feel that they are really *brunnescens* and not *ferox* varying in that direction. Two of the five birds are browner than the other three.

**MYIARCHUS TUBERCULIFER TUBERCULIFER** (Lafresnaye and D'Orbigny): *D'Orbigny's Dusky-capped Flycatcher*

*Tyrannus tuberculifer* LAFRESNAYE and D'ORBIGNY, Synopsis avium . . . , pt. 1, in Mag. Zool., vol. 7, cl. 2, 1837, p. 43 (Guarayos, Bolivia).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Negro, October 4, 1930.

1 ad. ♀, Venezuela, Puerto Ayacucho, Amazonas, January 4, 1930.

In view of what Zimmer has written (Amer. Mus. Nov., No. 994, 1938, pp. 19–20) about the possible validity of *coalei* I have compared the present birds with the type of *coalei* and with examples from northern Venezuela and from Santa Marta, Colombia. There are no constant differences between them, and so the current allocation of *coalei* in the synonymy of typical *tuberculifer* holds.

**CNEMOTRICCUS FUSCATUS FUMOSUS** (Berlepsch): *Guianan Dusky Flycatcher*

*Empidonax fuscatus fumosus* BERLEPSCH, Nov. Zool., vol. 15, 1908, p. 108 (Cayenne, French Guiana).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Fazenda Marinha, São Joaquim, Estado do Pará, September 18, 1930.

The single specimen of this dusky billed, generally dark form is in worn plumage.

**CNEMOTRICCUS FUSCATUS CABANISI** (Léotaud): *Léotaud's Dusky Flycatcher*

*Empidonax cabanisi* LÉOTAUD, Oiseaux de l'Isle de la Trinidad, 1866, p. 232 (Trinidad).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Laguna Icacal, near Ciudad Bolívar, December 8, 1929.

This race is more olivaceous, less brownish, above than any of the other forms of this species.

Zimmer (Amer. Mus. Nov., No. 994, 1938, p. 30) suggests that *cabanisi* may have to be "split" into two or possibly three races—*virioninus* Ridgway of Tobago, and another, for which no name is already available, from the upper stretches of the Orinoco. Material is not available to do more than again call attention to this possibility. A specimen was collected at San Antonio, on the Upper Orinoco, March 4, 1931, but was preserved in alcohol, rendering it quite useless for subspecific determination.

**CNEMOTRICCUS FUSCATUS DUIDAE** Zimmer: *Duida Dusky Flycatcher*

*Cnemotriccus fuscatus duidae* ZIMMER, Amer. Mus. Nov., No. 994, 1938, p. 30 (Playa del Río, Base, Mount Duida, Venezuela, altitude 550 feet).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá (Brazilian-Venezuelan border), November 17, 1930.

1 im. ♂, Brazil, Cucuhy, Rio Negro, February 6, 1930.

The immature bird is paler and tawnier above than are the adults. The adult male is considerably darker than the female.

**TERENOTRICCUS ERYTHRURUS VENEZUELENSIS** Zimmer: *Venezuelan Red-tailed Flycatcher*

*Terenotriccus erythrurus venezuelensis* ZIMMER, Amer. Mus. Nov., No. 1042, 1939, p. 6 (Esmeralda, Mount Duida, Venezuela; altitude 325 feet).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.

1 ad. ♀, Venezuela, San Carlos, Río Negro, Amazonas, January 28, 1931.

2 ad. ♂, 1 im. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 30–31, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.

1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.

2 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 19, 1931.

This race is more grayish on the top of the head and the back, and slightly paler below than is *T. e. signatus* of eastern Ecuador and northeastern Peru, the subspecies most like it in color. It ranges from the upper stretches of the Rio Negro and the Rio Uaupes, Brazil, to southern Venezuela in the valleys of the Upper Orinoco and Caura Rivers and to Mount Duida.

**MYIOBIUS BARBATUS BARBATUS** (Gmelin): *Whiskered Myiobius*

*Muscicapa barbata* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 933 (based on Daubenton, Planches enluminées . . . , pl. 830, fig. 1: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, Amazonas, November 2, 1930.

2 ad. ♀, 1 ad. —, Brazil, Salto do Huá, Rio Maturacá, Brazilian-Venezuelan border, November 17–23, 1930.

1 im. ♂, Brazil, Serra Imeri, near Salto do Huá, Brazilian-Venezuelan border, November 28, 1930.

1 im. ♂, 1 ad. ♀, Brazil, Cucuhy, Rio Negro, Amazonas, February 8, 1930.

1 ad. —, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.

1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 1, 1931.

On geographical grounds these specimens should be of the nominate race, with the description of which (no comparative material being available) they agree except in that the chin and upper throat are not as yellowish as the description calls for. Thus, Todd (Proc. Biol. Soc. Washington, vol. 35, 1922, p. 25) describes this area as deep colonial buff, whereas the present specimens are deep olive-buff on these parts.

Another specimen from the Rio Negro, February 2, 1930, was preserved in alcohol.

**HIRUNDINEA FERRUGINEA FERRUGINEA** (Gmelin): *Black-tailed Swallow-flycatcher*

*Todus ferrugineus* GMELIN, Systema naturae, vol. 1, pt. 1, 1788, p. 446 (based on "Ferruginous-bellied Tody" Latham, A general synopsis of birds, vol. 1, pt. 2, p. 662: Cayenne).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, 1,800 feet, March 20–22, 1931.

These specimens agree with a male from British Guiana. The female has the chin and upper throat more whitish than the male. Apparently these are the first examples of the form reported from the upper Orinoco, the previous Venezuelan records being from Mounts Duida, Auyán-tepuí, and Roraima, in the tropical and subtropical zones (1,100–2,400 meters on Auyán-tepuí).

**ONYCHORHYNCHUS CORONATUS CASTELNAUI** Deville: *Castelnau's Royal Flycatcher*

*Onychorhynchus castelnau* DEVILLE, Rev. Mag. Zool., ser. 2, vol. 1, 1849, p. 56 (mission de Sarayacu, Pampa del Sacramento, Peru).

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, Serra Imeri, Brazil-Venezuela border, December 3, 1930.

In identifying the lone example secured, I am guided by Zimmer's statement (Amer. Mus. Nov., No. 1043, 1939, pp. 6–7) that birds from "the uppermost reaches of the Rio Negro in Brazil, and the adjacent portion of the Casiquiare in Venezuela, are not quite typical but are . . . decidedly closer to *castelnau* than to *coronatus* . . ." The present example has the small size of *castelnau* (wing 75; tail 61 mm.) but has the upper tail coverts barred as in typical *coronatus*. It is

therefore an intermediate and is placed with *castelnavi* because of Zimmer's observation on his material.

**PLATYRINCHUS SATURATUS** Salvin and Godman: *Cinnamon-crested Flatbill*

*Platyrhynchus saturatus* SALVIN and GODMAN, Ibis, 1882, p. 78 (Merumé Mountains, British Guiana).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, Amazonas, November 3, 1930.

1 ad. ♂, Brazil, Rio Maturacá, Amazonas, November 9, 1930.

The only previous records for this flatbill on the upper Rio Negro seem to be two birds from Tatú and Mount Curicuriari, recorded by Zimmer (Amer. Mus. Nov., No. 1043, 1939, p. 9).

The male shows signs of molt in the wings.

**PLATYRINCHUS CORONATUS CORONATUS** Sclater: *Golden-crowned Flatbill*

*Platyrhynchus coronatus* SCLATER, Proc. Zool. Soc. London, vol. 26, 1858, p. 71 (Río Napo, Ecuador).

SPECIMENS COLLECTED

1 im. ♂, 1 im. ♀, Brazil, Rio Cauabury, above mouth of Rio Já, Amazonas, November 4, 1930.

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 4, 1930.

1 im. ♂, 1 im. ♀, Brazil, Rio Maturacá, November 9-13, 1930.

2 ad. ♂, 2 im. ♂, Brazil, Salto do Huá, Rio Maturacá, Brazil-Venezuela border, November 14-23, 1930.

1 im. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Caño Atamoni, February 6, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 12, 1931.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 18, 1931.

The adult male from Cerro Yapacana is slightly intermediate between typical *coronatus* and *gumia* of the Guianas and southeastern Venezuela (Mounts Roraima and Auyán-tepuí). It agrees with the former in coloration but has the small size (wing 53 mm.) of *gumia*. Zimmer (Amer. Mus. Nov., No. 1043, 1939, p. 9) records specimens from opposite El Merey, Río Casiquiare, southern Venezuela, as typical *P. c. coronatus*.

A specimen taken February 9, 1930, on the Rio Negro, was preserved in alcohol.

**TOLMOMYIAS SULPHURESCENS CHERREI** (Hartert and Goodson): *Cherrie's Flatbill*

*Rhynchocyclus sulphurescens cherrei* HARTERT and GOODSON, Nov. Zool., vol. 24, 1917, p. 414 (Cayenne, French Guiana).

SPECIMENS COLLECTED

1 im. -, Brazil, Salto do Huá, Rio Maturacá, November 22, 1930.

1 im. ♂, Brazil, Serra Imeri, near Salto do Huá, December 4, 1930.

3 ad. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 17-21, 1931.



The two Brazilian examples (actually taken very close to the Brazilian-Venezuelan boundary) are slightly darker than the Cerro Yapacana birds, and may be intermediate between *cherrei* and *insignis*.

**TOLMOMYIAS SULPHURESCENS INSIGNIS** Zimmer: *Zimmer's Flatbill*

*Tolmomyias sulphurescens insignis* ZIMMER, Amer. Mus. Nov., No. 1045, 1939, p. 5 (Rosarinho, Rio Madeira (left bank), Brazil).

SPECIMEN COLLECTED

1 —, Brazil, near Muirapinima, Rio Negro, October 4, 1930.

Zimmer records (*cit. supra*, p. 18) six specimens of this species from Muirapinima, as *T. s. insignis*. The characters by which this race may be distinguished from *cherrei* are stated to be the "very much duller wing-markings, . . . the wing bars and the margins of the tertials greenish instead of yellowish, hardly brighter than the external margins of the primaries . . ." The present specimen, judged by these criteria, is not a very typical example of its race but is, as one might expect on geographic grounds, somewhat intermediate between it and *cherrei*, but nearer *insignis*.

**TOLMOMYIAS POLIOCEPHALUS POLIOCEPHALUS** (Taczanowski): *Gray-crowned Flatbill*

*Rhynchocyclus poliocephalus* TACZANOWSKI, Ornithologie de Pérou, vol. 2, 1884, p. 285 (Nauta, Peru).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 16, 1931.

1 ad. ♂, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.

1 im. ♀, Venezuela, San Antonio, Upper Orinoco, March 9, 1931.

The male was in breeding condition. It is slightly smaller and duller in color than the female.

Zimmer (Amer. Mus. Nov., No. 1045, 1939, p. 14) has found that the birds from the Upper Rio Negro, and the Casiquiare and Upper Orinoco are typical *poliocephalus* and not *sclateri* of Manáos and eastward. The present material bears this out.

**TOLMOMYIAS POLIOCEPHALUS SCLATERI** (Hellmayr): *Sclater's Flatbill*

*Rhynchocyclus poliocephalus sclateri* HELLMAYR, Verh. zool.-bot. Ges. Wien, vol. 53, 1903, p. 207 (Barra do Rio Negro=Manáos, Brazil).

SPECIMENS COLLECTED

1 ad. ♂, 3 im. ♂, 1 ad. ♀, Brazil, Manáos, September 30–October 1, 1930.

All five specimens are in somewhat abraded plumage. This race is generally duller in coloration and has a more whitish throat than the nominate form.

**TOLMOMYIAS FLAVIVENTRIS COLLINGWOODI** (Chubb): *Northern Yellow-vented Flatbill*

*Rhynchocyclus flaviventris collingwoodi* CHUBB, Bull. Brit. Orn. Club, vol. 40, 1920, p. 109 (Macqueripe Valley, Trinidad).

## SPECIMENS COLLECTED

1 ad. ♂, 2 ad. ♀, 3 im. ♂, 1 im. —, Venezuela, Cerro Yapacana, Upper Orinoco, April 3–16, 1931.

5 ad. ♂, 3 ad. ♀, 3 im. ♂, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 8–15, 1931, and January 3–5, 1930.

1 ad. ♂, 1 ad. ♀, Venezuela, Ciudad Bolívar, June 8–10, 1931.

1 im. ♂, Venezuela, Soledad, December 10, 1929.

The differences between *collingwoodi* of Trinidad, Tobago, northern Venezuela, and up the Orinoco Valley to Puerto Ayacucho and the Caura Valley, and *aurulentus* of Santa Marta to the Lower Río Magdalena, Colombia, as pointed out by Zimmer (Amer. Mus. Nov., No. 1045, 1939, p. 16) hold in the material studied together with the present series, although they are rather slight. The present race averages darker, less clear yellow and green than *aurulentus*.

Another example from Puerto Ayacucho, January 3, 1930, was preserved in alcohol.

RAMPHOTRIGON RUFICAUDA (Spix): *Rufous-tailed Flatbill*

*Platyrhynchus ruficauda* SPIX, Avium species novae . . . Brasiliam . . ., vol. 2, 1825, p. 9, pl. 11, fig. 1 ("in sylvia flum. Amazonum").

## SPECIMENS COLLECTED

1 im. ♀, Brazil, Serra Imeri, Rio Maturacá, Brazil-Venezuela border, November 29, 1930.

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 6, 1930.

1 ad. ♂, 1 ad. ♀, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Upper Orinoco near Isla Temblador, February 25, 1931.

The Brazilian adult female has a slightly broader bill than any of the Venezuelan specimens.

In his notes on this species Zimmer (Amer. Mus. Nov., No. 930, 1937, p. 26) states that four specimens collected at Chamicuros, Peru, and now in the British Museum, are the only Peruvian examples recorded. It may be noted that there is a specimen from Pebas, Peru, collected by Orton, in the United States National Museum (No. 55325). The bird has no date on the label but was cataloged in the Museum in June 1869.

TODIROSTRUM PICTUM Salvin: *Painted Tody Tyrant*

*Todirostrum pictum* SALVIN, Bull. Brit. Orn. Club, vol. 7, 1897, p. xv (Annai, British Guiana).

## SPECIMENS COLLECTED

1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 16, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, December 31, 1930.

Before these two specimens were collected, the species appears to have been known only from the Guianas and from the Amazon around Obidos. They therefore constitute a notable westward extension of

known range and bring the species into close geographical contact with *T. guttatum*. On the basis of the great gap between the previous known records of the two, Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, p. 295) suggested that they might be conspecific. If the two are found to occur together on the Rio Negro as seems not unlikely, *guttatum* being recorded from Barcellos and *pictum* from Santa Isabel and São Gabriel, about 175 miles and 300 miles, respectively, to the west of Barcellos (*pictum* being the more eastern bird), it will be advisable to keep them as specific entities.

Hellmayr gives measurements of Guiana birds as follows: Wing (male) 41–42, (female) 39; tail 29–32; bill 13–15 mm. The present birds measure: Wing 39–40; tail 31–32; bill 14–15 mm. The immature bird is exactly like the adult except that it has a slight mixture of greenish gray on the black of the occiput.

**TODIROSTRUM CINEREUM CINEREUM** (Linnaeus): *Gray-backed Tody Tyrant*

*Todus cinereus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 178 (based on "The Grey and Yellow Flycatcher" Edwards, Gleanings of natural history, vol. 2, p. 110, pl. 262: Surinam).

SPECIMENS COLLECTED

1 im. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Puerto Ayacucho, Rio Orinoco, May 11–15, 1931.

2 ad. ♂, Venezuela, Ciudad Bolívar, June 10, 1931.

3 im. ♂, 1 ad. ♀, Venezuela, Soledad, Anzoátegui, June 11–12, 1931, and December 10, 1929.

The more southern birds (Puerto Ayacucho) have slightly larger bills than do the more northern examples, but the difference is not enough to be significant. Females have less dusky on the lower mandibles than the males but are otherwise similar to them. According to Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 488) typical *cinereum* occurs on Mount Auyán-tepuí as well as farther south to Rio Branco, Amazonas, Brazil. As far as I have been able to learn it has not been recorded as yet from northern Brazil west of the Rio Branco, that is, from the Rio Negro.

Two of the Soledad males were said to have had active gonads, in spite of their being labeled as immature.

An additional Puerto Ayacucho bird, taken January 6, 1930, was preserved in alcohol.

**TODIROSTRUM MACULATUM ANNECTENS** Zimmer: *Rio Negro Tody Tyrant*

*Todirostrum maculatum annectens* ZIMMER, Amer. Mus. Nov., No. 1066, 1940, p. 6 (Igarapé Cacao Pereira, lower right bank of Rio Negro, Brazil).

SPECIMENS COLLECTED

1 im. ♂, 1 im. ♀, Brazil, Santa Isabel, Rio Negro, October 13, 1930.

1 im. ♀, Brazil, Barcellos, Rio Negro, October 6, 1930.

These specimens are identified to subspecies chiefly by geographic considerations as the total comparative material seen is slight. They agree with Zimmer's description of this race, but it may be recalled that he called *annectens* and *diversum* nothing more than "recognizable intermediate forms" when he proposed them. On the basis of the slender series seen (3 *annectens*, 2 *diversum*, and 1 *signatum*) it is not possible to be unduly critical, but it is difficult to be deeply convinced that so many races are recognizable.

Apparently this species does not occur in the Upper Orinoco Valley; at least no records from there have been noted.

**EUSCARTHMORNIS ZOSTEROPS ZOSTEROPS** (Pelzeln): *White-eyed Tody Tyrant*

*Euscarthmus zosterops* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, p. 102, 173, part (Marabitanas, Rio Negro).

SPECIMENS COLLECTED

1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 8, 1930.

1 ad. ♂, 1 ad. ♀, 2 im. ♂, 2 im. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 3-28, 1931.

Zimmer (Amer. Mus. Nov., No. 1066, 1940, p. 13) has pointed out that *Idioptilon rothschildi* Berlepsch is the same as the present bird. A specimen from French Guiana (*Idioptilon rothschildi* was described from there) is certainly not separable from any of the present series.

One of the immature males from Cerro Yapacana is unusually pale, more whitish, less yellowish on the abdomen.

**EUSCARTHMORNIS IMPIGER** (Sclater and Salvin): *Active Tody Tyrant*

*Euscarthmus impiger* SCLATER and SALVIN, Proc. Zool. Soc. London, 1868, p. 171 pl. 13, fig. 1 (Caracas).

SPECIMEN COLLECTED

1 im. ♀, Venezuela, Soledad, Anzoátegui, December 11, 1929.

Soledad is rather far inland for this bird according to the records in literature. The species is largely a bird of the tropical coastal zone of northern Venezuela and of Caribbean Colombia.

**LOPHOTRICCUS VITIOSUS AFFINIS** Zimmer: *Zimmer's Helmeted Tyrant*

*Lophotriccus vitiosus affinis* ZIMMER, Amer. Mus. Nov., No. 1066, 1940, p. 20 (Río Suno, above Avila, eastern Ecuador).

SPECIMENS COLLECTED

1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 16, 1930.

1 im. ♂, Brazil, Panela de Onca, Rio Cauabury, November 1, 1930.

1 ad. ♂, Brazil, Rio Maturacá, November 11, 1930.

1 im. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.

The adult is more whitish, less yellowish, below than the immature specimens.

In the absence of adequate comparative material, the present birds

are identified subspecifically by geographic considerations. They agree with Zimmer's description and comments.

**COLOPTERYX GALEATUS** (Boddaert): *Helmeted Pygmy Tyrant*

*Motacilla galeata* BODDAERT, Table des planches enluminées . . ., 1783, p. 24  
(based on Daubenton, Planches enluminées . . ., pl. 391, fig. 1: Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 3 im. ♀, Brazil, São Gabriel, Rio Negro, December 26, 1930–January 9, 1931.

1 ad. ♂, 2 im. ♀, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.

1 im. ♂, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 1, 1931.

1 ad. ♂, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, at mouth of Caño Atamoni, February 6, 1931.

1 im. ♀, 1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 5–19, 1931.

Some of the February and April birds were in breeding condition. On the whole, the immature birds average slightly more yellowish below.

Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, pp. 333–334) and more recently Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 489) state that this flycatcher occurs in southern Venezuela, as far south as the falls of Maipures, the Caura Valley, and Mount Auyán-tepuí, and also in the Guianas and northern Brazil, west to Manáos. The present series extends the southwestern limits of the range somewhat to take in the lower stretches of the Rio Negro, the Casiquiare, and the Upper Orinoco.

