

AMERICAN MUSEUM NOVITATES

Number 509

Published by
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

Dec. 9, 1931

59.82 (85)

STUDIES OF PERUVIAN BIRDS. II

PERUVIAN FORMS OF THE GENERA *MICROBATES*, *RAMPHOCAENUS*, *SCLATERIA*, *PYRIGLENA*, *PITHYS*, *DRYMOPHILA*, AND *LIOSCELES*

By JOHN T. ZIMMER

Microbates cinereiventris peruvianus Chapman

Microbates cinereiventris peruvianus CHAPMAN, 1923 (August 28), Amer. Mus. Novit., No. 86, p. 5—La Pampa, southeastern Perú; ♂; Amer. Mus. Nat. Hist.

The type and two paratypes from the same general region appear to be the only Peruvian specimens known of this interesting bird. There are at hand five specimens from eastern Ecuador which apparently belong to the same subspecies, although they show some approach toward typical *cinereiventris* by being very slightly darker and duller on the back and head and with the center of the belly whiter. The difference is not great, and it is a question whether it deserves recognition by a separate name, although the known ranges in Ecuador and Perú are widely separated.

SPECIMENS EXAMINED

M. c. cinereiventris.—COLOMBIA: Barbacoas, 1 ♂, 1 (?); Alto Bonito, 1 ♀; Buenaventura, 1 ♀; San José, Cauca, 1 ♀ (?); Nóvita, 1 ♂; Juntas de Tamaná, 1 ♂. ECUADOR: Chimbo, 2 ♀; Naranjo, 1 ♀, 2 (?); Pato de Pauaro, 1 ♀; Río de Oro, 1 ♀ (?); Manaví, 1 ♀; Alamor, 1 ♂; Esmeraldas, 1 ♂.

M. c. magdalenae.—COLOMBIA: Antioquia, 1 ♂ (type).

M. c. semitorquatus.—PANAMÁ: 1 ♂ (type). NICARAGUA: Los Sabalos, 1 ♂.

M. c. peruvianus.—PERÚ: La Pampa, 2 ♂ (incl. type); Río Tavera, 1 ♂. ECUADOR: Río Suno, above Avila, 1 ♂; below San José, 2 ♀; mouth of Río Curaray, 2 ♀.

Ramphocaenus melanurus amazonum Hellmayr

Ramphocaenus melanurus amazonum HELLMAYR, 1907, Novit. Zool., XIV, p. 66—Teffé, Rio Solimoës, NW. Brazil; Tring Mus.

A male and a female from Lagarto, upper Río Ucayali (right bank), are perfectly comparable to two males from the type locality and a male and two females from the right bank of the lower Rio Madeira, Brazil. Four skins from the left bank of the Ucayali are, however, quite readily separable and are described below as new.

Nineteen specimens from the lower Tapajoz (both banks) show a distinct approach toward typical *melanurus* though they remain closer to *amazonum*. This approach is shown by the top and sides of the head being somewhat brighter than the back, which also is perhaps a little paler than in more western examples. Several of the skins have a more pronounced tendency toward ochraceous on the sides and flanks though not as pronounced as in *melanurus*. The wing and tail appear to average smaller though there is not much difference. None of the differences appear to be constant enough to warrant a separate name for the Tapajoz birds, especially since the characters are of an intermediate nature.

There is no reason to recognize two species of this genus. There is an excellent gradation of each of the characters by which *rufiventris* is supposed to be specifically separable from *melanurus*, though not always in the same order of arrangement of the subspecies, and the differences are all of degree. Since the various forms replace each other geographically, I prefer to refer them all to the single species *melanurus*.

***Ramphocaenus melanurus obscurus*, new subspecies**

TYPE from Santa Rosa, upper Ucayali (left bank), eastern Perú. No. 240,690, American Museum of Natural History. Adult male collected November 21, 1927, by Carlos Olalla and sons.

DIAGNOSIS.—Nearest to *R. m. amazonum* but darker above and with the breast, flanks, and the sides of the head more strongly ochraceous; tail shorter, with outer three pairs of rectrices with clear white terminal spots much as in *R. m. sticturus* which, however, is much paler in general coloration.