**ATALOTRICCUS PILARIS GRISEICEPS** (Hellmayr): *Gray-headed Pygmy Tyrant*

*Colopteryx pilaris griseiceps* HELLMAYR, Rev. Franç. Orn., vol. 3, No. 22, 1911, p. 24  
(Altigracia, Río Orinoco, Venezuela).

SPECIMENS COLLECTED

1 im. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 11, 1931.

1 im. ♂, 1 ad. ♀, Venezuela, Ciudad Bolívar, June 8–10, 1931.

In spite of the fact that the two males were marked "immature" by the collectors, all three specimens were noted as having enlarged, active gonads when shot.

Our specimens appear to come from the two extremes of the Venezuelan range of the race.

**MYIORNIS ECAUDATUS MISERABILIS** (Chubb): *Northern Short-tailed Pygmy Tyrant*

*Perisotriccus ecaudatus miserabilis* CHUBB, Ann. Mag. Nat. Hist., ser. 9, vol. 4, 1919, p. 301 (Bonasika River, British Guiana).

SPECIMEN COLLECTED

1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 17, 1931.

Zimmer's statement (Amer. Mus. Nov., No. 1066, 1940, pp. 21–22) that there "is just enough difference observable between birds from

Bolivia and Peru and those from British Guiana, Venezuela, and Trinidad to warrant the recognition of Chubb's *miserabilis*, described from British Guiana . . ." is borne out by material studied in the present connection. His inclusion of *Perissotriccus* in the generic concept of *Myiornis* is likewise accepted. There still seem to be too many slightly differentiated genera in current usage in the Tyrannidae.

The single specimen collected is in fresh plumage.

**CAPSIEMPIS FLAVEOLA FLAVEOLA** (Lichtenstein): *Yellow Tyrant*

*Muscicapa flaveola* LICHTENSTEIN, Verzeichniss der Doubletten des Zoologischen Museums . . . zu Berlin . . ., 1823, p. 56 (Bahia).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Providencia, Rio Negro, October 7, 1930.

1 ad. ♂, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.

The Brazilian specimen obtained is in worn plumage. It agrees quite well with a topotypical example but has the crown and occiput darker and browner. The Venezuelan example is less abraded although by no means in fresh feathering, and is more greenish above.

**EUSCARTHMUS MELORYPHUS MELORYPHUS** Wied: *Rufous-crowned Pygmy Tyrant*

*Euscarthmus meloryphus* WIED, Beiträge zur Naturgeschichte von Brasilien, vol. 3, 1831, p. 947 (boundary line of Minas Gerais and Bahia).

SPECIMEN COLLECTED

1 im. ♂, Venezuela, Soledad, Anzoátegui, December 7, 1929.

Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, pp. 358-359) notes that specimens from Venezuela and Colombia have the sides of the head slightly more tinged with fulvous and the tail feathers shorter than in more southern examples. Berlepsch's name *parulus*, based on a Bogotá bird, is available for these northern birds. However, as Hellmayr points out, these characters are not constant; this is borne out by the material examined in the present study.

**SERPOPHAGA HYPOLEUCA VENEZUELANA** Zimmer: *Orinoco White-bellied Serpophaga*

*Serpophaga hypoleuca venezuelana* ZIMMER, Amer. Mus. Nov., No. 1095, 1940, p. 14 (Caicara, Río Orinoco, Venezuela).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Isla Orocopiche, Anzoátegui, December 1, 1929.

In the absence of comparative material it is impossible to form any critical opinion of this subspecies. The single specimen obtained by the expedition agrees closely with Zimmer's description of *venezuelana*, to which form it should belong on geographic grounds.

**INEZIA SUBFLAVA CAUDATA** (Salvin): *Salvin's Inezia*

*Capsiempis caudata* SALVIN, Bull. Brit. Orn. Club, vol. 7, 1897, p. 16 (Ourumee, British Guiana).

## SPECIMEN COLLECTED

1 im. —, Venezuela, Soledad, Anzoátegui, December 10, 1929.

The single specimen obtained was just completing the molt into adult dress and is distinctly paler above than those from farther southward.

INEZIA SUBFLAVA OBSCURA Zimmer: *Zimmer's Inezia*

*Inezia subflava obscura* ZIMMER, Proc. Biol. Soc. Washington, vol. 52, 1939, p. 168 (Esmeraldas, Mount Duida, Venezuela; altitude 325 feet).

## SPECIMENS COLLECTED

1 ad. —, Venezuela, Chapazon, right bank Brazo Casiquiare, January 30, 1931.

1 ad. —, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare near Caño Perro de Agua, February 18, 1931.

3 ad. ♂, 2 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 1–5, 1931.

2 ad. ♂, Venezuela, right bank Upper Orinoco, opposite Corocoro Island, March 12–13, 1931.

This fine series agrees with the description, as it does in its geographic origin, with Zimmer's subspecies *obscura*. The form is darker and browner above than typical *subflava*, and differs from *caudata* of the Lower Orinoco by having the anterior under parts deeper yellow with heavier shading on the sides and flanks, but with no buffy tinge on the throat and breast, the white mental spot smaller and more definitely demarcated, and by having the outer tail feathers with only a narrow outer margin of white or yellowish (not reaching the shaft), the bill slightly longer, the tarsus shorter.

ELAENIA FLAVOGASTER FLAVOGASTER (Thunberg): *Yellow-billed Elaenia*

*Pipra flavogaster* THUNBERG, Mém. Acad. Sci. St. Pétersbourg, vol. 8, 1822, p. 286 (Brazil=Rio de Janeiro).

## SPECIMENS COLLECTED

2 ad. ♂, 1 im. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 3, 1930, and May 12–19, 1931.

1 ad. ♀, Venezuela, Ciudad Bolívar, June 10, 1931.

The June bird from Ciudad Bolívar is exceedingly abraded and has the yellowish color largely faded or bleached out. The January bird is in fresh plumage; the May examples are somewhat worn. The Ciudad Bolívar specimen is one of those troublesome skins that could be referred almost as readily to *E. spectabilis* as to *E. flavogaster*, but it is too small for the former (wing 72; tail 62 mm.).

ELAENIA PARVIROSTRIS Pelzeln: *Small-billed Elaenia*

*Elaenia parvirostris* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 107, 178 (Curytiba, Paraná).

## SPECIMENS COLLECTED

2 ad. ♂, 1 im. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 9–18, 1931.

1 im. ♂, 1 ad. ♀, 1 im. —, Venezuela, Ciudad Bolívar, June 8–11, 1931.

1 ad. ♂, Venezuela, Soledad, Anzoátegui, June 12, 1931.

Zimmer (Amer. Mus. Nov., No. 1108, 1941, pp. 11–12) has pointed out that this species appears to breed in and about northern Argentina around the end of January and to spend the southern winter in the northern parts of South America, returning south in September and October. The dates of the present series fit in very nicely with the extensive data given in his account, and so, too, do the plumage conditions of the various specimens. None of the nine birds was found to have enlarged gonads, a further agreement with Zimmer's account.

**ELAENIA CHIRIQUENSIS ALBIVERTEX** Pelzeln: *White-crowned Elaenia*

*Elaenia albivertex* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 107, 177 (Ypanema, São Paulo, Brazil).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, January 10, 1931.

1 ad. ♂, Venezuela, Chapazon, right bank Brazo Casiquiare, January 31, 1931.

The pale tips of the upper wing coverts are whiter and more pronounced in the male than in the female.

This flycatcher has an exceedingly extensive range without local differentiation—from Paraguay, southern Brazil, and Bolivia to the Guianas and Venezuela, eastern Peru, and Colombia (except the southwestern part.)

**ELAENIA RUFICEPS** Pelzeln: *Rufous-crested Elaenia*

*Elaenia ruficeps* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 108, 178 (Borba, Rio Madeira).

SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 14, 1931.

1 im. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 7, 1931.

It is only recently that this flycatcher was found to occur as far west as southern Venezuela. Thus, Hellmayr (Catalogue of the birds of the Americas, pt. 5, 1927, p. 424) records it from the three Guianas and from northern Brazil (at Borba on the Rio Madeira). Zimmer (Amer. Mus. Nov., No. 1108, 1941, p. 15) has added Yavanari in the Rio Negro to the Brazilian part of the range and lists examples from the Casiquiare and from Mount Duida in Venezuela. The present two seem to be the most northwesterly examples of the species to date. Both are in rather worn plumage.

**ELAENIA CANICEPS CINEREA** Pelzeln: *Gray Elaenia*

*Elaenia cinerea* PELZELN, Zur Ornithologie Brasiliens, pt. 2, 1868, pp. 108, 180 (Marabitanas, Rio Negro).



## SPECIMEN COLLECTED

1 im. ♂, Brazil, Cucuhy, Rio Negro, February 8, 1930.

The single example taken is in fairly fresh plumage.

**MYIOPAGIS GAIMARDII GUIANENSIS** (Berlepsch): *Guianan White-crested Flycatcher*

*Elaenia gaimardi guianensis* BERLEPSCH, Ornith., vol. 14, 1907, p. 421 (Camacusa, British Guiana).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 9, 1930.

1 ad. ♂, Brazil, Rio Negro, October 21, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, December 31, 1930.

1 ad. ♂, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 1, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.

1 im. ♂, Venezuela, Brazo Casiquiare, Caño Durutomoni, February 19, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.

1 ad. ♀, 1 ad. —, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 8–20, 1931.

Birds taken from October to early February had active gonads and are in abraded plumage. Those taken in February, March, and May have no notes as to gonadic condition, a sign suggesting that they had the gonads reduced in size; in plumage these examples are diverse as to the amount of wear evident. None are in fresh plumage.

The Puerto Ayacucho examples, the northernmost of the series, show no approach to *bogotensis* (Berlepsch).

In addition to the skins listed above, mention may be made of a specimen taken at Santa Isabel, October 16, 1930, preserved in alcohol.

**MYIOPAGIS VIRIDICATA PALLENS** Bangs: *Pale Elaenia*

*Myiopagis placens pallens* BANGS, Proc. New England Zool. Club, vol. 3, 1902, p. 85 (Santa Marta, Colombia).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Soledad, Anzoátegui, December 11, 1929.

Further material from the Orinoco Valley is needed to settle the taxonomic status of this species there. Zimmer (Amer. Mus. Nov., No. 1108, 1941, pp. 22–23) writes that five birds from Caicara and Quiribana de Caicara, in the Orinoco region, agree fairly well with Santa Marta skins but differ from them in having the margins of the greater and median upper wing coverts finely and sharply outlined with pale yellowish green and in having slightly smaller bills. In the bill character they agree better with the nominate form but have the yellow of the crest slightly more strongly tinged with chrome. "It is possible that they represent an unnamed form but may go with *pallens* for the present. A . . . bird from San Esteban, inland from Puerto Cabello, presumably belongs here also." The present specimen agrees with a bird from El Sombrero, Guárico, northern Vene-

zuela, and with others from Santander del Norte, Colombia, but has a slightly smaller bill and slightly paler yellow crest. It is in worn plumage and does not show any pale narrow margins on the upper wing coverts.

**SUBLEGATUS GLABER ORINOCENSIS** Zimmer: *Orinoco Smooth Flycatcher*

*Sublegatus glaber orinocensis* ZIMMER, Amer. Mus. Nov., No. 1109, 1941, p. 5 (Altagracia, Río Orinoco, Venezuela).

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Soledad, Anzoátegui, December 4, 1929.

The small size (wing 62 mm.) and paleness of this specimen agree with the characters of *orinocensis*, to which form it should belong geographically. The bird is in fairly fresh feathering.

The birds in the Río Negro drainage basin are darker and larger and form the race *S. g. sordidus* Zimmer.

**PHAEOMYIAS MURINA INCOMTA** (Cabanis and Heine): *Northern Mouse-colored Tyrannulet*

*Elainea incomta* CABANIS and HEINE, Museum Heineanum, vol. 2, 1859, p. 59 (Cartagena, Colombia).

SPECIMENS COLLECTED

3 ad. ♂, 2 ad. ♀, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 11-16, 1931.

1 ad. ♀, Venezuela, Soledad, Anzoátegui, December 4, 1929.

1 ad. ♂, Venezuela, Laguna Icacal, near Ciudad Bolívar, December 8, 1929.

1 ad. ♂, 1 ad. ♀, 1 im. —, Venezuela, Ciudad Bolívar, November 26, 1929, and June 10-11, 1931.

The immature birds are slightly paler above than the adults. All the present specimens are in fairly worn plumage.

No birds from the Río Negro have been available for study but it may be pointed out that Zimmer (Amer. Mus. Nov., No. 1109, 1941, p. 10) lists birds from Río Negro, Igarapé Cacao Pereira, as the Amazonian form *P. m. wagaie* (Taczanowski).

**CAMPTOSTOMA OBSOLETUM NAPAEUM** (Ridgway): *Ridgway's Tyrannulet*

*Ornithion napaeum* RIDGWAY, Proc. U. S. Nat. Mus., vol. 10, 1888, p. 520 (Diamantina, near Santarém, Río Tapajóz).

SPECIMENS COLLECTED

2 ad. ♂, Brazil, São Gabriel, Río Negro, Amazonas, January 8-13, 1931.

These specimens have been compared with topotypical examples and found to be very slightly darker above, but not significantly so.

**CAMPTOSTOMA OBSOLETUM VENEZUELAE** Zimmer: *Zimmer's Tyrannulet*

*Camptostoma obsoletum venezuelae* ZIMMER, Amer. Mus. Nov., No. 1109, 1941, p. 12 (La Cascabel, Río San Feliz, Venezuela).

SPECIMENS COLLECTED

3 ad. ♂, 1 ad. ♀, Venezuela, San Antonio, Upper Orinoco, March 1-5, 1931.

These examples differ from the Rio Negro birds in being very slightly more olive, less greenish, as stated in the original description of this race. In the other characters said to be diagnostic of *venezuelae* they do not differ from the specimens of *napaeum* seen. The last word has not yet been said on the forms of this flycatcher in Venezuela. If these examples are typical *venezuelae*, as it seems they are, as others from there have been so identified by the describer, then a specimen from El Sombrero, Guarico, northern Venezuela, probably represents still another race, characterized by paler coloration, especially above, and slightly larger and heavier bill. This specimen, recorded as *napaeum* prior to the description of *venezuelae* (Wetmore, Proc. U. S. Nat. Mus., vol. 87, 1939, p. 234) agrees in coloration with *pusillum* of Caribbean Colombia but differs from that race in having a much heavier bill. Birds from Goajira Peninsula, Colombia, are *pusillum*. Phelps (Bol. Soc. Venez. Cienc. Nat., No. 56, 1943, p. 316) identifies a specimen from Machiques, Perijá, extreme northwestern Venezuela as *pusillum* as well. Lest it be thought that the El Sombrero bird is merely an intergrade between *pusillum* and *venezuelae* let it be remembered that it has a larger bill than either.

From the material seen, *C. o. venezuelae* is a doubtful form.

**TYRANNISCUS GRACILIPES GRACILIPES** Selater and Salvin: *Slender-footed Tyrannulet*

*Tyranniscus gracilipes* SCLATER and SALVIN, Proc. Zool. Soc. London, 1867, p. 981 (Pebás, Peru).

SPECIMENS COLLECTED

- 1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 11, 1930.
- 1 ad. ♂, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 1, 1931.

This is another of the many instances of races of birds that pass unchanged from the Amazonian into the Orinocoan fauna. Zimmer (Amer. Mus. Nov., No. 1109, 1941, p. 22) writes, on the basis of more extensive material, that "series from the upper Rio Negro, Brazil, Mount Duida, the Rio Casiquiare, and the upper Orinoco are in close agreement and obviously represent the same form . . ."

**TYRANNULUS ELATUS** (Latham): *Yellow-crowned Tyrannulet*

*Sylvia elata* LATHAM, Index ornithologicus, vol. 2, 1790, p. 549 (based on Daubenton, Planches enluminées . . ., pl. 708, fig. 2: Cayenne).

SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Manáos, October 2, 1930.
- 2 ad. ♂, Brazil, Santa Isabel, Rio Negro, October 15-17, 1930.
- 3 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, January 1-14, 1931.
- 1 im. ♂, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 15, 1931.

Two of the January birds were in breeding condition when collected.

Zimmer (Amer. Mus. Nov., No. 1126, 1941, p. 2) found, with an enormous series, that no races of this tyrannulet could be recognized.

He comments that birds from the Rio Negro area, Brazil, show the darkest extreme of coloration but are not consistent in that character, and many specimens from that region can be matched by birds from localities far distant. The variable character of the color of the sides of the head below the eyes mentioned by him is illustrated in the present series. Two of the birds have this area yellowish or greenish, the rest grayish.

Recently Gyldenstolpe (Kungl. Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, p. 262) has concluded that *benii* Carr of Bolivia and *panamensis* Thayer and Bangs of Panama are recognizable races. In case further study should bear this out, the present birds would be *T. e. elatus*.

**LEPTOPOGON SUPERCILIARIS VENEZUELENSIS** Hartert and Goodson: *Venezuelan Leptopogon*

*Leptopogon superciliaris venezuelensis* HARTERT and GOODSON, Nov. Zool., vol. 24, 1917, p. 413 (Cumbre de Valencia, Valencia, above Puerto Cabello, Carabobo, Venezuela).

SPECIMEN COLLECTED

1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, Venezuelan border, December 7, 1930.

It is unfortunate that the lone example of this form secured is in immature plumage as the locality whence it comes is a new one. If the bird is *venezuelensis*, with which it is here tentatively placed, it extends the known range southwestward across southern Venezuela to the Rio Negro in Brazil; it was formerly recorded from Trinidad and northern Venezuela.

**LEPTOPOGON AMAUROCEPHALUS ORINOCENSIS** Zimmer and Phelps: *Orinoco Leptopogon*

*Leptopogon amaurocephalus orinocensis* ZIMMER and PHELPS. Amer. Mus. Nov., No. 1312, 1946, p. 15 (Santa Rosalía, Lower Caura Valley, State of Bolívar, Venezuela; altitude 100 meters).

SPECIMENS COLLECTED

1 ad. ♂, 2 im. ♂, Venezuela, Cerro Yapacana, March 20–April 21, 1931.

These three specimens have been compared for me with the type series of *orinocensis* by Dr. John T. Zimmer, with the unexpected result that they agree with this form and not with *obscuritergum*. It appears from this that *orinocensis* must range from Cerro Yapacana downstream to the Lower Caura region.

**PIPROMORPHA OLEAGINEA CHLORONOTA** (D'Orbigny and Lafresnaye): *Orinoco Pipromorpha*

*Muscicapa chloronotus* "Lesson," D'ORBIGNY and LAFRESNAYE, Synopsis avium, in Mag. Zool., 1837, cl. 2, p. 51 (Yuracares, Bolivia).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, Brazil, Santa Isabel, Rio Negro, October 10, 1930.

2 ad. ♂, 1 im. ♂, Brazil, Serra Imeri, near Salto do Huá, November 28–December 4, 1930.

1 im. ♂, Brazil, São Gabriel, Rio Negro, January 3, 1931.

1 im. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.

3 ad. ♂, 1 im. ♂, 1 ad. ♀, 1 im. –, Venezuela, Cerro Yapacana, Upper Orinoco, March 19–April 23, 1931.

The adult males from Cerro Yapacana were in breeding condition when collected.

While Hellmayr (Catalogue of the birds of the Americas, vol. 5, 1927, p. 497) has not recognized this race it appears that Todd, Zimmer, and Gyldenstolpe are correct in considering it distinct. The present series is quite uniform in appearance, indicating variational stability.

### Family HIRUNDINIDAE: Swallows

**PROGNE CHALYBEA CHALYBEA** (Gmelin): *White-bellied Martin*

*Hirundo chalybea* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 1026 (Cayenne).

#### SPECIMENS COLLECTED

1 ad. –, Brazil, São Gabriel, Rio Negro, Amazonas, January 12, 1931.

1 ad. ♂, Brazil, Cuehy, Rio Negro, Amazonas, February 1, 1930.

In his account of this wide ranging form, Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 18, footnote) states that he had not seen any Mexican material but that birds from Guatemala and Costa Rica seemed not to be separable from those from the northern half or more of South America. Mexican examples have been examined in the present connection and were found to be the same as those from the rest of the range of the race, as correctly worked out many years ago by Ridgway (Birds of North and Middle America, pt. 3, 1904, p. 40).

**STELGIDOPTERYX RUFICOLLIS AEQUALIS** Bangs: *Caribbean Rough-winged Swallow*

*Stelgidopteryx ruficollis aequalis* BANGS, Proc. New England Zool. Club, vol. 2, 1901, p. 58 (Santa Marta, Colombia).

#### SPECIMENS COLLECTED

2 im. ♂, 3 im. ♀, Venezuela, Soledad, June 11–12, 1931.