RANGE.—Western banks of the upper Río Ucayali in eastern Perú.

DESCRIPTION OF TYPE.—Top of head and upper mantle dark Saccardo's Umber¹; middle back darker, Olive Brown; rump still darker; upper tail-coverts somewhat brighter, like the upper back. Sides of head dull Buffy Brown with some traces of paler specks on the auriculars; an obsolete, narrow superciliary line from nostrils to over the auriculars; sides of neck somewhat clearer and brighter than the top of the head. Chin and throat white; breast dull, pale ochraceous-buff, darker on the sides, and with some traces of whitish subterminal spots; flanks broadly buffy like breast; middle of belly narrowly somewhat whitish; under tail-coverts like flanks. Wings fuscous, remiges and upper coverts externally margined with Saccardo's Umber x Cinnamon-Brown; bend of wing, under wing-coverts, and inner margins of remiges white; tail largely black; outer margins of rectrices basally Sepia; outer three rectrices with broad, clear white tips, broadest on outermost pair where there is a dusky or brownish spot at the tip of the outer web. Wing, 55.5 mm.; tail, 42; exposed culmen, 23.5; culmen from base, 28.5; tarsus, 22.5.

REMARKS.—The single female has the breast and flanks a little paler than the type but darker than in *amazonum*. One of the male paratypes is a little darker than the type.

¹Name of colors when capitalized indicate direct comparison with Ridgway's 'Color Standards and nomenclature.'

It is quite unusual to find the upper Ucayali acting as a distributional barrier, but it seems to be effective in the present instance. Further details regarding the distribution of both forms in Perú is highly desirable. There are no records of any sort from the lower Ucayali and yet the species is said to reappear in northern central Perú on the lower Huallaga and a nearby (more western) affluent of the Marañón, the Río Sillay, at Chyavitas. These northern records have been assigned to *amazonum*, but I am inclined to doubt the correctness of this assignment. A single breeding male specimen from the mouth of Lagarto Cocha, Río Napo, Ecuador, differs decidedly from three skins of *trinitatis* from farther up the Napo (lower Río Suno and mouth of the Curaray) and much more nearly resembles *amazonum* except that it is brighter and clearer (more rufescent) brown on the upper parts and the sides of the neck, and has the auriculars a little more deeply and extensively ochraceous, though much less so than in *trinitatis*; the under parts have very little ochraceous on the sides and breast, and the bill is distinctly broader than in either *amazonum* or *trinitatis*. Unfortunately this specimen lacks a tail. Taczanowski ('Orn. Pérou,' II, p. 53, 1884) describes a female from Yurimaguas as having the tail entirely black and the upper parts less rufous than in a French Guianan skin of *albiventris*, while the under parts are lightly washed with buff on breast and flanks. Hellmayr (Novit. Zool., XIV, p. 66, 1907) says of three skins from Yurimaguas, Chyavitas, and Santa Cruz, northern Perú, that they are rather brighter and clearer brown above than the type of *amazonum*. There is a strong probability that the Lagarto Cocha specimen either represents an undescribed form to which the north-Peruvian specimens belong or perhaps that it is an approach toward such a form from northern Perú. In any case, without more material, it is unsafe to carry the speculation farther. While most of the measurements of *obscurus* average a trifle larger than those of *amazonum*, the length of the tail appears to be distinctly greater in *amazonum*. In the three males of *obscurus* the tail is 42–42.5 mm. (average, 42.2); in *amazonum*, 46.5–50.5 mm. (average, 48.11). In the single female of *obscurus* the tail is 42.5 mm.; in the females of *amazonum*, 44–48.5 (average, 46.21).

SPECIMENS EXAMINED

R. m. melanurus.—BRAZIL: "Bahia," 3(?); Baião, Rio Tocantins (right bank), 1 ♂; Ananindeua, 1 ♂; Pernambuco, Palmares, 1 ♀; "Brazilia" (type of *Thryothorus gladiator*), 1.