The immature birds do not have the roughened edge on the outer web of the outer primary found in adults. The adult bird has the rump with the light area less prominent than in the majority of skins from northern Venezuela, but still distinct. The pale rump is definitely indicated in the immature birds.

**ATTICORA MELANOLEUCA** (Wied): *Black-collared Swallow*

*Hirundo melanoleuca* WIED, Reise nach Brasilien . . . , vol. 1, 1820, p. 345 (Rio Belmonte, Bahia, Brazil).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cachoeira Destacamento, Rio Cauabury, Amazonas, December 14, 1930.

1 im. ♂, 2 ad. ♀, 1 im. ♀, 1 im. —, Brazil, São Gabriel, Rio Negro, Amazonas, January 9–19, 1931.

1 ad. ♀, Venezuela, Puerto Ayacucho, January 6, 1930.

1 im. ♂, Venezuela, Isla Yagrumo, Río Negro, Amazonas, January 25, 1931.

1 ad. ♂, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 2, 1931.

Two of the immature birds have the entire upperparts dark dull brown with the bluish-black feathers of the adult plumage coming in on the lesser upper wing coverts, apparently the first area to be affected by the molt. Of the other two immature examples one is indistinguishable from the adults, its immaturity being the judgment of the collector from unrecorded evidence; the other is in an advanced state of postjuvénal molt.

This species was made the type and only member of the genus *Diplochelidon* by Ridgway (Proc. Biol. Soc. Washington, vol. 16, 1903, p. 106) but it seems preferable to "lump" this generic split with *Atticora* as has been done by most recent authors.

The colored figure of this species in Sharpe and Wyatt's monograph of the swallows (vol. 2, 1888, pl. 98) shows a greater development of the posteriorly projecting midventral extension of the dark breast band than do the present specimens.

At Raudal San Sebastián Holt collected one set of eggs (three eggs) of this swallow from a nest in a sand bank.

HIRUNDO RUSTICA ERYTHROGASTER Boddaert: *Barn Swallow*

*Hirundo erythrogaster* BODDAERT, Table des planches enluminées . . ., 1783, p. 45 (Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, Amazonas, October 10, 1930.

Although labeled as an adult this specimen is really a younger bird in process of acquiring mature plumage.

IRIDOPROCNE ALBIVENTER (Boddaert): *White-winged Swallow*

*Hirundo albiventer* BODDAERT, Table des planches enluminées, 1783, p. 32 (Cayenne).

## SPECIMENS COLLECTED

3 ad. ♂, 1 im. —, Brazil, São Gabriel, Rio Negro, December 30, 1930–January 12, 1931.

1 im. ♀, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

The immature female from the Brazo Casiquiare is gray above except for the rump and the broad white markings on the wings. One of the São Gabriel birds, taken January 3, is a young bird just from the nest, not yet quite grown, sex not indicated. It has a slight bluish tinge on the back. An adult male examined has blue and

green mixed on the head and back, while another is steel blue with only a tinge of green.

### Family CORVIDAE: Crows and Jays

#### CYANOCORAX HEILPRINI Gentry: *Heilprin's Jay*

*Cyanocorax heilprini* GENTRY, Proc. Acad. Nat. Sci. Philadelphia, 1885, p. 90 (Rio Negro).

#### SPECIMENS COLLECTED

1 im. ♂, Venezuela, Upper Orinoco, right bank, opposite Corocoro Island, March 16, 1931.

3 ad. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 19–April 29, 1931.

Heilprin's jay seems to be a rare bird in collections, and little has been published about it. It differs at a glance from its other congeners by having the frontal crest.

Of the three adult males, two are considerably abraded and are less purplish, more brownish above and below than the third example. One of the abraded males and the adult female show signs of molt, especially in the tail. The immature birds are essentially like the adults in coloration.

When he wrote his account of this jay Hellmayr (Catalogue of the birds of the Americas, pt. 7, 1934, p. 25) had seen only seven specimens, distributed among four museums. The present series is therefore a sizable addition to the available material of this form.

#### CYANOCORAX VIOLACEUS Du Bus: *Violaceous Jay*

*Cyanocorax violaceus* DU BUS, Bull. Acad. Roy. Sci., Lettr. et Beaux-Arts Belg., vol. 14, 1847, p. 103 (Peru).

#### SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Cauabury, Amazonas, November 6, 1930.

1 ad. ♀, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 7, 1931.

2 ad. ♀, Venezuela, Playa de Candela, Brazo Casiquiare, February 8, 1931.

1 ad. ♀, Venezuela, Buenos Aires, Brazo Casiquiare, February 21, 1931.

The specimens from Venezuela are somewhat paler than the one from Brazil, especially on the abdomen and upper back, and all the present specimens are paler on these areas, than are birds from Rio Combirciato, Peru, from Napo, Ecuador, and from Barrigon, eastern Colombia. Chubb (The birds of British Guiana, vol. 2, 1921, 588–589) uses the name *hyacinthinus* for the British Guiana bird on the basis of its being paler in coloration than examples from eastern Peru, Ecuador, and Colombia. It would seem from this that the name *hyacinthinus* Cabanis might be revised for the birds from Guiana to Venezuela and adjacent parts of northern Brazil. On the other hand, Hellmayr (Catalogue of the birds of the Americas, pt. 7, 1934, p. 28, footnote) records that an old faded specimen from British Guiana is somewhat duller than skins from upper Amazonia, but that birds

from the Caura, Venezuela, do not appreciably differ from others from upper Amazonia. He had three specimens from the Rio Negro (Marabitanas, São Joaquim, and from below Lamalonga and Santa Isabel). He concludes that *hyacinthinus* could not be maintained as a race, to say nothing of its use as a species as in Chubb's book.

The status of *hyacinthinus* as a possible northeastern subspecies of *C. violaceus* must remain unsettled until some one with ampler material looks into it. The type locality of *hyacinthinus* is Canuku Mountains, British Guiana, the opposite end of the range of the species from Peru, the locus of typical *violaceus*.

Two of the Venezuelan birds show signs of molt in the primaries.

### Family TROGLODYTIDAE: Wrens

#### HELEODYTES GRISEUS (Swainson): *Guianan Cactus Wren*

*Furnarius griseus* SWAINSON, *Animals in menageries*, 1837, p. 325 (savannas of Guiana).

#### SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 21, 1931.

The present specimen is slightly paler above than another female from the Rio Parime, northern Brazil, and also differs from it in having a shorter bill (26.8 mm. in the Venezuelan bird as against 30 mm. in the Brazilian, the culmen being measured from the base). More material is needed to determine the limits of individual variation in this wren.

This is a bird of the savannas from northern Brazil north to Venezuela and British Guiana.

#### HELEODYTES MINOR MINOR Cabanis: *Lesser Cactus Wren*

*Heleodytes minor* CABANIS, *Museum Heineanum*, vol. 1, 1851, p. 80 (Venezuela).

#### SPECIMEN COLLECTED

1 im. ♀, Venezuela, Soledad, Anzoátegui, December 7, 1929.

The bird is in fresh plumage.

This form occurs along the Lower Orinoco and the Caura Rivers north to eastern Venezuela (Sucre).

#### HELEODYTES NUCHALIS NUCHALIS (Cabanis): *Orinocoan Banded Wren*

*Campylorhynchus nuchalis* CABANIS, *Arch. für Naturg.*, vol. 13, 1847, p. 206 (Cumaná, Venezuela).

#### SPECIMENS COLLECTED

2 ad. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Soledad, Anzoátegui, December 7, 1929, and June 11-12, 1931.

Wetmore (*Proc. U. S. Nat. Mus.*, vol. 87, 1929, pp. 237-238) has revised the races of this wren, and it is in accordance with his findings



that these specimens have been identified. The nominate form has the ventral spotting less heavy than in the north Venezuelan form, *brevipennis*, and has the throat and chin unmarked and a slightly smaller bill. It occurs in the Orinoco Valley from Caicara to Ciudad Bolívar and the Cumaná region.

**THRYOTHORUS LEUCOTIS HYPOLEUCUS** (Berlepsch and Hartert): *White-bellied Wren*

*Thryophilus albipectus hypoleucus* BERLEPSCH and HARTERT, Bull. Brit. Orn. Club, vol. 12, 1901, p. 12 (Altigracia, Río Orinoco, Venezuela).

SPECIMENS COLLECTED

1 im. ♀, Venezuela, Ciudad Bolívar, November 27, 1929.

1 ad. ♂, Venezuela, Soledad, Anzoátegui, June 12, 1931.

The adult male was noted as having enlarged gonads.

The young female is noticeably darker and more rufescent above than the adult male.

This race occurs along the middle stretches of the Orinoco from the Apure River to Ciudad Bolívar.

**THRYOTHORUS LEUCOTIS ALBIPECTUS** Cabanis: *White-breasted Wren*

*Thryothorus albipectus* CABANIS, in Schomburgk, Reisen in Britisch-Guiana . . . pt. 3, 1848 (=1849), p. 673 (Cayenne, French Guiana).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, 1 im. ♀, 1 im. —, Brazil, Providencia, Rio Negro, Amazonas, October 7, 1930.

These four specimens, which by their identity of locality must be considered as of one form, bear out very well Hellmayr's contention (Catalogue of the birds of the Americas, pt. 7, 1934, p. 161) that *albipectus* is an exceedingly unstable form. The unsexed immature bird is noticeably darker above and on the flanks, thighs, and under tail coverts than any of the other specimens; the immature female is buffier on the throat and breast than are the others.

If Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, No. 3, 1941, p. 301) are correct in splitting *albipectus*, the present series would probably have to be called *taeniopterus* Ridgway (type locality, Diamantina, Santarém, Brazil). A female topotype of *taeniopterus* agrees closely with the dark immature specimen of the present series. No topotypical *albipectus* have been seen. Gyldenstolpe (Kungl. Svenska Vet.-Akad. Handl., vol. 22, No. 3, 1945, p. 270) finds that material from Lower Amazonia indicates that neither color nor size characters appear to be valid for the recognition of *taeniopterus*.

**THRYOTHORUS LEUCOTIS BOGOTENSIS** (Hellmayr): *Villavicencio Wren*

*Thryophilus albipectus bogotensis* HELLMAYR, Verh. zool.-bot. Ges. Wien, vol. 51, 1901, pp. 770, 794: ("Bogota," Colombia).

## SPECIMENS COLLECTED

- 3 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, Playa de Candela, February 8, 1931.  
 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.  
 1 ad. ♂, Venezuela, Brazo Casiquiare, February 13, 1931.  
 1 ad. ♂, 1 im. ♀, Venezuela, Brazo Casiquiare, near Caño Matipin, February 18, 1931.  
 1 ad. ♀, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.  
 1 ad. ♂, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.  
 3 ad. ♂, Venezuela, Puerto Ayacucho, Río Orinoco, May 11–15, 1931.  
 1 ad. ♀, 1 im. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 3–5, 1930.

This fine series of *bogotensis* has been compared with specimens of *zuliensis*, *venezuelanus*, *albipectus*, *hypoleucus*, and *leucotis*. Birds from the Brazo Casiquiare average slightly darker above than do Orinoco examples, but the difference is very small and not entirely constant.

**THRYOTHORUS CORAYA GRISEIPECTUS** Sharpe: *Gray-breasted Wren*

*Thryothorus griseipectus* SHARPE, Catalogue of birds in the collection of the British Museum, vol. 6, 1881, p. 236, pl. 15, fig. 1 (Nauta, Ecuador).

## SPECIMENS COLLECTED

- 1 ad. ♂, Brazil, Rio Cauabury, Amazonas, November 3, 1930.  
 1 ad. ♂, 2 ad. ♀, Brazil, Rio Maturacá, Amazonas, November 6–11, 1930.  
 1 im. —, Brazil, Salto do Huá, Rio Maturacá, November 20, 1930.  
 3 ad. ♂, 2 im. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, December 27, 1930–January 9, 1931.  
 1 ad. ♀, Brazil, Rio Negro Islands below San Carlos, Amazonas, January 27, 1931.  
 2 ad. ♂, 2 ad. ♀, Brazil, Cucuhy, Rio Negro, Amazonas, February 3–8, 1930.  
 1 ad. ♀, Venezuela, Cerro Guanari, Brazo Casiquiare, February 4, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below Caño Caripo, February 22, 1931.

Hellmayr (Catalogue of the birds of the Americas, pt. 7, 1934, p. 193) gives the wing length of this form as 60–65 mm. in males, 58–60 mm. in females. This is greater than the measurements of the present series, which run from 54 to 62.5 mm. in the males, and from 54 to 58 mm. in females. All these specimens come from the general area from which Hellmayr notes the birds have smaller bills and are somewhat deeper chestnut above. Within the series there are no significant geographic variations. It may be noted, however, that all the adult females have the forehead, crown, occiput, and nape considerably paler, more rufescent, less blackish, than a fairly topotypical one from Río Pastaza, Ecuador. The same difference does not hold for males from the two regions, however.

Of the three birds labeled as immature, two are not readily distinguishable from adults. One, however, is much darker on the breast

and abdomen, both of which areas are like the color of the flanks and vent in adult birds. This specimen also has the sides of the head without whitish streaks, as in adults of the race *T. c. herberti* from south of the Amazon.

**TROGLODYTES MUSCULUS CLARUS** Berlepsch and Hartert: *Pale-bellied House Wren*

*Troglodytes musculus clarus* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 8 (Bartica Grove, British Guiana).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 13, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 15, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

The specimen from Santa Isabel is more rufescent on the upper parts of the head and body than are the other two, possibly because of its being in fresher plumage. It is less rufescent and slightly paler than another October female from northern Venezuela (Ocumare de la Costa).

**HENICORHINA LEUCOSTICTA LEUCOSTICTA** (Cabanis): *Black-capped Wood Wren*

*Cyphorhinus leucostictus* CABANIS Arch. für Naturg., vol. 13, No. 1, 1847, p. 206 (Guiana).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Cauabury, below mouth of Rio Maturacá, Amazonas, November 7, 1930.

2 ad. ♂, 1 ad. —, Brazil, Serra Imeri, near Salto do Huá, November 26, 1930–December 6, 1930.

1 im. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 6, 1931.

The supposedly immature bird cannot be distinguished from adults in plumage except for a little greater mixture of brown in the black of the occiput.

The Rio Cauabury specimen shows signs of molt in the wings.

**MICROCERCULUS BAMBLA CAURENSIS** Berlepsch and Hartert: *Venezuelan Banded Wren*

*Microcerculus caurensis* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 5 (Nicare, Caura River, Venezuela).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, Rio Maturacá, November 11, 1930.

1 ad. ♂, 1 im. ♀, Brazil, Serra Imeri, near Salto do Huá, December 4–7, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, January 14, 1931.

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 2, 1931.

Gilliard (Bull. Amer. Mus. Nat. Hist., vol. 77, 1941, p. 493) has recorded *caurensis* from the foot of Mount Duida, the nearest locality to the present ones from which the species has been recorded. His bird was compared directly with the type. I have used his birds as comparative material (together with borrowed specimens of the other races of the species) and find the present series to be *caurensis*, as might be expected geographically. The known range of *caurensis* is

thereby extended farther to the southeast in Venezuela and in the Upper Rio Negro area of Brazil. Only a few years ago Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, 1941, p. 302) added the species (n nominate form) to the avifaunal list of Brazil; Pinto (Catalogo Aves do Brazil, pt. 2, 1944, p. 350) added the race *albigularis*; now we may add *caurensis* as well.

The female from Cerro Yapacana was in breeding condition.

### Family MIMIDAE: Mockingbirds and Thrashers

**MIMUS GILVUS MELANOPTERUS** Lawrence: *Black-winged Mockingbird*

*Mimus melanopterus* LAWRENCE, Ann. Lyc. Nat. Hist. New York, vol. 5, No. 1, 1849, p. 35, pl. 2 (Venezuela).

#### SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Soledad, December 10, 1929.

2 im. -, Venezuela, Puerto Ayacucho, Río Orinoco, May 21, 1931.

Though these specimens appear to fall into the concept expressed by the use of the name *melanopterus*, the race may be in need of further study. The lone adult is definitely less pure grayish, more brownish gray on the upper parts than are adults of comparable sex and season from El Sombrero, and Ocumare de la Costa, northern Venezuela. It differs from them also in having a somewhat smaller bill although it shows no other mensural differences. On the other hand, it is slightly less brownish above than adults from Aragua, northern Venezuela, which are also considered *melanopterus*.

The immature birds are badly abraded but show no evidence of postjuvénal molt.

**DONACOBIVS ATRICAPILLUS ATRICAPILLUS** (Linnaeus): *Black-capped Mocking Thrush*

*Turdus atricapillus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 295 (eastern Brazil).

#### SPECIMENS COLLECTED

2 ad. ♂, 1 im. ♂, Brazil, Ceo de Arary, above Parintins, Amazonas, September 20, 1930.

These three specimens have been compared with a long series from most parts of the range of this form as well as with examples of the other two races of the species.

The immature specimen has the top of the head and nape dark brown instead of black as in the adults and also has white superciliaries.

### Family TURDIDAE: Thrushes

**TURDUS ALBICOLLIS PHAEOPYGUS** Cabanis: *Gray-rumped Thrush*

*Turdus phaeopygus* CABANIS, in Schomburgk, Reisen in British-Guiana . . . , pt. 3, 1848 (=1849), p. 666 (British Guiana).

## SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 16, 1930.  
 1 ad. ♀, Brazil, Cachoeira Manajó, Rio Cauabury, October 30, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, Maturacá, Amazonas, November 11–12, 1930.  
 2 ad. ♂, 1 ad. ♀, Brazil, Salto do Huá, Rio Maturacá, Amazonas, November 16–22, 1930.  
 4 ad. ♂, Brazil, Serra Imeri, Rio Maturacá, Amazonas, November 26, 1930–December 5, 1930.  
 1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 9–12, 1931.  
 5 ad. ♂, 6 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 19–April 25, 1931.

In studying the present series the other races of the species were gone over as well. The arrangement given by Hellmayr (Catalogue of the birds of the Americas, pt. 7, 1934, pp. 366–373) was found to hold except for two items. The race *minusculus* Bangs was found to be not valid (thereby agreeing with the results arrived at by Todd, Proc. Biol. Soc. Washington, vol. 44, 1931, p. 49) and was “lumped” with the present race; and the range of *phaeopygoides* Seebohm was found to include the “District Federal” of northern Venezuela as well as the areas mentioned by Hellmayr. A number of birds from the Lower Orinoco (without more explicit localities) were likewise found to fit the characters of *phaeopygoides*. Todd’s race *cayennensis* was upheld, but the material seen was scant; no material of *coloratus* or of *contemptus* Hellmayr was available.

**TURDUS NUDIGENIS NUDIGENIS** Lafresnaye: *Bare-eyed Thrush*

*Turdus nudigenis* LAFRESNAYE, Rev. Zool., vol. 11, 1848, p. 4 (Caracas).

## SPECIMENS COLLECTED

- 1 ad. ♀, Venezuela, Puerto Ayacucho, January 6, 1930.  
 1 ad. ♂, Venezuela, Ciudad Bolívar, June 11, 1931.

The June specimen is in exceedingly worn plumage; the January bird is quite freshly feathered.

**TURDUS FUMIGATUS FUMIGATUS** Lichtenstein: *Sabian Thrush*

*Turdus fumigatus* LICHTENSTEIN, Verzeichniss der Doubletten des Zoologischen Museums . . . zu Berlin . . ., 1823, p. 38 (Brazil; restricted to Rio Espirito Santo, Espirito Santo, by Hellmayr (Catalogue of the birds of the Americas, pt. 7, 1934, p. 385).

## SPECIMENS COLLECTED

- 1 ad. ♂, Venezuela, Brazo Casiquiare, February 7, 1931.  
 1 ad. ♂, 1 ad. ♀, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11–13, 1931.  
 1 ad. ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.  
 1 ad. ♂, Venezuela, San Antonio Upper Orinoco, March 8, 1931.

This series shows that the race is very variable in tone of color, an observation also made by Hellmayr (Catalogue of the birds of the

Americas, pt. 7, 1934, p. 386, footnote). Thus, the two males from the Brazo Casiquiare are different enough to suggest two races but for the fact that they both were taken in the same area at the same time. One is very much more rufescent and darker than the other. The two birds from the Upper Orinoco resemble the paler of the Brazo Casiquiare males. It is obvious from these few birds that great series are needed before we can determine whether or not the geographic variations exceed individual variability in this form. For the present, at least, it may be well to follow Hellmayr in considering *fredericki* Chubb and *abariensis* Chubb as synonyms of *fumigatus*.

**TURDUS IGNOBILIS ARTHURI** (Chubb): *Arthur's Black-billed Thrush*

*Planesticus arthuri* CHUBB, Bull. Brit. Orn. Club, vol. 33, 1914, p. 131 (Abari River, British Guiana).

SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 11, 1931.

This lone specimen appears to belong to the present race, which I have otherwise seen from the lowlands of Duida and from Rio Negro, and constitutes a slight extension of the known range of the form westward, the previous westernmost point in Venezuela from which it had been reported being the base of Mount Duida. It also fits the colored illustration in Chubb's "Birds of British Guiana" (vol. 2, 1921, pl. 5, fig. 2) except that it does not have the throat nearly as white as in the plate. Its dimensions are as follows: wing 105; tail 78; culmen from the base 21 mm. It is a very worn plumage and is for this reason slightly paler than any of the other specimens seen.

**TURDUS LEUCOMELAS ALBIVENTER** Spix: *Spix's Thrush*

*Turdus albiventer* SPIX, Avium species novae . . . Brasiliam . . ., vol. 1, 1824, 70, pl. 69, fig 2 (Pará, Brazil).

SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Laguna Icacal, Ciudad Bolívar, December 8, 1929.

1 ad. ♀, Venezuela, Ciudad Bolívar, June 10, 1931.

1 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 22–April 3, 1931.

1 ad. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, January 10, 1930, and May 9–12, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Soledad, Anzoátegui, November 29, 1929, and June 13, 1931.

These specimens have been compared with three each from British Guiana, Venezuela, and Colombia, and with five from eastern Brazil (Bahia, Ceará, and Santarém). The differences shown by these 24 birds do not warrant keeping *epphipialis* Sclater distinct from *albiventer*, even when we bear in mind Hellmayr's statement (Catalogue of the birds of the Americas, pt. 7, 1934, p. 401) that the differences between the two, "while noticeable in series of freshly molted birds, are

hardly apparent, when worn examples of *T. l. albiventer* are compared." It is true that abraded *albiventer* are considerably less brownish olive, more grayish than birds in fresh feathering, but even in comparable specimens in fairly new plumage, the differences do not impress one as constant.

Birds collected from March to June are badly worn; those taken in November, December, and January are much less so.

**HYLOCICHLA MINIMA ALICIAE** (Baird): *Northern Gray-cheeked Thrush*

*Turdus aliciae* BAIRD, Pacific Railroad Survey, vol. 9, 1858, p. 217 (Illinois and Upper Missouri= West Northfield, Ill.)

SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 15, 1931.

In identifying this bird as *aliciae* I am recognizing the Newfoundland birds as distinct from continental northern birds. The Newfoundland birds are the nominate form, a browner race.

**HYLOCICHLA MINIMA MINIMA** (Lafresnaye): *Newfoundland Gray-cheeked Thrush*

*Turdus minimus* LAFRESNAYE, Rev. Zool., vol. 11, 1848, p. 5 (Bogotá, Colombia).

SPECIMENS COLLECTED

1 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 16, 1931.

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 15, 1931.

These birds have wing lengths of 97 and 98 mm., respectively, and are therefore too large for the southern race *bicknelli* but fit within the variational limits of the nominate subspecies.

**Family SYLVIIDAE: Old World Warblers, Gnatcatchers, etc.**

**POLIOPTILA PLUMBEA PLUMBICEPS** Lawrence: *Lawrence's Gnatcatcher*

*Polioptila plumbeiceps* LAWRENCE, Proc. Acad. Nat. Sci. Philadelphia, vol. 17, 1865, p. 37 (Venezuela).

SPECIMENS COLLECTED

1 ad. ♀, Venezuela, Soledad, Estado Anzoátegui, December 4, 1929.

1 im. ♂, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.

2 ad. ♂, 1 ad. ♀, 1 im. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 12, 1931.

2 im. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 10, 1931.

4 ad. ♂, 1 im. ♂, 4 ad. ♀, 1 ad. —, Venezuela, Puerto Ayacucho, Río Orinoco. May 11-14, 1931.

1 ad. ♀, Venezuela, Ciudad Bolívar, Bolívar, June 11, 1931.

1 ad. ♂, Venezuela, Soledad, Anzoátegui, June 12, 1931.

In birds from northern Venezuela (Ocumare de la Costa, La Trilla, Independencia, and near Maracay) Wetmore found the feathers behind the nostrils to be whitish (Proc. U. S. Nat. Mus., vol. 87, 1939, p. 242). This is not true of the present series.

There is considerable variation in darkness or lightness of the upperparts regardless of season or sex in birds from the same localities.

### Family CYCLARHIDAE: Peppershrikes

**CYCLARHIS GUJANENSIS FLAVIPECTUS** Sclater: *Yellow-breasted Peppershrike*

*Cyclorhis flavipectus* SCLATER, Proc. Zool. Soc. London, vol. 26, 1858, p. 448, part (Trinidad).

#### SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Soledad, Anzoátegui, December 10, 1929.

This form is found in northern Venezuela and Trinidad, west to the eastern slopes of the eastern Andes of Colombia. The present specimen resembles skins from more northern localities in Venezuela in the color of the upper surface, including the crown, but is slightly duller yellow below.

A specimen taken at Ciudad Bolívar, June 8, 1931, was preserved in alcohol.

**CYCLARHIS GUJANENSIS GUJANENSIS** (Gmelin): *Guianan Peppershrike*

*Tanagra gujanensis* GMELIN, Systema naturae, vol. 1, pt. 2, 1789, p. 893 (French Guiana).

#### SPECIMENS COLLECTED

1 im. ♂, 1 im. ♀, Brazil, Manáos, October 1, 1930.

8 ad. ♂, 4 ad. ♀, Venezuela, Puerto Ayacucho, Río Orínoco, January 2, 1930 (1 ♂) and May 11-19, 1931 (all the rest).

Most of the May adults were noted as having enlarged gonads when collected.

When compared with *C. g. flavipectus* these birds are distinctly darker green on the back, and darker gray on the crown, while below the yellow is definitely more greenish. They are identified as typical *gujanensis* in accordance with the recent treatment by Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 200). Two immature birds, fully grown, taken at Manáos, October 1, 1930, are still duller green on the breast. It seems not improbable that birds assigned to this race may require further division when material comes to hand.

### Family VIREONIDAE: Vireos

**VIREO VIRESCENS VIRESCENS** Vieillot: *Red-eyed Vireo*

*Vireo virescens* VIEILLOT, Histoire naturelle des oiseaux de l'Amérique septentrionale, Sept. 1, "1807," 1808, p. 84, pl. 53 (no locality given = New Jersey).

#### SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, 2 ad. ♀, 1 im. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, December 27, 1930-January 19, 1931.

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 7, 1930.

2 im. ♀, Venezuela, Chapazon, right bank Brazo Casiquiare, January 30-31, 1931.



1 ad. —, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 1, 1931.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 5, 1931.

2 ad. ♂, 1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 1–14, 1931.

The latest, in point of time of the year, of these wintering birds were taken at a time when the species ordinarily begins to arrive in southern United States.

An additional specimen, taken at São Gabriel, January 9, 1931, was preserved in alcohol.

**VIREO VIRESCENS VIVIDIOR** Hellmayr and Seilern: *Caribbean Vireo*

*Vireo chivi vividior* HELLMAYR and SEILERN, Verh. Orn. Ges. Bayern, vol. 12, 1913, p. 315 (Caparo, Trinidad).

SPECIMENS COLLECTED

2 ad. ♂, 2 ad. ♀, 1 ad. —, Venezuela, Puerto Ayacucho, Río Orinoco, January 5, 1930, and May 8–13, 1931.

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 17, 1931.

1 ad. ♂, Venezuela, Tamatama, Upper Orinoco, February 23, 1931.

1 ad. ♂, 1 ad. ♀, Venezuela, Bolívar, Estado Bolívar, June 8–10, 1931.

The May and June birds are in more worn plumage than are those taken from January to April.

**VIREO VIRESCENS SOLIMOENSIS** Todd: *Amazonian Vireo*

*Vireo caucæ solimoensis* TODD, Auk, vol. 48, 1931, p. 412 (São Paulo de Olivença, Rio Solimões, Brazil).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Manáos (Flores Tramway), Estado do Amazonas, October 2, 1930.

This specimen agrees in its small size (wing 65, tail 45.4 mm.) with the characters of *solimoensis*, to which form it should belong on the basis of geography as well.

**HYLOPHILUS MUSCICAPINUS MUSCICAPINUS** Selater and Salvin: *Flycatcherlike Hylophilus*

*Hylophilus muscicapinus* SCLATER and SALVIN, Nomenclator avium neotropicalium, 1873, p. 156 (St. Louis d'Oyapock, French Guiana).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, December 31, 1930–January 3, 1931.

The immature bird shows signs of molting, especially in the tail. São Gabriel appears to be the southwesternmost locality from which this vireo has been recorded; previously it was not known in Brazil west of Obidos and Rio Jary, although it had been reported from as far west as Suapure, La Unión, and Nicare, on the Caura River, in Venezuela.

The adult male is slightly larger than a comparable specimen from Bartica Grove, British Guiana.

**HYLOPHILUS BRUNNEICEPS BRUNNEICEPS** Selater: *Brown-headed Hylophilus*

*Hylophilus brunneiceps* SCLATER, Proc. Zool. Soc. London, 1866, p. 322 ("in Brasil merid., Ypanema"=Rio Vaupé, a tributary of the Upper Rio Negro).

## SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Chapazon, right bank Brazo Casiquiare, January 30, 1931.

1 ad. ♀, 1 im. ♂, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 22-27, 1931.

The immature bird is like the adults in plumage.

No comparative material either of this form or of *H. b. inornatus* has been available for examination, but the specimens agree closely with Sclater's colored figure (Ibis, 1881, pl. 11, fig. 1) and with descriptions.

**HYLOPHILUS OCHRACEICEPS FERRUGINEIFRONS** Sclater: *Rufous-fronted Hylophilus*

*Hylophilus ferrugineifrons* SCLATER, Proc. Zool. Soc. London, 1862, p. 110 (Bogotá, Colombia).

## SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 1-7, 1930.

2 ad. ♂, 1 ad. ♀, 1 im. ♀, Brazil, Serra Imeri, Rio Maturacá, November 29-December 6, 1930.

2 ad. ♂, 1 im. ♂, Brazil, Rio Maturacá, November 9-12, 1930.

2 ad. ♂, 1 im. ♀, Brazil, Salto do Huá, Rio Maturacá, November 18-20, 1930.

1 ad. ♂, Brazil, Rio Cauabury, above mouth of Rio Já, November 5, 1930.

1 ad. ♂, Venezuela, Chapazon, right bank of Brazo Casiquiare, January 30, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 11, 1931.

1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, April 21, 1931.

Zimmer (Amer. Mus. Nov., No. 1160, 1942, p. 5) found in his series that the specimens from the Rio Negro, Brazil, showed the greatest "extreme of positive brown coloration on the back and of deep rufescence on the anterior part of the head . . ." The present series, differing from Zimmer's material in being a north-south instead of an east-west section of the range of the race, shows no greater development of these characters in Rio Negro birds than in others from southern Venezuela. In fact, the 16 birds collected by the expedition show remarkably little variation.

**HYLOPHILUS SEMICINEREUS VIRIDICEPS** (Todd): *Green-headed Hylophilus*

*Pachysylvia semicinerea viridiceps* TODD, Proc. Biol. Soc. Washington, vol. 42' 1929, p. 191 (Pied Saut, French Guiana).

## SPECIMEN COLLECTED

1 ad. ♀, Brazil, Santa Isabel, Rio Negro, October 17, 1930.

This specimen is in fairly fresh plumage; it is definitely referable to *viridiceps* and shows no variation in the direction of *juruanus* Gyldenstolpe.

This race occurs from French Guiana west to southern Venezuela (the Mount Duida region) south to the north bank of the Amazon.

**HYLOPHILUS FLAVIPES ACUTICAUDA** Lawrence: *Buff-bellied Hylophilus*

*Hylophilus acuticauda* LAWRENCE, Proc. Acad. Nat. Sci. Philadelphia, 1865, p. 37 (Venezuela; Puerto La Cruz, Carabobo suggested as restricted type locality by Todd, Proc. Biol. Soc. Washington, vol. 42, 1929, p. 198).

## SPECIMENS COLLECTED

- 1 ad. ♂, 1 im. ♂, Venezuela, Soledad, December 7, 1929.  
4 ad. ♂, 2 ad. ♀, 1 im. ♀, Venezuela, Ciudad Bolívar, June 8–11, 1931.

All the June adults were noted as having enlarged, active gonads when collected. All of them are in worn plumage, decidedly light below, being more grayish green, less olive above than the December birds from Soledad, which are in fresher plumage.

This series has been compared with, and found to agree with, the series of *acuticauda* in the American Museum of Natural History by Dr. Wetmore, who has kindly given me this information.

## Family COEREBIDAE: Honeycreepers

**CHLOROPHANES SPIZA SPIZA** (Linnaeus): *Green Honeycreeper*

*Motacilla spiza* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, 188 (based on "The Green Black-cap Flycatcher" Edwards, A natural history of birds, vol. 1, p. 25, pl. 25, left fig.: Surinam).

## SPECIMENS COLLECTED

- 1 ad. ♀, Brazil, Rio Cauabury, Amazonas, October 21, 1930.  
1 ad. ♂, Venezuela, Cerro Yapacana, Upper Orinoco, March 28, 1931.

The colors, especially the shades of blue-green, in these birds appear to change somewhat in the course of time in the old museum specimens, making it hard to test the validity of some of the races. Thus, three specimens from Bahia, Brazil, on the basis of geography must be *axillaris* Zimmer but are quite indistinguishable in color from typical *spiza*. The present male from Cerro Yapacana is the most bluish below of any of a fair series of this form, which makes me wonder if the blue may not diminish in time (which would account for the two *axillaris* also).

**CYANERPES NITIDUS** (Hartlaub): *Short-billed Honeycreeper*

*Coereba nitida* HARTLAUB, Rev. Zool., vol. 10, 1847, p. 84 ("du nord du Perou").

## SPECIMENS COLLECTED

- 2 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 1, and February 2, 1931.  
1 ad. ♂, Venezuela, Solano, Brazo Casiquiare, February 2, 1931.

The present series adds nothing to what Zimmer (Amer. Mus. Nov., No. 1203, 1942, p. 14) has written on the basis of an astonishingly large series of what has been considered hitherto a rare bird in collections.

**CYANERPES CYANEUS DISPAR** Zimmer: *Zimmer's Blue Honeycreeper*

*Cyanerpes cyaneus dispar* ZIMMER, Amer. Mus. Nov., No. 1203, 1942, p. 10 (Buena Vista, Río Casiquiare, southwestern Venezuela).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Serra Imeri, near Salto do Huá, Brazilian-Venezuelan border, December 5, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 17, 1931.

1 ad. ♂, Brazil, Cucuhy, Rio Negro, Amazonas, February 4, 1930.

6 ad. ♂, 1 im. ♂, 1 ad. ♀, 1 im. unsexed, Venezuela, Cerro Yapacana, Upper Orinoco, April 5-17, 1931.

Two of the Venezuelan males have a slight greenish edging to the outer web of the outermost primaries of the left wing, but not of the right one. The male from Serra Imeri is considerably larger in all its dimensions than any of the others.

Prior to the description of *dispar*, in his discussion of *C. c. cyaneus*, Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 254) noted that Brazilian specimens from south of the Amazon generally have shorter and slenderer bills than do more northern examples and suggested that if they were to be separated Cabanis's name *Arbelorkhina brevipes* was available for them. Although it was described as from "Porto Cabello," Venezuela, Hellmayr claimed that the type is really a Brazilian trade skin. The material I have seen from Brazil south of the Amazon (but not *violacens* Zimmer) averages longer in its bill measurements than does the present more northern series. The material at hand would tend to suggest that "Porto Cabello" may well have been the correct locality after all for *brevipes*. There seems, from all this divergence of views, to be more individual variation than can be reconciled to the recognition of *brevipes* as distinct, no matter which view of its type locus be accepted. Zimmer (Amer. Mus. Nov., No. 1203, 1942, p. 8) has also found "too much overlap to permit the recognition of '*brevipes*' . . ."

As stated in the original description of *dispar*, which is definitely an intermediate race without strikingly distinctive characters, "males from the Cassiquiare region of southwestern Venezuela agree with those of *violacens* in coloration and length of bill but have the wing as long as that of Guianan *cyaneus*. The females, furthermore, have a slight distinction in color from the Matto Grosso females. Since there is a fairly extensive area occupied by birds of this sort, it seems advisable to give the population a distinctive name."

CYANERPES CAERULEUS MICRORHYNCHUS (Berlepsch): *Small-billed Honeycreeper*

*Coereba caerulea microrhyncha* BERLEPSCH, Journ. für Orn., vol. 32, 1884, p. 287 (Bucaramanga, Colombia).

## SPECIMENS COLLECTED

5 ad. ♂, 2 ad. ♀, Brazil, Serra Imeri, Rio Maturacá, November 28-December 4, 1930.

1 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 1, 1931.

2 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 2-9, 1931.

7 ad., ♂, 1 im. ♂, 6 ad. ♀, 1 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 5-29, 1931.

The immature male from Cerro Yapacana is in a very advanced stage of the postjuvinal molt, the only remnants of its youthful plumage being a few scattered greenish feathers on the back. The immature female is similar to the adults but lacks the light bluish malar line.

I follow Zimmer (Amer. Mus. Nov., No. 1203, 1943, p. 12) in considering *cherriei* a synonym of *microrhynchus*. The measurements given for *cherriei* (to which race the present series would have to be referred if it were valid) by Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 261) are slightly smaller than those I get for the Serra Imeri birds. He gives wing lengths of from 52–54 mm. and bill lengths of 15–16, rarely 17 mm., for males, while I find the males to have wing measurements of from 52–57 mm., and bills of from 16.5–18 mm.

DACNIS CAYANA CAYANA (Linnaeus): *Cayenne Dacnis*

*Motacilla cayana* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 366 (based on "*Sylvia cayenensis coerulea*" Brisson, Ornithologie, vol. 3, p. 534, pl. 28, fig. 1: Cayenne).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Brazil, Manáos (Flores Tramway) Amazonas, September 29–30, 1930.

1 im. ♂, Brazil, Barcellos, Rio Negro, Amazonas, October 6, 1930.

1 ad. ♂, Brazil, Rio Maturacá, Amazonas, November 11, 1930.

1 ad. ♂, 2 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 5–16, 1931.

1 im. ♂, Venezuela, Raudal San Sebastián, Brazo Casiquiare, February 1, 1931.

1 ad. ♀, Venezuela, Solano, Brazo Casiquiare, February 2, 1931.

3 ad. ♂, 2 im. ♂, 4 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 1–23, 1931.

3 ad. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Upper Orinoco, January 5, 1930, and May 11–20, 1931.

Although Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 269) writes that "birds from Amazonia and Venezuela are apparently inseparable from a Guianan series, the throat being deep black in the male . . ." it happens that the throats of all the males in the present series are tinged with green, differing in this respect from birds from British Guiana and Trinidad, but are equally dark.

Two males in an advanced stage of the postjuvinal molt (Puerto Ayacucho, May 20, and São Gabriel, January 15) indicate that the order of this molt is not definite, one has the adult feathering completely on the upperparts, except for the wings, while the other still has many green feathers left above, but the latter specimen is just as far along with the molt on the underparts as is the former.

DACNIS FLAVIVENTER D'Orbigny and Lafresnaye: *Yellow-bellied Dacnis*

*Dacnis flaviventer* D'ORBIGNY and LAFRESNAYE, Mag. Zool., vol. 7, cl. 2, 1837, p. 21 (Yuracares, Bolivia).

## SPECIMEN COLLECTED

1 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 17, 1931.

The single example collected is in fresh plumage, it has the black frontal band slightly more extensive than in others seen from Colombia and Ecuador. However, the total material seen is small, while Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 280, footnote) and Zimmer (Amer. Mus. Nov., No. 1193, 1942, p. 2) both concluded after examining extensive series that the species showed no geographic variational tendencies.

**COEREBE FLAVEOLA BOLIVARI** Zimmer and Phelps: *Bolivian Bananaquit*

*Coereba flaveola bolivari* ZIMMER and PHELPS, Amer. Mus. Nov., No. 1312, 1946, p. 20 (Ciudad Bolívar).

## SPECIMENS COLLECTED

2 ad. ♂, 1 im. ♂, 1 im. ♀, Venezuela, Ciudad Bolívar, June 8-9, 1931.

The specimens listed above are toponymical *bolivari*, a form stated to be similar to *C. f. luteola*, but with the back paler, brownish gray rather than dark brownish black, and with the crown less deeply black. In their more grayish dorsal color the birds approach *guianensis* but have the distinct white spot on the primaries as in *luteola*.