R. m. albiventris.—BRITISH GUIANA: Tumatumari, 1 ♂. BRAZIL: Faro, 2 ♀.

R. m. sticturus.—BRAZIL: Primavera, Matto Grosso, 1 ♀; Barão Melgaço, 1 ♂; "Matto Grosso" (Natterer), 1 ♀.

R. m. amazonum.—BRAZIL: Boca Lago, Teffé, 2 ♂; Igarapé Auará, Río Madeira, 1 ♂, 1 ♀; Borba, 1 ♀; Cameté, Tocantins (left bank), 1(?); Igarapé Bravo, Río Tapajoz (left bank), 5 ♂, 5 ♀; Aramanáy, Río Tapajoz (right bank), 1 ♂, 2(?); Tauarý (right bank), 2 ♂, 4 ♀. PERÚ: Lagarto, upper Ucayali (right bank), 1 ♂, 1 ♀.

R. m. obscurus.—PERÚ: Santa Rosa, upper Ucayali (left bank), 3 ♂ (incl. type), 1 ♀.

R. m. subspecies?—ECUADOR: mouth of Lagarto Cocha, Río Napo, 1 ♂.

R. m. trinitatis.—ECUADOR: mouth of Río Curaray, 1 ♀; lower Río Suno, 1 ♂, 1 ♀. COLOMBIA: Buena Vista, 1 ♀. VENEZUELA: Esmeralda, Mt. Duida, 4 ♂, 3 ♀; Playa del Río Base, 4 ♂, 2 ♀; Caño León, 1 ♂, 4 ♀; La Laja, Río Orinoco, 1 ♂; El Merey, Río Cassiquiare, 1 ♂, 1 ♀; opposite El Merey, 1 ♂, 1 ♀. Suapuré, 4 ♂, 2 ♀; San Antonio, 1 ♂ (very close to *pallidus*), 1 ♀; Cumanacoa, 1 ♂; Cristóbal Colón, 1 ♂, 1 ♀; Cocallar, 1 ♂; Cuchivano, 1(?). TRINIDAD: Pointe Gourde, 1 ♀; Caura, 1 ♀; Caparo, 2 ♀; Princetown, 1 ♂, 2 ♀; Carenage, Industry River, 2 ♂.

R. m. sanctae-marthae.—COLOMBIA: Santa Marta, Bonda, 2 ♂, 5(?); Concha, 1(?).

R. m. griseodorsalis.—COLOMBIA: east of Palmira, 1 ♂ (type); Dabeiba, Río Sucio, 1 ♂; El Roble, 1 ♂.

R. m. rufiventris.—NICARAGUA: 8 ♂, 7 ♀. GUATEMALA: 2(?). COSTA RICA: 2 ♀. PANAMÁ: 4 ♂, 3 ♀. ECUADOR: Portovelo, 2 ♂; Bucay, 1 ♂; Esmeraldas, 1 ♂; Alamar, 1 ♀(?); Naranjo, 1 ♀(?).

Sclateria naevia argentata (Des Murs)

Herpsilochmus argentatus DES MURS in Castelnau, 1856 (June), 'Expéd. Amér. Sud.,' (pt. 7), I, (3), livr. 18, p. 53, Pl. xvii, fig. 2—Nauta, northeastern Perú; Paris Mus.

Eleven specimens from eastern Perú, coming from localities ranging from the north bank of the Amazon at the mouth of the Napo to the upper Río Ucayali, and the Carabaya district of southeastern Perú, furnish good evidence as to the comparative uniformity of this subspecies in its Peruvian range. Birds from farther up the Napo, in Ecuador, at the mouth of the Curaray, are likewise typical. As the range approaches that of adjacent forms, however, there is a well-marked variation in the direction of these forms.

Thus on the left bank of the Río Madeira, at Rosarinho, the males have quite distinct traces of dusky tips on the sides of the throat and of dusky lunules on the sides of the breast and flanks, while the feet are slightly duller in color and less brightly yellowish (in dried skins). The bill, wing, and tail also tend to be slightly longer. The females from this locality are a little paler tawny ochraceous on the lateral under parts, with faint suggestions of paler centers and darker lunules on those parts, while the upper parts average much lighter brown, less fuscous; the feet are like those of the male. These variations show a decided approach toward *S. n. toddi* of the Río Tapajoz, of which five skins from the Serra

de Parintins, across the Amazon from Obidos, west of the Tapajoz, seem to be fairly typical. The males of this form are quite decidedly lunulated beneath, including even the median under parts; the females have the ochraceous sides of throat, breast, and flanks more broadly extended toward the median line, while above they are dark Olive Brown instead of dark Fuscous. The feet are like those of the Rosarinho birds. A nearly adult male from Matto Grosso is less strongly marked than the Rosarinho birds and has the feet again clearer yellow, being in all respects closer to typical *argentata* than the Madeira specimens.