**COEREBE FLAVEOLA RORAIMAE** Chapman: *Roraima Bananaquit*

*Coereba guianensis roraimae* CHAPMAN, Amer. Mus. Nov., No. 341, 1929, p. 6 (Arabupu, Roraima, Venezuela).

## SPECIMENS COLLECTED

2 ad. ♂, 2 im. ♂, Venezuela, San Antonio, Upper Orinoco, March 3-8, 1931.

2 ad. ♂, 2 ad. ♀, Venezuela, Upper Orinoco, right bank opposite Corocoro Island, March 13-15, 1931.

9 ad. ♂, 1 im. ♂, 1 ad. ♀, 3 im. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 22-April 17, 1931.

There is no white alar speculum in the great majority of these specimens and only a trace of it in a few. It is this character that serves to separate this form from *C. f. colombiana*.

The races of this species and their ranges in southwestern Venezuela are exceedingly complicated, and enormous series are needed to work them out. Zimmer's arrangement (Amer. Mus. Nov., No. 1193, 1942, pp. 4-10) based on something over 800 specimens, which is followed here, indicates that no fewer than six races occur in southwestern Venezuela alone.

**COEREBE FLAVEOLA COLOMBIANA** (Cabanis): *Colombian Bananaquit*

*Certhiola colombiana* CABANIS, Journ. für Orn., 1865, p. 412 ("Bogota," Colombia).

## SPECIMENS COLLECTED

5 ad. ♂, 1 im. ♂, 5 ad. ♀, Venezuela, Puerto Ayacucho, January 4-8, 1930, and May 9-20, 1931.

These birds have a slightly developed white alar speculum. Their

identification as *colombiana* is corroborated by the fact that Zimmer (Amer. Mus. Nov., No. 1193, 1942, p. 10) records a series from Ayacucho as of this subspecies. This form is grayer dorsally and somewhat duller yellow on the breast and rump than *C. f. luteola*.

**COEREBA FLAVEOLA MINIMA** (Bonaparte): *Cayenne Bananaquit*

*Certhiola minima* BONAPARTE, Compt. Rend. Acad. Sci. Paris, vol. 38, 1854, p. 259 (Cayenne).

SPECIMENS COLLECTED

- 3 ad. ♂, 1 ad. ♀, Brazil, Manáos, Amazonas, September 27–October 2, 1930.
- 1 ad. ♂, Brazil, Rio Maturacá, Amazonas, November 11, 1930.
- 1 ad. ♂, Brazil, Salto do Huá, Rio Maturaca, November 21, 1930.
- 1 im. ♀, Brazil, Serra Imeri, Amazonas, November 29, 1930.
- 1 im. ♂, Venezuela, Chapazon, Brazo Casiquiare, January 30, 1931.

Compared with *C. f. roraimae*, the present birds are less blackish above, with the yellow of the rump and under surface duller. The white wing speculum is absent. The Chapazon specimen differs from immature *roraimae* in the same way as do the adults of the two races.

Zimmer (Amer. Mus. Nov., No. 1193, 1942, pp. 9–10) lists *C. f. minima* from Buena Vista and Solano, on the Casiquiare, and *C. f. intermedia* from the Casiquiare at the junction of the Río Huaynia. Chapazon, Buena Vista, and Solano are all within 25 miles of the junction of the Casiquiare and the Huaynia, so it would appear that Zimmer's *intermedia* may turn out to be specimens of *minima*. Yet he had 22 specimens of *intermedia* and 21 of *minima* from the Casiquiare.

**ATELEODACNIS MARGARITAE** Holt: *Margaret's Ateleodacnis*

*Ateleodacnis margaritae* HOLT, Auk, vol. 48, 1931, p. 570 (north bank of Rio Amazonas at Ceo do Arary above Parintins, Estado do Amazonas, Brazil).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 unsexed (apparently subadult ♂), Ceo do Arary above Parintins, north bank of Amazon, Brazil, September 20, 1930.

The adult male is the type of the species. As stated in the original description this honeycreeper is closely related to *A. bicolor* (Vieillot) but has lighter, clear, blue-gray upperparts and pale bluish gray (not brownish buff) underparts. It is strange indeed to find this form close to the center of the range of its nearest congeneric relative.

The range of this form extends to Igarapé, Auará, just above Borba on the right bank of the Rio Madeira, and to northeastern Peru, according to Hellmayr (Catalogue of the birds of the Americas, pt. 8, 1935, p. 321).

## Family COMPSOTHTYPIDAE: Wood Warblers

*DENDROICA PETECHIA AESTIVA* (Gmelin): *Eastern Yellow Warbler*

*Motacilla aestiva* GMELIN, *Systema naturae*, vol. 1, pt. 2, 1789, p. 996 (Canada).

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Soledad, December 10, 1929.

The single specimen collected closely matches others from the eastern United States in coloration and size.

*DENDROICA STRIATA* (Forster): *Blackpoll Warbler*

*Muscicapa striata* FORSTER, *Philos. Trans.*, vol. 62, 1772, p. 428 (Fort Severn, west coast of Hudson Bay).

## SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Raudal Corocoro, Brazo Casiquiare, February 9, 1931.

1 ad. ♂, Venezuela, Brazo Casiquiare, near Caño Mabinagui, February 20, 1931.

1 im. ♂, Venezuela, San Antonio, Upper Orinoco, March 4, 1931.

1 ad. ♂, 2 im. ♂, 1 unsexed adult (= ♂), 3 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, April 10-20, 1931.

The two February males are in winter plumage, the April males are largely in breeding plumage. In his account of the molts of this warbler Dwight (*Ann. New York Acad. Sci.*, vol. 13, 1900, pp. 264-266) says that "the early beginning of the prenuptial moult is indicated by a specimen labeled Roraima, British Guiana, November 1st, which shows active moult in progress on the nape, back, abdomen, and sides, where black and white feathers are replacing yellowish ones." This is certainly not borne out by the present series. However, the Raudal Corocoro male may be wrongly sexed as it is very greenish above and yellowish below, even more so than in any of the Cerro Yapacana females.

*SEIURUS NOVEBORACENSIS NOVEBORACENSIS* (Gmelin): *Northern Waterthrush*

*Motacilla noveboracensis* GMELIN, *Systema naturae*, vol. 1, pt. 2, 1789, p. 958 (New York).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Puerto Ayacucho, Amazonas, January 5, 1930.

This specimen is of the typical race; its measurements are: wing 77, tail 52, culmen from the base 14.5; tarsus 21.5 mm., and its dorsal coloration is decidedly olivaceous.

*SETOPHAGA RUTICILLA RUTICILLA* (Linnaeus): *Southern Redstart*

*Motacilla Ruticilla* LINNAEUS, *Systema naturae*, ed. 10, vol. 1, 1758, p. 186 (Virginia).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Serra Imeri, near Salto do Huá, December 7, 1930.

1 ad. ♂, Venezuela, San Antonio, Upper Orinoco, March 3, 1931.

1 ad. ♂, 1 im. ♂, 4 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 20-April 11, 1931.



All these specimens are in rather worn plumage; the December bird is the least abraded. This is in keeping with the fact that the spring molt is late in this species, growing feathers being recorded on May specimens from New York by Dwight (Ann. New York Acad. Sci., vol. 13, 1900, p. 288).

**SETOPHAGA RUTICILLA TRICOLORA** (P. L. S. Müller): *Northern Redstart*

*Motacilla tricolora* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 175 (based on Buffon, Planches enluminées . . . , pl. 391, fig. 2: Cayenne).

SPECIMENS COLLECTED

4 ad. ♂, 2 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 25–April 11, 1931.

The small, relatively short bill, the small wing speculum of the males, and the lack of contrasting grayness on the crown and olive on the mantle in the females, place these specimens in this subspecies, only recently recognized as valid. Most of the arguments against the the validity of *tricolora* are due to a misconception of its range. It has been thought of as a northwestern breeding form, nesting in Montana, Idaho, and Washington, but it is really a northern race, extending eastward across Canada to Newfoundland. This, of course, accounts for the numerous eastern migrant specimens of *tricolora* mixed in with typical *ruticilla* from the eastern United States.

The specimens are largely in worn plumage, although one of the males, taken March 26, has new brown-edged feathers on the upper back.

**GRANATELLUS PELZELNI PELZELNI** Selater: *Pelzel's Red-breasted Chat*

*Granatellus pelzelni* SCLATER, Proc. Zool. Soc. London, 1864, p. 606, pl. 27, upper fig. (Destacamento do Ribeirão, Rio Madeira, Brazil).

SPECIMEN COLLECTED

1 ad. ♂, Brazil, Santa Isabel, Rio Negro, Amazonas, October 17, 1930.

I have compared this specimen with 14 others of like sex from the Tapajóz and Madeira Rivers, Brazil, and from localities on the Caura and Mato Rivers, and El Callao, Venezuela. There is considerable variation in the extent of the black on the top of the head, some almost agreeing with the description of *G. p. paraensis* Rothschild (but differing from that race and agreeing with *pelzelni* in having a large white postocular mark, and in having white on the sides and lower abdomen). On the whole it appears that the more western birds (Upper Caura River, Venezuela, and Santa Isabel, Brazil) have less black on their crowns than do more eastern examples (Tapajóz River, Brazil, and El Callao, Venezuela). Specimens from near the type locality, on the Madeira River, are nearer to the northwestern birds in this respect. However, an example from the Suapure area, Venezuela, which should have less extensive black has the whole crown and

occiput black as in eastern birds. There may be a tendency, not yet carried to constancy, for a geographic difference. It would take more extensive material than I have seen to persuade me to attempt to divide "typical" *pelzelni* into two races. Furthermore, it may be noted that Hellmayr (Nov. Zool., vol. 13, 1906, p. 355) writes that specimens from the Caura River, Venezuela, agree with the type from the Upper Rio Madeira, which he considers the same as more eastern birds (except, of course, for the birds from the Pará district). If there were to be considered more urgently the possibility of a western split from *pelzelni*, the facts, as understood at present, would imply a range for which it would be difficult to conjure up ecological reasons.

#### Family ICTERIDAE: Blackbirds, Hangnests, etc.

**GYMNOSTINOPS YURACARES YURACARES** (Lafresnaye and d'Orbigny): *Olive Oropendola*  
*Cassicus yuracares* LAFRESNAYE and D'ORBIGNY, Synopsis avium, pt. 2, in Mag.  
Zool., vol. 8, 1838, cl. 2, p. 2 (Yuracares, Bolivia).

##### SPECIMENS COLLECTED

1 ad. unsexed, Brazo Casiquiare, near Caño Perro de Agua, Venezuela, February 18, 1931.

1 ad. ♂, Buenos Aires, Brazo Casiquiare, Venezuela, February 21, 1931.

1 ad. ♂, San Antonio, Upper Orinoco, Venezuela, March 3, 1931.

1 ad. ♀, San Antonio, Upper Orinoco, Venezuela, March 9, 1931.

These birds agree with two specimens from Peru and Colombia. The present specimens would be referable to *G. y. caurensis* Todd if that race were valid. However, the series bears out Hellmayr (Catalogue of the birds of the Americas, pt. 10, 1937, p. 9), who considers *caurensis* a synonym of *yuracares* although stating that "Venezuelan birds may have on average slightly weaker bills." The only difference I can see is that the remiges are darker, more chaetura-black in the Venezuelan and Colombian birds, paler, more clove brown in the Peruvian example. No toptotypical Bolivian birds have been seen.

The birds listed above are in slightly worn plumage.

##### **OSTINOPS VIRIDIS** (P. L. S. Muller): *Green Oropendola*

*Oriolus viridis* P. L. S. MÜLLER, Natursystem, Suppl., 1776, p. 87 (based on "Cassique vert, de Cayenne" Daubenton, Planches enluminées . . ., pl. 328: Cayenne).

##### SPECIMENS COLLECTED

1 ♂, 3 ♀ ad., São Gabriel, Rio Negro, Amazonas, Brazil, January 12-19, 1931.

1 ♀ ad., 2 ♀ im., Cerro Yapacana, Upper Orinoco, Venezuela, April 27, 1931.

The male, although labeled as an adult, is probably an immature bird as it has a very small bill (culmen from base 59 mm. as against 71 mm. in an adult male from British Guiana) and has the throat, breast, and upper abdomen duller, more grayish, less yellowish green than in an adult from British Guiana, and has the thighs olive-green

only slightly mottled with chestnut. Although it has such a small bill, it is considered larger in its other dimensions than the Guianan male (wing 235 as against 222, tail 162 as against 158 mm.). There is no size difference between the present females and one from British Guiana, except in the bill, which varies from 52–53 mm. in the Venezuelan-Brazilian birds as against 55 mm. in the Guianan example.

The extent of the dusky olive on the lateral rectrix is very variable; in some specimens the entire outer web and the inner part of the tip of the inner web are of this color, while in others it may be reduced to a small terminal fleck on the outer web. This range of variation is apparently independent of age or geography.

The two immature females are paler than the adults both in the green and in the chestnut-colored parts.

In the absence of birds from eastern Peru, the arrangement arrived at by Hellmayr (Catalogue of the birds of the Americas, pt. 10, 1937, p. 16) is followed and *flavescens* is considered inseparable. This accounts for the binomial heading used here.

**CACICUS CELA CELA** (Linnaeus): *Yellow-rumped Cacique*

*Parus cela* LINNAEUS, *Systema naturae*, ed. 10, vol. 1, 1758, p. 191 ("in Indiis," errore; Surinam substituted by Hellmayr, Nov. Zool., vol. 13, 1906, p. 20).

SPECIMENS COLLECTED

- 1 ♂ ad., Santa Isabel, Rio Negro, Amazonas, Brazil, October 13, 1930.
- 1 ♂ ad., 2 ♀ ad., São Gabriel, Rio Negro, Amazonas, Brazil, December 30, 1930–January 6, 1931.
- 2 ♂ ad., Puerto Ayacucho, Venezuela, January 5–6, 1930.
- 1 ♂ ad., Raudal San Sebastián, Brazo Casiquiare, Venezuela, February 2, 1931.
- 1 im. ♂, San Antonio, Upper Orinoco, Venezuela, March 9, 1931.
- 1 ♂ ad., Cerro Yapacana, Upper Orinoco, Venezuela, April 29, 1931.
- 1 ♂ ad., 1 ♀ ad., Puerto Ayacucho, Río Orinoco, Venezuela, May 21, 1931.

These 11 specimens have been compared with a long series from many parts of the range of the race and no peculiarities were noted. The amount of plumbeous coloring on the basal part of the bill varies greatly; some specimens have none while others have both the maxilla and the mandible extensively tinged with it.

At Raudal San Sebastián these birds were nesting. Holt collected two sets of two eggs each there on February 2, 1931.

A specimen, not listed above, was collected at São Gabriel, January 10, 1931, and was preserved in alcohol.

**PSOMOCOLAX ORYZIVORUS ORYZIVORUS** (Gmelin): *Rice Grackle*

*Oriolus oryzivorus* GMELIN, *Systema naturae*, vol. 1, pt. 1, 1788, p. 386 (based on "Rice Oriole" Latham, A general synopsis of birds, vol. 1, pt. 2, p. 423: Cayenne).

## SPECIMEN COLLECTED

1 ad. ♂, Isla Temblador, Upper Orinoco, Venezuela, February 25, 1931.

The single specimen of the rice grackle obtained by the expedition is in somewhat abraded plumage and is the smallest adult of its sex seen (out of a comparative series of a dozen skins). Its dimensions are as follows: Wing 180, tail 137, culmen from base 32.5 mm. The bill is particularly small, the measurements of the culmen in the other males seen ranging from 34–39.5 mm.

**MOLOTHRUS BONARIENSIS VENEZUELENSIS** Stone: *Venezuelan Shiny Cowbird*

*Molothrus venezuelensis* STONE, Auk, vol. 8, 1891, p. 347 (Venezuela=San Esteban, Carabobo).

## SPECIMEN COLLECTED

1 "ad." ♂, Ciudad Bolívar, Venezuela, June 8, 1931.

The single specimen obtained was said by the collector to have had the gonads enlarged. It is, however, a young male in postjuvinal molt, the head, neck, breast, and upper back being covered with purplish adult feathers, while the rest of the bird still has the old, juvenal, dark-brown plumage, with merely a trace, here and there, above and below, of new bluish adult body feathers. The color of the juvenal feathers is very dark, much darker and without any of the olivaceous color seen in a juvenal male from Turmero, Aragua, Venezuela. This suggests that in this race, as in the nominate form, a considerable degree of dichromatism exists in the young (and possibly in the female adults).

**HOLOQUISCALUS LUGUBRIS LUGUBRIS** (Swainson): *Swainson's Grackle*

*Quiscalus lugubris* SWAINSON, Animals in menageries, 1837, p. 299 ("Brazil," errore=British Guiana according to Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 32).

## SPECIMENS COLLECTED

1 ad. ♂, 2 im. ♂, 1 ad. ♀, Ciudad Bolívar, Venezuela, December 12, 1929, and June 8–9, 1931.

The immature males resemble the adult female, but are paler, more grayish below, and slightly paler, more brownish above on the head and upper back. They are both in molt in the wings and tail.

**ICTERUS CHRYSOCEPHALUS** (Linnaeus): *Moriche Oriole*

*Oriolus chrysocephalus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 164 (based on "Le Carouge à teste jaune d'Amérique" Brisson=Cayenne, Berlepsch and Hartert, Nov. Zool., vol. 9, 1902, p. 31).

## SPECIMENS COLLECTED

1 ♂ ad., Santa Isabel, Rio Negro, Amazonas, Brazil, October 16, 1930.  
1 ♀ ad., Chapazon, Brazo Casiquiare, Venezuela, January 31, 1931.

These specimens agree with others from British Guiana, Brazil, and Colombia ("Bogota"). The male has a longer wing, but shorter

tail and bill than the female, as may be seen from the following measurements: Male—wing 105.3, tail 97, culmen from base 22.8 mm.; female—wing 98, tail 100, culmen from base 24.2 mm.

Another example was taken at Puerto Ayacucho, Rio Orinoco, January 8, 1930, and was preserved in alcohol.

**ICTERUS NIGROGULARIS NIGROGULARIS** (Hahn): *Yellow Oriole*

*Xanthornus nigrogularis nigrogularis* HAHN, Vögel aus Asien, Afrika, Amerika und Neuholland, livr. 5, 1819, pl. 1 ("Jamaica, Mexico, and Cayenne"; type from "Brazil").

SPECIMENS COLLECTED

2 ♂ ad., Soledad, Venezuela, Dec. 4, 1929.

Both specimens are in fairly fresh plumage; one has the pale tips of the rectrices worn off on all but the outermost pair.

Compared with a long series from Colombia, Venezuela, Brazil, and British Guiana, these two individuals appear very richly tinged with orange on the sides of the throat and breast. They are well above the average in this respect (males only being considered, the females yellower).

**GYMNOMYSTAX MEXICANUS** (Linnaeus): *Black and Yellow Oriole*

*Oriolus mexicanus* LINNAEUS, *Systema naturae*, ed. 12, vol. 1, 1766, p. 162 (based on "Le Troupiale brun de la Nouvelle Espagne" Brisson, *Ornithologie*, vol. 2, p. 105=Mexico, errore: Cayenne substituted as type locality Berlepsch and Hartert, *Nov. Zool.*, vol. 9, 1902, p. 32).

SPECIMENS COLLECTED

1 ♀ im., Ciudad Bolívar, Venezuela, November 25, 1929.

1 ♂ im., Soledad, Venezuela, November 29, 1929.

1 ♀ ad., Puerto Ayacucho, January 4, 1930.

The two immature birds show signs of molt in the wings, and have most of the crown and occiput solid black broken in front by a yellow median intrusion from the forehead. The old (juvenal) remiges are dark clove brown, not blackish as in adults.

The adult female is a very large bird with a wing length of 135 mm. in which it is exceeded by no other in the series available for comparison, and equaled only by one from Cayenne. The size variation in this species is very great, however, and apparently has no geographic correlation.

**STURNELLA MAGNA PRATICOLA** Chubb: *Guianan Meadowlark*

*Sturnella magna praticola* CHUBB, *Ann. Mag. Nat. Hist.*, ser. 9, vol. 8, 1921, p. 445 (Abary River, British Guiana).

SPECIMENS COLLECTED

2 ♂ ad., Puerto Ayacucho, Río Orinoco, Venezuela, May 20-21, 1931.

Although available comparative material is rather scanty (1 *praticola*, 2 *paralius*, and 9 *meridionalis*) the present specimens are

certainly referable to *praticola* on the basis of size (wings 98.5 and 99 mm., respectively), which, according to Hellmayr (Catalogue of the birds of the Americas, pt. 10, 1937, 217) is the only "absolutely constant character separating this form . . ." They differ from the only other example of the race seen, a female from Forto do Rio Branco, Brazil, January or February (Pelzeln), in having the two dark coronal stripes and the postocular stripe much darker, fuscous black, as opposed to ferruginous streaked with black in the female. The latter specimen is in very worn and faded plumage generally.

### Family THRAUPIDAE: Tanagers

*TANAGRA XANTHOGASTER BREVIROSTRIS* (Bonaparte): *Short-billed Euphonia*

*Euphonia brevirostris* BONAPARTE, Rev. Mag. Zool., ser. 2, vol. 3, 1851, p. 136 ("Colombia"=Bogotá).

#### SPECIMENS COLLECTED

- 2 ad. ♂, Rio Cauabury, Amazonas, Brazil, November 3-4, 1930.  
 1 im. ♂, Puerto Ayacucho, Río Orinoco, Venezuela, May 18, 1931.  
 1 im. ♂, San Antonio, Upper Orinoco, Venezuela, March 31, 1931.

The immature bird from San Antonio is tentatively placed in this form, but it is not certainly indentifiable. The adult males agree with a series of specimens of *brevirostris* from "Bogota" and eastern Ecuador. Judged by Hellmayr's account (Catalogue of the birds of the Americas, pt. 9, 1936, pp. 24-25) they appear to be the first actual records of the race from Brazil, although the range as stated there implies that extreme western Amazonia belongs in the range of this form. The distribution is as follows—tropical and subtropical zones of eastern Colombia, eastern Ecuador, and eastern Peru, to southern Venezuela and to British Guiana. The nominate form, which is slightly smaller, and, in the males, has the yellow cap paler, less orange, is more eastern and southern in its range, leaving quite a gap from which apparently no specimens have been collected. The two Rio Cauabury birds help a little to reduce this gap from the north.

The immature male from Puerto Ayacucho resembles the female plumage but is much yellower below and darker above.

*TANAGRA CHLOROTICA TRINITATIS* (Strickland): *Trinidad Euphonia*

*Euphonia trinitatis* STRICKLAND, Contr. Orn., 1851, pt. 2, p. 72 (Trinidad, Venezuela, and St. Thomas (errore)=Trinidad).

#### SPECIMENS COLLECTED

- 1 unsexed (♂ by plumage) Soledad, Venezuela, December 10, 1929.  
 4 ad. ♂, 3 ad. ♀, Puerto Ayacucho, Río Orinoco, Venezuela, May 8-19, 1931.

Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 38, footnote) has disposed of the question of Berlepsch's supposed

Orinocoan race *pileata* and has demonstrated the conspecificity of *trinitatis* and *chlorotica*. Far from being two species, the forms are not too well marked even as subspecies.

The Soledad specimen is a young bird molting into adult male plumage; the nape and upperparts of the body and wings are still green sprinkled with new dark blue feathers, and the underparts are completely adult in appearance.

**TANAGRA RUFIVENTRIS RUFIVENTRIS** Vieillot: *Rufous-billed Euphonia*

*Tangra rufiventris* VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., vol. 32, 1819, p. 426 (no locality=Iquitos, Peru).

SPECIMENS COLLECTED

- 1 ad. ♂, Chapazon, Brazo Casiquiare, Venezuela, January 30, 1931.  
 1 im. ♂, 1 im. ♀, Raudal, San Sebastián, Brazo Casiquiare, Venezuela, February 1, 1931.  
 1 ad. ♂, Caño Atamani, Brazo Casiquiare, Venezuela, February 6, 1931.  
 1 ad. ♂, San Antonio, Upper Orinoco, Venezuela, March 1, 1931.  
 1 ad. ♂, 1 ad. ♀, 1 im. ♂, Cerro Yapacana, Upper Orinoco, Venezuela, April 7-23, 1931.

Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 58, footnote) writes that males "from the Orinoco region, Rio Negro, Rio Madeira, and Rio Xingú, when compared to a series from eastern Ecuador and Peru, have the median underparts and the lower tail coverts deeper orange-rufous, and the sulphine-yellow lateral area in females is brighter as well as more extensive," and suggests that subdivision of this race might be justified. This should be reflected in the present series, which has been compared with a series of four adults of each sex from eastern Ecuador, kindly lent me by the American Museum of Natural History, but I cannot see the differences alluded to above.

**TANAGRA PLUMBEA** (Du Bus): *Plumbeous Euphonia*

*Euphonia plumbea* DU BUS, Bull. Acad. Roy. Sci., Lettr. et Beaux-Arts Belgique, vol. 22, No. 1, 1855, p. 156 ("la Nouvelle Grenade," errore?).

SPECIMENS COLLECTED

- 2 ad. ♂, 1 ad. ♀, San Antonio, Upper Orinoco, Venezuela, March 1-2, 1931.  
 1 ad. ♂, 1 ad. ♀, Cerro Yapacana, Upper Orinoco, Venezuela, April 6, 1931.

Because of the rarity of this species in collections and the fact that the present five specimens appear to be the first ones recorded from the Upper Orinoco Valley, it may be of interest to give their measurements: Males—wing 48.2-49.5 (48.8); tail 26-26.8 (26.4), culmen from base 7.7-8.0 (7.8 mm.); females—wing 46.4-47.3, tail 26.9-27.0, culmen from base 7.0-7.5 mm. A female from Valle de los Monos, Mount Duida, is somewhat larger, especially in the bill—wing 48.5, tail 27.2, culmen from base 9 mm. Birds from British Guiana agree

quite well but raise the maximal measurements slightly, the wing in two males being 49 and 50 mm., and in a female 52 mm., respectively, but their other measurements do not show any difference from the Venezuelan birds. The birds of British Guiana may prove separable on the basis of color, two adult males from that country being darker, more washed with dusky orange on the midventral area and more abundantly flecked with dusky olive on the sides than Venezuelan examples. An adult female from British Guiana has the upper abdomen, sides, flanks, and under tail coverts more heavily washed with dusky olive-green and has the dorsal greenish area somewhat more pronounced, more distinct from the slate blue of the head and nape.

Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 67, footnote) writes that "birds from the Rio Negro appear to agree with others from British Guiana." A male (by plumage, not sexed by collector) from Rio Negro agrees with Venezuelan ones in the ventral coloration.

If one were to separate the British Guiana birds as a distinct subspecies the type locality of the species (and therefore of the nominate form) would have to be definitely restricted. The original type locality is generally considered to be erroneous as the species has not been rediscovered in Colombia. The next definite locality in literature is Rio Negro (Sclater, Proc. Zool. Soc. London, 1856, p. 280), but in view of the intermediate character of the bird from there, it would seem better to take a place geographically more extreme. Of course, if it were possible, the type specimen should be critically examined before deciding this point.

**TANAGRELLA VELIA IRIDINA** (Hartlaub): *Amazonian Tanagrella*

*Tangra iridina* HARTLAUB, Rev. Zool., vol. 4, 1841, p. 305 ("Prov. Mogobamba, Peru" = Moyobamba, Peru).

SPECIMEN COLLECTED

1 ad. ♀, Cerro Yapacana, Upper Orinoco, Venezuela, April 11, 1931.

The single example collected agrees with others from Upper Amazonian Brazil (Rio Negro).

**CALOSPIZA CHILENSIS COELICOLOR** (Sclater): *Western Paradise Tanager*

*Calliste coelicolor* SCLATER, Contr. Orn., 1851, p. 51 ("Anolaima," Colombia).

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, Chapazon, Brazo Casiquiare, Venezuela, January 30, 1931.

These specimens agree with a small series from British Guiana and "Bogota," Colombia. The measurements of these birds are smaller than those given for the race by Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 83, footnote) but the birds agree better



in color with *coelicolor* than with *paradisea*. Their dimensions are: Male—wing 72, tail 52.5; female—wing 72, tail 50 mm., while Hellmayr gives wing 76–81 (male), 74–72 (female); tail 52–60 mm.

**CALOSPIZA XANTHOGASTRA** (Sclater): *Yellow-bellied Spotted Tanager*

*Calliste xanthogastra* SCLATER, Contr. Orn., 1851, pt. 1, p. 23 ("Rio Negro").

SPECIMENS COLLECTED

1 ad. ♂, 3 ad. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, January 6–17, 1931.

The adult male has the edges of the feathers of the back bluer than do the females. Two of the four birds collected had "active gonads" indicating that the breeding season (if definite) must be sometime around January.

Comparison with specimens from "Bogota" and especially from eastern Ecuador (near Macas, Oriente), and eastern Peru (Napo) upheld Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, pp. 104–105) in synonymizing *rostrata* Berlepsch and Stolzmann with *xanthogastra*.

**CALOSPIZA NIGRO-CINCTA NIGRO-CINCTA** (Bonaparte): *Black-banded Tanager*

*Aglaia nigro-cincta* BONAPARTE, Proc. Zool. Soc. London, vol. 5, "1837"=June 1838, p. 121 ("that portion of Brazil bordering on Peru").

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, January 19, 1931.

Both specimens had the gonads in active condition.

The male has the sides and flanks darker blue than in two males and two unsexed birds from "Bogota," Colombia, four from eastern Ecuador, and three from Río Surutu, Bolivia. The São Gabriel male is also smaller than the other three, having a wing length of 63 mm. as opposed to 67 and 72 mm. in the Bogotá birds, 65.5–70.5 mm. in the Ecuadorian examples, and 71, 71.6, and 74 mm. in the Bolivian birds.

The female collected is probably not fully adult, as it is not so highly colored as the male, the breast being largely grayish instead of black and the sides and flanks more grayish also. It has a wing length of 60 mm. as against 64 mm. in a female from "Bogota," and 63.5 and 66 mm. in two from eastern Ecuador.

On the other hand, Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 127, footnote) finds "apparently no local variation in this species, birds from such widely separated localities as Roraima, the Caure Valley, and 'Bogota' agreeing with others from northern Peru."

**CALOSPIZA MEXICANA MEDIA** (Berlepsch and Hartert): *Intermediate Turquoise Tanager*  
*Calliste mexicana media* BERLEPSCH and HARTERT, Nov. Zool., vol. 9, 1902, p. 19  
 (Maipures, Orinoco River, Venezuela).

## SPECIMENS COLLECTED

2 ad. ♀, 1 im. ♀, Puerto Ayacucho, Río Orinoco, Venezuela, January 5, 1930 and May 14, 1931.

These specimens are practically topotypical.

The immature female is indistinguishable from the adult collected at the same time except in that it is smaller (wing 66 as against 71 mm. in the adult) and in that the humeral patch is smaller and in place of the outer row of violet-tipped feathers it has buffy-tipped ones.

The race is new to the National Museum and the specimens have been identified by comparison with actual specimens of the other races, and with the original description of *media*, with which they agree in having the underparts slightly darker brighter yellow than in *mexicana*. In this they are intermediate between *mexicana* and *vieilloti*. The purplish color of the head and throat in all races of this species seems to vary according to wear.

**CALOSPIZA MEXICANA BOLIVIANA** Bonaparte: *Bolivian Turquoise Tanager*

*Calospiza boliviana* BONAPARTE, Compt. Rend. Acad. Sci. Paris, vol. 32, No. 3, 1851, p. 30 (Guarayos, Bolivia).

## SPECIMENS COLLECTED

3 ad. ♂, 1 ad. ♀, 1 im. ♂, São Gabriel, Amazonas, Brazil, January 3-12, 1931.

The immature male is like the adults in every respect.

This series agrees with specimens from "Bogota," Colombia, Ecuador, Peru, and "Brazil." Six specimens from the Lower Amazon (Diamantina to Pará) average paler on the belly and are referred to *lateralis* Todd. It may be remarked, in passing, that Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 137, footnote) considers *lateralis* as a synonym of *boliviana*. He writes that birds "from Lower Amazonia (*lateralis*) are on average paler yellow below with more heavily black spotted flanks, but so many individuals are indistinguishable from those of Bolivia that I do not see any practical advantage in maintaining the distinction by a separate name . . ." On the other hand, Griscom and Greenway (Bull. Mus. Comp. Zool., vol. 88, No. 3, 1941, p. 325) find a long series from Lower Amazonia (Tapajóz, Santarém, and Benevides) to be readily told from seven Bolivian specimens. I have seen no Bolivian birds but assume from this that the present upper Amazonian birds differ from *lateralis* just as typical *bolivianus* is said to. In other words, if there are no other differences *lateralis* would be surrounded on the north and on the



Black-collared swallows (*Atticora melanoleuca*) on rock near Isla Yagrumo, Venezuela



Sun-bittern (*Eurypyga helios*) at San Antonio, Venezuela.



south by *boliviana*, a situation which would certainly be unlikely and which would necessitate a reinvestigation of the validity of *lateralis*.

**CALOSPIZA GYROLA PARVA** (Zimmer): *Zimmer's Green Tanager*

*Tangara gyroloides parva* ZIMMER, Amer. Mus. Nov., No. 1246, 1943, p. 5  
(Mount Curucuryari, Rio Negro, Brazil).

SPECIMENS COLLECTED

2 ad. ♂, São Gabriel, Rio Negro, Amazonas, Brazil, January 1-3, 1931.

1 ad. ♂, Cucuhy, Rio Negro, Amazonas, Brazil, February 7, 1930.

According to the measurements given by Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 143, footnote) for *catharinae* these specimens from the extreme northeastern part of the range of the subspecies are very small. They have wing lengths of 69, 69.5, and 70 mm., respectively, while Hellmayr's series of males (from Peru) had wings varying from 70-77 mm. in length. A male from near Macas, eastern Ecuador, has a wing length of 76 mm., two others from along the eastern Ecuadorian-Peruvian border are smaller, more like the Rio Negro birds, with wing lengths of 72-72.5 mm.; two eastern Peruvian specimens measure 74 and 76 mm., respectively, while 4 males from Colombia have wings of 71, 76, 76.7, and 80 mm. respectively. The bills are smaller and weaker in the Rio Negro birds than in east Ecuadorian specimens, a difference that is more apparent to the eye than to the calipers, but which may be expressed mensurally as follows: Width of bill at gape 8.5-8.7 in eastern Ecuadorian males, 8.0-8.2 in Peruvian birds; 7.0-7.8 in Colombian ones, and 7.0-7.5 in Rio Negro males. It may be that more extensive series would indicate a fairly constant average difference in size between the two groups. The present Rio Negro birds may be characterized as agreeing with typical *catharinae* from eastern Peru and Ecuador in coloration, and with *albertinae* of Lower Amazonia and Matto Grosso in size. Strangely enough, the Colombian, Ecuadorian, and Peruvian specimens of *catharinae* have the top and sides of the head averaging slightly paler than on the Rio Negro ones, more like *albertinae* of Lower Amazonia. In other words, they agree with the characters given by Zimmer in his establishment of *parva*; the race is recognizable although by no means strikingly marked.

**CALOSPIZA CAYANA CAYANA** (Linnaeus): *Rufous-crowned Tanager*

*Tangara cayana* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 315 (based on "Le Tangara verd, de Cayenne" Brisson, Ornithologie, vol. 3, 1760, p. 21, pl. 4, fig. 3: Cayenne).

SPECIMENS COLLECTED

1 im. ♀, San Antonio, Upper Orinoco, Venezuela, March 5, 1931.

1 ad. ♂, 1 ad. ♀, Cerro Yapacana, Upper Orinoco, Venezuela, March 22, 1931.

3 ad. ♂, 2 ad. ♀, 2 im. ♀, Puerto Ayacucho, Río Orinoco, Venezuela, May 13-19, 1931, and January 3, 1930.

1 ad. ♂, Soledad, Venezuela, December 4, 1929.

1 ad. ♀, Ciudad Bolívar, Venezuela, June 10, 1931.

In adult birds the edges of the remiges and their upper coverts vary from quite greenish ("bluish gray green") to bluish ("dark green blue gray"), and the forehead and anterior portion of the crown vary in the presence or absence of a sprinkling of greenish feathers among the golden tawny ones. The extent and intensity of the blue on the throat and breast are also very variable. Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 159, footnote) quotes Sclater to the effect that this blue is brighter in Peruvian birds. This is borne out by the series studied in the present connection, a bird from the head waters of the Huallaga River being the most bluish one examined. It is, however, no larger in size than Venezuelan examples, contrary to Sclater's observations.

The northern Venezuelan-Colombian race *fulvescens* Todd seems to me to be founded on rather slight characters. It is said to differ from the nominate race in being somewhat larger and paler, the coloration throughout, but especially above, being more silvery, less buffy. Two adults from Aragua and La Victoria, which, by geography, should be *fulvescens*, are doubtfully different from the present series from the Upper Orinoco.

The immature females resemble the adults of that sex but lack the orange-tawny "cap," having the top of the head like the upper back but washed with dull olive-yellow, and they also differ from adults in having the chin and throat less suffused with greenish gray.

THRAUPIS EPISCOPUS EPISCOPUS (Linnaeus): *Bishop Tanager*

*Tanagra Episcopus* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 316 (based on "L'Evesque" Brisson, Ornithologie, vol. 3, p. 40, pl. 1, fig. 2: "Bresil" = Cayenne, Berlepsch, Nov. Zool., vol. 15, 1908, p. 115).

SPECIMENS COLLECTED

1 ad. ♀, Manáos (Flores Tramway), Amazonas, Brazil, September 27, 1930.

2 ad. ♂, 1 ad. ♀, 1 im. ♂, Santa Isabel, Rio Negro, Amazonas, Brazil, October 9-17, 1930.

3 ad. ♂, 1 ad. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, January 2-17, 1931.

1 im. ♂, Cucuhy, Rio Negro, Amazonas, Brazil, February 6, 1930.

1 ad. ♂, 2 ad. ♀, 1 im. ♀, Puerto Ayacucho, Río Orinoco, Venezuela, May 11-19, 1931.

1 ad. ♂, Puerto Ayacucho, Río Orinoco, Venezuela, January 6, 1930.

A study of the present fine series, together with a larger one still, reveals so much individual variation in the degree and extent of the whitish humeral patch and the pale edgings of the greater upper wing coverts that one is led, by inference, to question the validity of *T. e. leucoptera* (Sclater) of the eastern slope of the eastern Andes of Co-

lombia, stated by Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 207, footnote) to be a connecting link between *episcopus* and *coelestis* (Spix). On the whole, the Brazilian specimens listed above have more whitish on the wings than the four from Puerto Ayacucho, Venezuela. However, one finds birds with much whitish and others of equal maturity and like sex with little or none from the same general localities in parts of the range as widely separated as British Guiana and Santarem, Brazil. In a general way it does seem that western Amazonian birds tend to have more of the whitish on the wings than do eastern ones, which suggests that possibly we have in upper Amazonia a great area over which *episcopus* and *coelestis* intergrade. Hellmayr, on the other hand, finds birds from Barcellos on the Rio Negro to agree perfectly with others from Pará and the Guianas. It also appears that *episcopus* and *cana* merge in the southern part of the Orinoco drainage, which accounts for the present specimens from Puerto Ayacucho having a somewhat intermediate coloration.

Recently Zimmer (Amer. Mus. Nov., No. 1262, 1944, p. 10) has described *T. e. mediana* from Manáos, Brazil. If valid, this would be the form to which our present species would have to be referred. However, in view of the above comments and the fact that Zimmer writes that his new form, ". . . is admittedly intermediate between *episcopus* and *coelestis*, . . ." it seems better to consider *mediana* a synonym of the nominate form.

**THRAUPIS EPISCOPUS CANA** (Swainson): *Gray Tanager*

*Tanagra cana* SWAINSON, Ornithological drawings, pt. 3, 1836, pl. 37 (no locality indicated—"Venezuela," suggested by Berlepsch, Verh. 5th Internat. Orn. Kongr. Berlin, 1912, p. 1051, restricted to Caracas by Hellmayr, Arch. für Naturg., vol. 90A, No. 2, 1924, p. 185).

**SPECIMEN COLLECTED**

1 ad. ♀, Ciudad Bolívar, Venezuela, June 8, 1931.

The specimen is in rather worn plumage.

**THRAUPIS PALMARUM MELANOPTERA** (Sclater): *Amazonian Palm Tanager*

*Tanagra melanoptera* SCLATER, Proc. Zool. Soc. London, vol. 24, "1856" (=1857), p. 235 (east Peru and "Bogota"—eastern Peru).

**SPECIMENS COLLECTED**

1 ad. ♂, 1 im. ♂, Santa Isabel, Rio Negro, Amazonas, Brazil, October 9–15, 1930.

3 ad. ♂, São Gabriel, Rio Negro, Amazonas, Brazil, January 6–10, 1931.