Beyond Ecuador, to the northeastward, several skins from the Río Cassiquiare, in Venezuela, again depart from the normal coloration of *argentata* in much the same way as do the Rio Madeira birds, though the measurements are like those of typical *argentata* and the color of the feet remains bright yellow. The males have the color of the lateral under parts darkened, with traces of lunulate markings, and the females are dark Olive Brown above instead of fuscous. Curiously, the approach seems to be in the direction of *naevia* rather than toward *diaphora* of the Caura Valley. Direct association with *toddi* is unreasonable since the species appears to be quite absent from the lower Rio Negro and the Jamundá by which route, otherwise, there could have been a connection.

The Rio Madeiran and Peruvian ranges are connected through the upper Purús and probably the Madre de Dios, the higher branches of which find their source in that part of Perú in which the species occurs.

SPECIMENS EXAMINED

S. n. naevia.—BRITISH GUIANA: Rockstone, Essequibo River, 1 "♀" = ♂. SURINAM: Paramaribo, 1 ♀. TRINIDAD: Princetown, 1 ♂, 4 ♀. VENEZUELA: "Venezuela," 1 ♂.

S. n. toddi.—BRAZIL: Serra de Parintins, 2 ♂, 3 ♀.

S. n. argentata.—PERÚ: Puerto Indiana (north bank of Amazon), 1 ♂, 5 ♀; Orosa (south bank of Amazon), 1 ♂; Lagarto, upper Ucayali, 1 ♂, 1 ♀; Santa Rosa, upper Ucayali, 1 ♀; Río Tavera, Carabaya district, 1 ♂. ECUADOR: mouth of Río Curaray, 2 ♂, 1 ♀; mouth of Lagarto Cocha, 1 ♀. BRAZIL: Rosarinho, Rio Madeira, 5 ♂, 3 ♀; Barão Melgaço, Matto Grosso, 1 ♂. VENEZUELA: Río Cassiquiare, Mery (left bank), 1 ♂, 2 ♀; opposite Mery (right bank), 1 ♂.

NOTES ON THE GENUS *Pyriglena*

In studying the Peruvian members of the genus *Pyriglena* it became necessary to examine the forms found in other parts of South America with a view to determining their interrelationship. A number of interesting facts have thus come to light which it may be well to record, including the recognition of a new subspecies from the state of Pernam-

buco, Brazil, and one from the Tapajoz. The following notes are in discussion of the various observations.

A study of the plumages of some of the forms of this species has given interesting results. Three plumages appear to be recognizable in each sex. The juvenal males are largely fuscous black without a definite white area concealed at the base of the mantle feathers. There is often more or less brown on the mantle and scapulars and on a subterminal band on the upper wing-coverts, especially the greater series. The first annual plumage is more like that of the adult, with the black and white of the mantle (or other parts) not so sharply defined nor so clear, and with occasional traces of brown still remaining in some cases. The wings and tail are those of the juvenal plumage. The adults need no description here except the remark that the "colors" are sharp and clear.

Young females are not at hand in sufficient numbers to give many details, besides which the subspecific differences are such as to make a detailed statement necessary for each form. The juvenals may or may not be separable from the males of corresponding age, but probably they average browner. Females in first annual plumage resemble adult females in general aspect, except that the colors are duller and the white of the mantle, when present, less clear and sharply defined, while wing and tail are those of the juvenal plumage.

Textures vary, as is to be expected, from the extremely loose and fluffy plumage of the juvenals to the firmer, stiffer feathers of the adult, with the first annuals occupying a median position.