1 ad. ♂, Cucuhy, Rio Negro, Amazonas, Brazil, February 3, 1930.

1 ad. ♂, 1 ad. ♀, Chapazon, Brazo Casiquiare, Venezuela, January 30, 1931.

1 ad. ♀, San Antonio, Upper Orinoco, Venezuela, March 3, 1931.

1 ad. ♂, 2 ad. ♀, 1 im. ♂, Puerto Ayacucho, Río Orinoco, Venezuela, May 11–20, 1931.

All but one of the Venezuelan specimens listed above are more greenish, less bluish gray on the upper back than the Brazilian birds, a difference difficult to fully explain by their more abraded plumage. The Brazilian birds agree with a specimen from near the type locality of *melanoptera* in eastern Peru. Specimens from the lower Amazon and from the Guianas are intermediate between typical *palmarum* and *melanoptera*; on the whole it seems that lower Amazonian birds are *palmarum* while Guianan examples are nearer to the present race.

Hellmayr (Catalogue of the birds of Americas, pt. 9, 1936, p. 228, footnote) writes that the characters of *melanoptera* are most strongly pronounced in birds from Upper Amazonia. Birds from the Orinoco Basin, Trinidad, the Guianas, and Brazil north of the Amazon he finds inseparable although varying somewhat in the direction of the nominate subspecies. There seems to be considerable individual variation in the degree and extent of purplish or bluish gray on the upper back and breast. The most purplish bird seen is the most nearly topotypical—a specimen from the headwaters of the Hualloga River, Peru. It is matched above by several of the present series from Rio Negro, but exceeds them in the ventral violaceousness.

**RAMPHOCELUS CARBO CARBO** (Pallas): *Silver-beaked Tanager*

*Lanius* (*Carbo*) PALLAS, in Vroeg's Catalogus, Adumbratiunculae, 1764, p. 2 ("Surinam").

SPECIMENS COLLECTED

1 ad. ♂, 1 ad. ♀, 2 unsexed (= ♀?), Manáos, Amazonas, Brazil, September 26–30, 1930.

1 ad. ♂, Barcellos, Rio Negro, Amazonas, Brazil, October 6, 1930.

1 ad. ♂, Santa Isabel, Rio Negro, Amazonas, Brazil, October 9, 1930.

5 ad. ♂, 1 im. ♂, 1 im. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, January 2–16, 1931.

1 ad. ♂, 1 ad. ♀, 1 (im. ?) ♀, Cucuhy, Rio Negro, Amazonas, Brazil, February 1–3, 1930.

1 ad. ♂, Brazo Casiquiare, Caño Atamoni, Venezuela, February 6, 1931.

1 ad. ♂, 1 im. ♂, 2 im. ♀, San Antonio, Upper Orinoco, Venezuela, March 3–8, 1931.

1 ad. ♂, Puerto Ayacucho, Río Orinoco, Venezuela, January 2, 1930.

4 ad. ♂, 2 im. ♂, 3 ad. ♀, Puerto Ayacucho, Río Orinoco, Venezuela, May 13–20, 1931.

Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 254, footnote) observes that birds from the Upper Orinoco are intermediate between *carbo* and *venezuelensis*, and that "it is a matter of personal preference to refer them to one rather than the other race." This may be true of adult males, but the females of the two forms seem to be quite readily differentiated; in *venezuelensis* the females are more reddish, between chestnut and mahogany red, less cinnamomeous; in *carbo* more brownish, the abdomen ferruginous.

One of the males from São Gabriel, January 2, is molting into adult plumage.



A juvenal bird collected on the Rio Negro on February 1, 1930, was preserved in alcohol. It is not listed with the skins mentioned above.

**PIRANGA RUBRA RUBRA** (Linnaeus): *Summer Tanager*

*Fringilla rubra* LINNAEUS, *Systema naturae*, ed. 10, vol. 1, 1758, p. 181 (based on "The Summer Red-Bird" Catesby, *The natural history of Carolina . . .*, vol. 1, p. 56, pl. 56: "Carolina and Virginia"=South Carolina).

SPECIMENS COLLECTED

1 ♀ ad., Puerto Ayacucho, Venezuela, January 5, 1930.

1 ♂ ad., Raudal Corocoro, just below Playa Candela, Casiquiare, Venezuela, February 9, 1931.

The crown, occiput, and upper back of the female have a number of reddish-brown feathers showing among the greenish ones, and some of the longer upper tail coverts are similarly reddish brown.

**PIRANGA FLAVA HAEMALEA** Salvin and Godman: *Roraima Red Tanager*

*Pyrranga haemalea* SALVIN and GODMAN, *Ibis*, 1883, p. 205 (Roraima, British Guiana).

SPECIMEN COLLECTED

1 ad. ♀, Serro Imeri, near Salto do Huá on the Venezuelan-Brazilian border, December 7, 1930.

This rather puzzling specimen seems to fit best with *haemalea*, but the identification is not so certain as might be hoped for. It is similar to a female of *desidiosa* but has the throat brighter yellow and the forehead and crown darker brownish olive. Its dimensions are as follows: Wing 90.5, tail 77, culmen from base 18.6 mm. The nearest point to Serro Imeri whence the race (or the species) has been recorded hitherto seems to be Mount Duida.

**HABIA RUBICA PERUVIANA** (Taczanowski): *Peruvian Red Ant-tanager*

*Phoenicotrampus peruvianus* TACZANOWSKI, *Ornithologie du Pérou*, vol. 2, 1884, p. 498 (Chyavetas, Chamicuros, Yurimaguas, and Monterico=Yurimaguas).

SPECIMEN COLLECTED

1 ♂, São Gabriel, Rio Negro, Amazonas, Brazil, January 14, 1931.

This specimen is labeled as an adult, but it may be really an immature bird. It agrees in coloration very closely with a female from Villa Braza, Rio Tapajós, Brazil, except for the color of the tail, and in having a few faint orange flecks on the throat and in having the thighs and under tail coverts darker and more brightly orange. The tail is similar to that of an adult male from Hyutanahan, Rio Purús, Brazil. Its measurements are: Wing 83; tail 70.5; culmen from cere 17 mm. It is unfortunately in a plumage that is useless for sub-specific determination but appears to be best placed in *peruviana*, although it comes from a locality a little more northerly than *peruviana* has been recorded hitherto.

TACHYPHONUS RUFUS (Boddaert): *Greater White-shouldered Tanager*

*Tangara rufa* BODDAERT, Table des planches enluminées . . ., 1783, p. 44 (based on "Le Tanagroux de Cayenne" Daubenton, Planches enluminées . . ., pl. 711: Cayenne (=female)).

## SPECIMENS COLLECTED

- 2 ad. ♂, 1 ad. ♀, Puerto Ayacucho, Orinoco, Venezuela, May 11-20, 1931.  
1 ad. ♂, 2 im. ♂, Ciudad Bolívar, Venezuela, November 25, 26, 1929, and June 10, 1931.

One of the immature males is indistinguishable from the adults, the other has a few of the brownish juvenal feathers left in the wings, cheeks, throat, breast, and abdomen.

TACHYPHONUS CRISTATUS CRISTATUS (Linnaeus): *Scarlet-crested Tanager*

*Tanagra cristata* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 317 (based on "Le Tangara noir hupé de Cayenne" Brisson, Ornithologie, vol. 6, Suppl., p. 65, pl. 4, fig. 3: Cayenne).

## SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, 1 im. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, January 3-6, 1931.  
2 ad. ♀, Colombian bank of Río Negro, opposite San Carlos, Venezuela, January 30, 1931.  
1 ad. ♂, 1 ad. ♀, 1 im. ♀, Chapazon, Brazo Casiquiare, Venezuela, January 30, 1931.  
1 ad. ♀, Brazo Casiquiare, Caño Atamoni, Venezuela, February 6, 1931.  
1 im. ♀, Brazo Casiquiare, near Caño Durutomoni, Venezuela, February 19, 1931.  
1 ad. ♀, Isla Temblador, Upper Orinoco, Venezuela, February 25, 1931.  
6 ad. ♂, 1 ad. ♀, 1 im. ♂, Cerro Yapacana, Upper Orinoco, Venezuela, April 2-25, 1931.

The scarlet-crested tanagers inhabiting the Upper Orinoco Valley have been the subject of divergent opinions by investigators. Chapman (Bull. Amer. Mus. Nat. Hist., vol. 55, 1926, p. 680) found that eight males from Maipures and Suapure, Upper Orinoco, had much larger bills and slightly smaller and deeper crests than a series from eastern Ecuador and from Cayenne. He wrote that he considered these Orinoco birds separable, but in default of Bogotá specimens of "*crstatellus*" Sclater, he was not able to decide if that name should be used or a new one coined for them. Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, p. 327, footnote), on the other hand, found that birds from the Caura Valley, Venezuela (east of the Upper Orinoco!), and the Upper Rio Negro could not be satisfactorily separated from a series of "Bogota" skins (*crstatellus*)! Unfortunately the comparative material available for study in the present connection does not permit me to decide between these two opinions. Inasmuch as Hellmayr apparently had the critical material lacking to Chapman, and also toptotypical Cayenne birds, I follow the former's conclusions.

The immature male, taken January 30, at Chapazon, is in an early state of postjuvencal molt. Young birds of both sexes resemble the adult females but are less rufescent above and below.

In the collections of the U. S. National Museum is a specimen received many years ago from Boucard. It bears, on the Boucard's Museum label, the locality "Lojas, Aequatur" and the date 1889. Although unsexed, it is an adult male by plumage. Aside from the fact that Lojas is in southwestern Ecuador, a region outside the known range of the species, the specimen is peculiar in that the crest is orange, not red, nearest in color to that of the race *intercedens* Berlepsch, but has the very narrow gular mark as in *huarandosae* Chapman.

An additional specimen taken in São Gabriel, January 21, 1931, was preserved in alcohol.

**TACHYPHONUS PHOENICIUS** Swainson: *Red-shouldered Tanager*

*Tachyphonus phoenicius* SWAINSON, Animals in menageries, 1837, p. 311 (believed to be from "Fernando Po, on the African coast," errore=eastern Peru="Cayenne" (?)).

SPECIMENS COLLECTED

9 ad. ♂, 5 ad. ♀, Cerro Yapacana, Upper Orinoco, Venezuela, March 22–April 23, 1931.

This fine series agrees with other specimens from British Guiana. Apparently these specimens extend the known range of the species a little to the northwest. Previously this tanager was known only from two Venezuelan localities—San Carlos (Río Guainia) and Mount Duida. Its range extends from the three Guianas, through northern and central Brazil to southern Venezuela and eastern Peru.

A number of the specimens were marked as having the gonads enlarged.

**TACHYPHONUS SURINAMUS BREVIPES** Lafresnaye: *Western Fulvous-crested Tanager*

*Tachyphonus brevipes* LAFRESNAYE, Rev. Zool., vol. 9, 1846, p. 206 (Colombia="Bogota").

SPECIMENS COLLECTED

1 ad. ♀, Cachoeira Manajó, Rio Cauabury, Amazonas, Brazil, October 30, 1930.

1 ad. ♂, Rio Cauabury, Amazonas, Brazil, November 4, 1930.

3 ad. ♂, 1 ad. ♀, 1 im. ♀ Serra Imeri, Rio Maturacá, Brazil (near Venezuelan border, near Salto do Huá), November 27–December 5, 1930.

2 ad. ♂, São Gabriel, Rio Negro, Amazonas, Brazil, January 3–9, 1931.

2 ad. ♂, 1 ad. ♀, 1 im. ♀, Cucuhy, Rio Negro, Amazonas, Brazil, February 1–7, 1930.

5 ad. ♂, 2 ad. ♀, Cerro Yapacana, Upper Orinoco, Venezuela, March 18–April 22, 1931.

All of these birds seem to be referable to *brevipes*, which is not exactly in harmony with the account of the races given by Hellmayr (Catalogue of the birds of the Americas, pt. 9, 1936, pp. 333, 334).

He writes that the nominate form occurs in French, Dutch, and British Guiana, "west to the adjoining parts of Venezuela (Orinoco Delta and Caura Valley) south to the north bank of the lower Amazon, Brazil (Obidos, Manaos)," while he records *brevipes* from the upper stretches of the Rio Negro to eastern Peru. In other words, Hellmayr suggests that *brevipes* occurs on the Upper Rio Negro while *surinamus* is the bird to the north of it in the Caura Valley and also to the south of it at Manáos. I have seen no birds from either locality, but the present series agree with toptotypical "Bogota" *brevipes* and differs from typical Guianan examples of *surinamensis*. Either Caura Valley birds are more or less intermediate or the line of demarcation between the races in southern Venezuela must be between the valleys of the Caura and the Upper Orinoco, an area which does not seem to function as a limiting boundary for races of many other birds.

Immature females are not different in coloration from adults.

Two additional birds from São Gabriel were preserved in alcohol.

**HEMITHRAUPIS FLAVICOLLIS AURIGULARIS** Cherrie: *Golden-throated Tanager*

*Hemithraupis flavicollis aurigularis* CHERRIE, Bull. Amer. Mus. Nat. Hist., vol. 35, 1916, p. 389 (Suapuré, Caura River, Venezuela).

SPECIMENS COLLECTED

1 ad. ♀, Salto do Huá, Venezuelan border, Brazil, November 16, 1930.

2 ad. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, December 31, 1930 and January 1, 1931.

1 ad. ♀, Chapazon, Brazo Casiquiare, Venezuela, January 30, 1931.

1 ad. ♂, 3 im. ♂, Cerro Yapacana, Upper Orinoco, Venezuela, April 3-17, 1931.

The three supposedly immature males from Cerro Yapacana are very different *inter se*, and suggest, if correctly sexed, that the male, at least, of this form goes through a very complicated plumage cycle. One of them (U.S.N.M. No. 329389) resembles the adult females but has the crown and occiput slightly darker; another (U.S.N.M. No. 329388) is similar to the first one but has the lower back, rump, and upper tail coverts yellow, not dark green; has the chin and throat brighter, more golden, yellow; and has some black remiges, upper wing coverts, and auriculars coming in; the third one is like the adult male, but has the yellow of the back, rump, and upper tail coverts a little paler, less tinged with orange. It may be that the first of these is the true juvenal plumage, the second merely a stage of the postjuvenal molt, and the third the first adult plumage, differing from subsequent ones only in the shade of the yellow on the back and rump. The females show less variability, the chief variable being the extent of yellowish suffusion on the abdomen.

**THLYPOPSIS SORDIDA ORINOCENSIS** Friedmann: *Orinoco Orange-headed Tanager*

*Thlypopsis sordida orinocensis* FRIEDMANN, Proc. Biol. Soc. Washington, vol. 55, 1942, p. 85 (Isla Orocopiche, near Soledad, Orinoco River, Venezuela).

## SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♀, Isla Orocopiche, Venezuela, December 1, 1929.

1 im. ♂, Soledad, Venezuela, December 7, 1929.

The adult male from Isla Orocopiche is the type of this form. The few adults of this subspecies I have seen have been very variable in the darkness or lightness of the orange head. The type is the yellowest, especially on the forehead, and the most tinged with olive on the orange of the occiput; a male from Capuchin is the brightest orange (and also the lightest); a female from El Fraile is the duskiest on the posterior crown and occiput. All agree, however, in the grayness of the back and in their small size.

The two immature birds are olive-green above, somewhat lighter and more yellowish on the head than on the back, with yellow and superciliary lines meeting in front at the base of the bill. They have the sides of the head yellowish, the cheeks and auriculars flushed with olive, and have the chin, throat, breast, most of abdomen, sides, and flanks yellowish. The young male is generally brighter yellow than the female and has the yellow extending over the lower abdomen and under tail coverts, which are whitish in the young female.

As stated in the original description, this race is similar to typical *sordida* but has the upperparts purer gray, less olivaceous, the general tone deep grayish olive (as opposed to dark citrine in the nominate race) and is slightly smaller (wings in the males 67–68 mm. in *orinocensis*; 70–71 mm. in *sordida*).

## Family FRINGILLIDAE: Finches

**SALTATOR MAXIMUS MAXIMUS** (P. L. S. Müller): *Lesser Buff-throated Saltator*

*Tanagra mazima* P. L. S. MÜLLER, *Natursystem*, Suppl., 1776, p. 159 (based on "Tangara, des grands bois de Cayenne" Daubenton, *Planches enluminées* . . ., pl. 205: Cayenne).

## SPECIMENS COLLECTED

1 imm. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 13, 1930.

2 ad. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 5–15, 1931.

1 ad. ♂, Venezuela, Playa de Candela, Brazo Casiquiare, February 8, 1931.

2 ad. ♂, 2 ad. ♀, Venezuela, Puerto Ayacucho, Río Orinoco, May 14–19, 1931, and January 4, 1930.

These specimens reveal considerable individual variation in the amount of green on the crown, in the intensity of the ochraceous tone on the under tail coverts, and in the length of the bill. The last-named character varies from 20–24 mm. in females, and from 18.5–22 mm. in males (culmen measured from the base).

**SALTATOR COERULESCENS BREWSTERI** Bangs and Penard: *Brewster's Saltator*

*Saltator olivascens brewsteri* BANGS and PENARD, *Bull. Mus. Comp. Zool.*, vol. 62, 1918, p. 91 (Caparo; Trinidad).

## SPECIMENS COLLECTED

- 4 ad. ♂, Venezuela, Ciudad Bolívar, June 8-10, 1931.  
 1 ad. ♀, 1 ad. ♂, 1 im. ♀, Venezuela, Soledad, Estado Anzoátegui, December 4, 1929, and June 12, 1931.  
 1 im. ♀, Venezuela, Puerto Ayacucho, January 6, 1930.

In the color of the upperparts these specimens approach *olivascens* Cabanis from the Guianas and extreme northern Brazil. A molting adult male taken at Ciudad Bolívar, June 9, has many of the old feathers of the upperparts, auriculars, wing coverts, the outer edges of the primaries and secondaries, and a few of the breast, flank, and abdominal feathers washed with green. The immature female from Soledad is very greenish above and below. I have seen a similarly greenish, but somewhat paler, example of *S. c. plumbeus*, so this virescent immature plumage appears to hold for the species as a group and not merely for the present race.

One of the males from Ciudad Bolívar has the white superciliaries much reduced, approaching the race *plumbeus* in this respect. It is also darker, more brownish above than the other three collected at the same time and place.

All the June specimens are in very worn plumage or in molt; the December birds are in fairly fresh feathering.

SALTATOR ORENOCENSIS ORENOCENSIS Lafresnaye: *Orinocoan Saltator*

*Saltator orenocensis* LAFRESNAYE, Rev. Zool., vol. 9, 1846, p. 274 ("l'embouchure de l'Orenoque," Venezuela).

## SPECIMENS COLLECTED

- 1 ♂ im., 1 ♂ ad., 2 ♀ ad., 1 ♀ im., Soledad, Venezuela, November 29, December 4, 1929, and June 11, 1931.  
 1 ♂ ad., 1 ♀ ad., Ciudad Bolívar, Venezuela, June 8-9, 1931.

This series has been compared with two females from farther north in Venezuela by Wetmore (Proc. U. S. Nat. Mus., vol. 87, 1939, pp. 256-257), who found his two from near Parapara, Estado Guárico, and from near El Sombrero, respectively, to have heavier bills. The bird from near Parapara is virtually a topotype of *S. o. rufescens* Todd; its measurements are:—wing 87.5, tail (molting) 82.5, exposed culmen 19, depth of bill 12 mm. Another female collected by Cherric at Altagracia on the far northwest coast of Venezuela measures: Wing 88, tail 82, exposed culmen 18, depth of bill 12 mm. The Altagracia bird has a good deal of buffy wash on the breast and abdomen which is lacking in the Parapara specimen. However, it can be matched by two immature birds from Soledad. It is unfortunate that Tocuyo was chosen as the type locality for *rufescens* as topotypes may prove to be indistinguishable from *orenocensis*. Specimens from farther to the west, however, are distinguishable on the basis of a greater extent of buffy wash on the underparts.

The four specimens collected in June are in very worn plumage; the young male taken on December 4 is completing its tail molt and is otherwise in fresh plumage as are also the other December and late November specimens. The worn-plumaged examples are much whiter, less washed with tawny-buff on the breast and upper abdomen than are the three in fresh feathering. This may, to some extent, account for what Hellmayr (Catalogue of the birds of the Americas, pt. 11, 1938, p. 28, footnote) refers to as "some local variation."

**CARYOTHAUSTES CANADENSIS CANADENSIS** (Linnaeus): *Green Grosbeak*

*Loxia canadensis* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 304 (based on "Le Gros-bec de Cayenne" Brisson, Ornithologie, vol. 3, p. 229, pl. 11, fig. 3: "Canada" (lapsus) = Cayenne).

SPECIMENS COLLECTED

1 ♀, Brazil, Rio Cauabury, below mouth of Rio Maturacá, Amazonas, November 7, 1930.

2 ♂, 1 ♀, Brazil; Serra Imeri, Brazil-Venezuela line, November 28–December 3, 1930.

2 ♂, 1 ♀, Brazil; Cucuhy, Rio Negro; February 5–8, 1930.

1 ♂, Venezuela; Cerro Guanari, Brazo Casiquiare, February 4, 1931.

1 ♀, Venezuela; Cerro Yapacana, Upper Orinoco, April 18, 1931.

The birds collected in February and April were in breeding condition, the collectors having noted on the labels "active gonads."

This series exhibits fairly great variability in the size and stoutness of the bill and in the length of the wing (85 to 93 mm. in the males) but the variations are nongeographic. All the birds are adults.

The Venezuelan specimens extend the range of this race to a new northern limit. Hellmayr (Catalogue of the birds of the Americas, pt. 11, 1938, pp. 46–47) does not include Venezuela in its range but writes in a footnote, "Whether the trade skins in the Berlepsch collection supposed to be from the 'Orinoco delta' really came from Venezuela remains to be corroborated." The present two specimens from Cerro Guanari and Cerro Yapacana, while far from the Orinoco Delta in origin, yet are steps toward validating the data on the Berlepsch skins.

These specimens have been compared with a good series of this race and with three adults of *C. c. brasiliensis*.

An additional specimen, taken on the Rio Cauabury, November 7, 1930, is preserved in alcohol.

**PITYLUS GROSSUS GROSSUS** (Linnaeus): *White-throated Grosbeak*

*Loxia grossa* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 307 (based on "Le Gros-bec bleu d'Amerique" Brisson, Ornithologie, vol. 6, suppl., '89, pl. 5, fig. 1: "America" = Cayenne).

SPECIMENS COLLECTED

5 ♂, 4 ♀ Brazil; Saõ Gabriel, Rio Negro, Amazonas, January 1–16, 1931.

1 ♀, Brazil; Rio Cauabury, Amazonas, October 31, 1930.

- 1 ♂, Brazil; Serro Imeri, Brazil-Venezuela line, December 2, 1930.  
 1 ♀, Venezuela; Chapazon, Brazo Casiquiare, January 30, 1931.  
 1 ♀, Venezuela, Brazo Casiquiare, mouth of Caño Atamoni, February 6, 1931.  
 1 ♂, Venezuela, Brazo Casiquiare, below mouth of Río Pacila, February 13, 1931.  
 1 ♀, Venezuela, Upper Orinoco, near Cerro Cariche, February 24, 1931.

Hellmayr (Catalogue of the birds of the Americas, pt. 11, 1938, p. 55) writes that females from northern Brazil to Peru are generally more strongly washed with brownish underneath than in birds from the Guianas, although males from these areas are indistinguishable. I have compared the present fine series with a good number of others and find that, if anything, females from British Guiana are more brownish, less olive, underneath than are north Brazilian examples! There is then, no constant color difference on which to attempt further subdivision of this race.

The present series adds considerably to the known range of this bird in Venezuela. Hellmayr records it only from the Caura Valley, nearly 200 miles to the east of the Brazo Casiquiare.

PAROARIA GULARIS NIGRO-GENIS (Lafresnaye): *Black-eared Cardinal*

*Nemosia nigro-gentis* LAFRESNAYE, Rev. Zool., vol. 9, 1846, p. 273 ("l'embouchure de l'Orenoque," Venezuela).

SPECIMENS COLLECTED

- 2 ad. ♂, 2 ad. ♀, Venezuela, Soledad, December 4, 1929, and June 11, 1931.  
 1 ad. ♂, Venezuela, Ciudad Bolívar, June 8, 1931.  
 1 unsexed, Venezuela, Isla Orocopiche, near Soledad, December 1, 1929.

A male, labeled adult, from Soledad, collected on June 11, is in a late stage of the postjuvenile molt, the old feathers of back and wings being earth brown. It has a number of the red coronal and occipital feathers tipped with bluish black. The other Soledad male, in full plumage, has a few faint blackish edgings on the tips of the white breast feathers.

CYANOCOMPSA CYANOIDES ROTHSCILDI (Bartlett): *Rothschild's Blue Grosbeak*

*Guiraca rothschildii* (i) BARTLETT, Ann. Mag. Nat. Hist., vol. 6, 1890, p. 168 (River Caramang, British Guiana).

SPECIMENS COLLECTED

- 1 ad. ♂, 1 ad. ♀, Rio Maturacá, Amazonas, Brazil, November 9-11, 1930.  
 2 ad. ♂, 1 ad. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, January 9-16, 1931.  
 1 ad. ♀, Cucuhy, Rio Negro, Amazonas, Brazil, February 7, 1930.  
 1 ad. ♀, Playa de Candéia, Brazo Casiquiare, Venezuela, February 8, 1931.  
 2 ad. ♂ (1 undoubtedly a ♀!), 1 im. ♂, Cerro Yapacana, upper Orinoco, Venezuela, April 15-22, 1931.

These four males when compared with others from British Guiana and Cayenne seem very slightly brighter, more pure bluish, less purplish blue, on the forehead and the humeral patch. The difference, however, is extremely slight.



SPOROPHILA INTERMEDIA Cabanis: *Gray Seed-eater*

*Sporophila intermedia* CABANIS, Museum Heineanum, vol. 1, 1851, p. 149 (Venezuela).

## SPECIMENS COLLECTED

2 ad. ♂, Venezuela, Soledad, December 10, 1929, June 11, 1931.

Both specimens are in rather abraded plumage; neither has any white on the throat; one is much darker than the other on the top of the head and is also somewhat darker on the back.

SPOROPHILA NIGRICOLLIS NIGRICOLLIS (Vieillot): *Yellow-bellied Seed-eater*

*Pyrhula nigricollis* VIEILLOT, Tabl. Enc. Méth., Orn., livr. 93, 1823, p. 1027 ("Brésil").

## SPECIMEN COLLECTED

1 ad. ♀, Venezuela, Cerro Yapacana, Upper Orinoco, March 22, 1931.

The single example collected is in worn plumage.

SPOROPHILA LINEOLA (Linnaeus): *Lined Seed-eater*

*Loxia lineola* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 174 ("Asia" errore=Surinam).

## SPECIMENS COLLECTED

4 ad. ♂, 1 ad. ♀, Brazil, Santa Isabel, Rio Negro, Amazonas, October 10-13, 1930.

The width of the white coronal mark is variable in the four males collected.

SPOROPHILA BOUVRONIDES (Lesson): *Lesson's Seed-eater*

*Pyrhula bouvronides* LESSON, Traité d'ornithologie, livr. 6, 1831, p. 450 (Trinidad).

## SPECIMENS COLLECTED

1 im. ♂, Brazil, São Gabriel, Rio Negro, Amazonas, January 6, 1931.

3 ad. ♂, 1 ad. ♀, Venezuela, Ciudad Bolívar, June 8, 9, 1931.

1 ad. ♂, Venezuela, Soledad, June 12, 1931.

None of the four adult males have any white specks on the middle of the forehead, but have the entire upper surface dark greenish black.

Hellmayr (Catalogue of the birds of the Americas, pt. 11, 1938, p. 211) states that the female of this species is indistinguishable from that of *S. lineola*. While the material examined by me is slight, it appears that the female *bouvronides* is very slightly paler generally than that of *lineola*, but more extensive material may upset this difference.

The young male from São Gabriel is in an early stage of the post-juvinal molt, the rectrices, the innermost secondaries, and a few scattering feathers of the back and throat are of the dark adult plumage, otherwise the feathering is like that of the adult female but less ochraceous below and slightly dusker above.

SPOROPHILA MINUTA MINUTA (Linnaeus): *Minute Seed-eater*

*Loxia minuta* LINNAEUS, Systema naturae, ed. 10, vol. 1, 1758, p. 176 (Surinam).

## SPECIMENS COLLECTED

1 ad. ♀, Brazil, Cucuhy, Rio Negro, February 1, 1930.

1 ad. ♂, Venezuela, Puerto Ayacucho, January 6, 1930.

The male has the top of the head and the upper back dusky brownish olive. A series of a dozen males reveals about half are in this plumage while the other half have these parts cinereous; whether the latter are the truly adult birds I cannot say with certainty, but it seems that they are. The underparts in the males also vary in darkness. The present specimen is very pale, agreeing in this respect with a bird from Bogota, Colombia, and differing from others from British Guiana, Venezuela, Brazil, Colombia, Trinidad, and Tobago. The female collected, is whiter on the abdomen and less tawny, more olivaceous, above than others from Colombia, Venezuela, and British Guiana.

SPOROPHILA CASTANEIVENTRIS Cabanis: *Chestnut-bellied Seed-eater*

*Sporophila castaneiventris* CABANIS, in Schomburgk, Reisen in British Guiana, pt. 3, 1848 (=1849), p. 679 (Cumaka, coast of British Guiana).

## SPECIMENS COLLECTED

1 ad. ♂, Brazil, Rio Amazonas, Amazonas, September 20, 1930.

1 ad. ♂, 1 ad. ♀, Brazil, São Gabriel, Rio Negro, Amazonas, January 6-13, 1931.

These specimens have been compared with others from British Guiana, Brazil, and Peru, all of which together bear out Hellmayr's action (Catalogue of the birds of the Americas, pt. 11, 1938, p. 226, footnote) in synonymizing *S. c. rostrata* Todd with typical *castaneiventris*.

ORYZOBORUS ANGOLENSIS TORRIDUS (Scopoli): *Lesser Chestnut-bellied Rice Grosbeak*

*Loxia torrida* SCOPOLI, Annus I Historico-Naturalis, 1769, p. 140 (based on a bird brought alive by Jacquin to the Vienna Zoological Garden = north coast of Venezuela (Hellmayr)).

## SPECIMENS COLLECTED -

1 im. ♂, Providencia, Rio Negro, Amazonas, Brazil, October 7, 1930.

1 ad. ♂, San Antonio, Upper Orinoco, Venezuela, March 9, 1931.

1 ad. ♂, Puerto Ayacucho, Orinoco, Venezuela, May 12, 1931.

The two adults have wing lengths of 56 and 58.5 mm.; tail 51 and 51.5 mm., respectively, agreeing with the dimensions recorded by Hellmayr (Catalogue of the birds of the Americas, pt. 11, 1938, p. 246). The gonads were enlarged, suggesting that the birds were taken in or near their breeding season.

VOLATINIA JACARINA JACARINA (Linnaeus): *Southern Blue-black Grassquit*

*Tanagra jacarina* LINNAEUS, Systema naturae, ed. 12, vol. 1, 1766, p. 314 (based on "Jacarini" Marcgrave, Historiae rerum naturalium Brasiliae, p. 210: northeastern Brazil).

## SPECIMENS COLLECTED

3 ad. ♂, Manáos (Flores Tramway), Amazonas, Brazil, September 26–30, 1930.

One of these specimens has somewhat less white on the axillaries than the other two, but all are nearer to the nominate than to the northern, black-axillared race.

VOLATINIA JACARINA SPLENDENS (Vieillot): *Northern Blue-black Grassquit*

*Fringilla splendens* VIEILLOT, Nouv. Dict. Hist. Nat., nouv. éd., vol. 12, 1817, p. 173 (based on "Moineau, de Cayenne" Daubenton, Planches enluminées . . ., pl. 224, fig. 3: Cayenne).

## SPECIMENS COLLECTED

4 ad. ♂, and 1 ad. ♀, 1 im. ♀, São Gabriel, Rio Negro, Amazonas, Brazil, December 26, 1930–January 10, 1931.

1 ad. ♂, 1 ad. ♀, Cucuhy, Rio Negro, Amazonas, Brazil, February 1, 1930.

1 im. ♂, Puerto Ayacucho, Venezuela, January 6, 1930.

1 ad. ♂, 1 ad. ♀, Soledad, Anzoátegui, Venezuela, June 11, 1931.

The immature male differs from the females in having the pectoral streaks sharper, more blackish, less brownish.

SICALIS COLOMBIANA COLOMBIANA Cabanis: *Venezuelan Yellow Finch*

*Sycalis colombiana* CABANIS, Museum Heineanum, vol. 1, 1851, p. 147 ("Porto Cabello," errore; Ciudad Bolívar, Río Orinoco, Venezuela).

## SPECIMEN COLLECTED

1 ad. ♂, Venezuela, Ciudad Bolívar, June 10, 1931.

The only specimen obtained by the expedition, taken at the type locality, is in worn plumage.

SICALIS FLAVEOLA FLAVEOLA (Linnaeus): *Northern Yellow Finch*

*Fringilla flaveola* LINNAEUS, Systema naturae, ed. 12, 1766, p. 321 (Surinam).

## SPECIMENS COLLECTED

1 ad. ♂, 2 ad. ♀, Venezuela, Soledad, December 7, 11, 1929, June 12, 1931.

1 ad. ♀, Venezuela, Ciudad Bolívar, June 9, 1931.

There is no appreciable difference between the sexes, but the male seems to have the orange on the forehead and forepart of the crown slightly brighter and more extensive than the females.

CORYPHOSPINGUS PILEATUS BREVICAUDUS Cory: *Short-tailed Pileated Finch*

*Coryphospingus pileatus brevicaudus* CORY, Publ. Field Mus. Nat. Hist., Orn. Ser., vol. 1, 1916, p. 346 (Margarita Island, off Venezuela).

## SPECIMENS COLLECTED

1 ad. ♂, Venezuela, Soledad, Anzoátegui, December 11, 1929.

1 ad. ♂, Venezuela, Laguna Icacal, near Ciudad Bolívar, December 8, 1929.

5 ad. ♂, 5 ad. ♀, Venezuela, Ciudad Bolívar, June 8, 9, 11, 1931.

The June specimens are in very worn plumage, the December birds much less so.

This subspecies is not too well differentiated from the nominate form but is recognizable.

ARREMON TACITURNUS TACITURNUS (Hermann): *Pectoral Sparrow*

*Tanagra taciturna* HERMANN, *Tabula affinitatum animalium* . . . 1783, p. 214 (note) (based on "L'Oiseau Silencieux" Buffon, *Histoire naturelle des oiseaux*, vol. 4, p. 304, and Daubenton, *Planches enluminées* . . . , pl. 742: Cayenne (cf. Stresemann, *Nov. Zool.*, vol. 27, 1920, p. 328)).

SPECIMENS COLLECTED

- 1 ad. unsexed, 1 ad. ♀, Rio Cauabury, Amazonas, Brazil, November 5, 1930.  
4 ad. ♂, 5 ad. ♀, 1 im. unsexed, São Gabriel, Rio Negro, Amazonas, Brazil, December 31, 1930–January 17, 1931.  
1 ad. ♀, Raudal Corocoro, Brazo Casiquiare, Venezuela, February 9, 1931.  
1 ad. ♂, Brazo Casiquiare, below mouth of Río Pacila, Venezuela, February 22, 1931.  
1 ad. ♂, Brazo Casiquiare, below Caño Caripo, Venezuela, February 22, 1931.  
7 ad. ♂, 2 ad. ♀, 1 im. ♂, Cerro Yapacana, Upper Orinoco, Venezuela, March 19–April 7, 1931.

This fine series has been compared with 20 more specimens from northeastern Brazil, French Guiana, and British Guiana, and no constant geographic differences were noted. Two adult males from Ceará agree with a statement by Hellmayr (*Publ. Field Mus. Nat. Hist., Zool. Ser.*, vol. 12, No. 18, 1929, p. 289) that east Brazilian birds have the backs of a brighter, more yellowish hue. However, birds from Bahia to the south of them and from the Guianas and the Lower Amazon to the north, are indistinguishable from one another or from Upper Amazonian birds. In a later work Hellmayr (*Catalogue of the birds of the Americas*, pt. 12, 1938, p. 426, footnote) makes no mention of the back color but writes that he has "yet to see from Guiana or Amazonia specimens with such an extensive grayish suffusion across chest and along flanks as is the case in *some* individuals from Bahia" and that he has been unable to perceive any other differences. I find this character to be too variable to be relied on as a possible racial trait. The unsexed adult (probably a male) from Rio Cauabury is about as heavily grayish on the chest, sides, and flanks as the grayest of a series of Bahia birds.

A young male collected at Cerro Yapacana, on April 9, shows the beginnings of adult coloration in the blackish brown auriculars and subocular stripe. There is an indication of the white supraocular stripe and a paling of the center of the crown and nape indicating the stripe to come. The throat is buffy white, the breast dark grayish buffy, this color extending over the flanks, and the abdomen is pale grayish white with a buffy tint.

The width of the black pectoral band varies greatly throughout the range of the race.

Two specimens in addition to those listed above were preserved in alcohol—one from São Gabriel, January 13, 1931, and one from near Cerro Cariche, Upper Orinoco, February 24, 1931.

MYOSPIZA AURIFRONS AURIFRONS (Spix): *Yellow-browed Sparrow*

*Tanagra aurifrons* SPIX, *Avium species novae* . . . , *Brasiliam* . . . , vol. 2, 1825 p. 38, pl. 50, fig. 2 ("in provincia Bahia" errore = Fonte Bôa, Solimões, Brazil (Hellmayr, *Nov. Zool.*, vol. 17, 1910, p. 281)).

SPECIMENS COLLECTED

1 ad. ♂, 1 im. ♂, Manáos (Flores Tramway), Amazonas, Brazil, September 27, 1930.

1 im. ♂, Barcellos, Rio Negro, Amazonas, Brazil, October 6, 1930.

2 ad. ♂, Santa Isabel, Rio Negro, Amazonas, Brazil, October 13, 1930.

1 ad. ♂, 1 ad. ♀, 1 im. ♂, São Gabriel, Rio Negro, Amazonas, Brazil, December 26, 1930–January 14, 1931.

1 ad. ♀, Cucuhy, Rio Negro, Amazonas, Brazil, February 6, 1930.

These examples have been compared with a series from Peru, Ecuador, and Colombia (La Morelia) and have been found to be essentially alike. The western birds are slightly darker and slightly more olivaceous above, and would be referable to *M. a. zamorae* Chapman if that form were to be recognized. The difference is slight, however, not at all as definite as the original description of *zamorae* suggests. Inasmuch as Hellmayr (*Catalogue of the birds of the Americas*, pt. 11, 1938, p. 484, footnote) has also found *zamorae* to be doubtfully valid, I follow his arrangement in calling these birds typical *aurifrons*.

The present specimens are about the northernmost Upper Amazonian ones yet collected.

The immature birds are very variable. Two have considerable yellow on the lores and chin, while one has none. The last has the pectoral streaks much more strongly developed than the other two, and is also smaller and may be a younger bird. It also has the edges of the remiges and their greater upper coverts and of the feathers of the upper back more ochraceous-tawny than do the other two individuals.

## INDEX TO FAMILIES

---

- Accipitridae, 385.  
Alcedinidae, 428.  
Anatidae, 384.  
Anhingidae, 382.  
Apodidae, 417.  
Aramidae, 393.  
Ardeidae, 382.  
Bucconidae, 432.  
Capitonidae, 436.  
Caprimulgidae, 411.  
Cathartidae, 385.  
Charadriidae, 396.  
Ciconiidae, 382.  
Cochleariidae, 383.  
Coerebidae, 537.  
Columbidae, 398.  
Compothlypidae, 542.  
Conopophagidae, 483.  
Corvidae, 525.  
Cotingidae, 484.  
Cracidae, 391.  
Cuculidae, 407.  
Cyclarhidae, 534.  
Dendrocolaptidae, 447.  
Eurypygidae, 395.  
Falconidae, 388.  
Formicariidae, 458.  
Fringillidae, 561.  
Furnariidae, 453.  
Galbulidae, 430.  
Heliornithidae, 393.  
Hirundinidae, 523.  
Icteridae, 544.  
Jacanidae, 395.  
Laridae, 397.  
Mimidae, 530.  
Momotidae, 429.  
Nyctibiidae, 416.  
Opisthocomidae, 393.  
Phasianidae, 392.  
Picidae, 439.  
Pipridae, 492.  
Psittacidae, 402.  
Psophiidae, 394.  
Rallidae, 394.  
Ramphastidae, 437.  
Rynchopidae, 398.  
Scolopacidae, 397.  
Strigidae, 409.  
Sylviidae, 533.  
Thraupidae, 548.  
Threskiornithidae, 383.  
Tinamidae, 397.  
Trochilidae, 418.  
Troglodytidae, 526.  
Trogonidae, 425.  
Turdidae, 530.  
Tyrannidae, 490.  
Vireonidae, 534.