A further character of considerable value in distinguishing both sexes in first annual plumage from those in adult dress is the comparative size and shape of the outermost primary-coverts. In the juvenal wing, which persists through the first annual stage, the obvious outermost covert (the tenth, counting from within) is relatively broad and rounded at the tip and more or less of the same length as the ninth, sometimes being a little longer but often shorter and never longer than the eighth. In fully adult birds the tenth covert is slender, acute at the tip, stiffened, distinctly longer than the ninth, and slightly longer than the eighth.

During the examination of the primary-coverts, the interesting discovery was made that a remicle, or eleventh primary, is of irregular occurrence in this species. It occurs apparently in all the subspecies but not in all the individuals and, when present, is variable in size up to nearly the length of the outermost obvious primary-covert which does not, however, belong to it. The covert of the remicle is exceedingly small. Gadow, in his table of the families of birds with reference to the

development of the primaries, places the Formicariidae in the group in which this feather is not developed. Evidently the occurrence is exceptional. In a hasty glance at several allied genera, I have been unable to discover a similar development though it is a matter for which a closer watch should be kept in the future.

A series of males of *leucoptera* taken in Bahia in January, May, June, July, August, and September, shows a young bird in early post-juvenal molt on June 19 and another in nearly complete first annual plumage on the same date; June 21 and July 11 show birds in first annual molt which the age of the preceding juvenal specimens would suggest is a post-nuptial molt. April 11 and 15 give birds also in first annual molt though from a different area in the range of the form (vicinity of Rio).

In *castanoptera*, a series of females gives a fairly good idea of the general trend of the molts. The juvenal females are quite fluffy and dull blackish or brownish on head, upper tail-coverts, and under parts, dull brown on the back with no suggestion of white at the bases of the mantle feathers; first annual specimens have more blackish head and under parts and a lighter brown back, with more or less white concealed and with traces of a dusky area between the whitish bases and brown tips, not so clear as in the adults.

In an Ecuadorian series, a juvenal bird taken January 21 has the first trace of post-juvenal molt. A November 11 bird is in first annual plumage with the beginnings of the first annual molt. Two birds, dated January 22 and 24, are nearly fully adult including new wings and tail. An August 5 bird is fully adult. An adult January male had enlarged testicles.

A Colombian series indicates somewhat later dates for the corresponding stages. May 14 and 19 show the beginnings of the post-juvenal molt and May 13 a more developed stage of the same, while May 14 shows a well-advanced stage of the first annual molt. Adult males of May and June are marked as having enlarged testicles.

A March female of *castanoptera* has the ovaries slightly enlarged and is just completing a molt of the rectrices; the wing is just beginning a molt; the body plumage is fresh. A May 23 adult female is in full molt (apparently post-nuptial?). A February male from the locality of the March female is in advanced annual molt and is labeled as with testicles much enlarged. A March male from the same place is farther advanced, with testicles only slightly enlarged. These data again point to the molt being post-nuptial. A third female from another locality in

Perú, dated August 27, is apparently in first annual plumage, with traces of the juvenal on the occiput and with wing and tail complete and still juvenal. The concealed patch on the mantle is only a little duller than in the adult bird. The March female is not unlike this specimen in many particulars and differs principally by reason of the wing which shows the characters of the adult in one, of the immature in the other.

In *picea*, two adult males of May 7 and May 14, respectively, are labeled as with enlarged testicles and are near the end of an annual molt. A young male of May 3 is in its first annual molt, with numerous brown feathers of the first annual plumage still in place on the back and lower under parts and with some of the new black mantle feathers marked by faint brownish tips. Since I have no males of *picea* in full first annual plumage for comparison, I am unable to say whether or not brown feathering is a character of that plumage of the males in this form or whether this specimen is gynandromorphic.

The general conclusions reached from a study of all the material is that the time of the post-nuptial molt of the adults corresponds fairly closely with that of the post-juvenal and first annual molts of the young. The post-juvenal molt apparently is complete for the body plumage but does not affect the wings and tail. The first annual plumage is then worn until after the following breeding season when the first annual molt occurs, and the succeeding annual post-nuptial molts take care of the following regular changes of plumage.

***Pyriglena leucoptera leucoptera* (Vieillot)**

Turdus leucopterus VIEILLOT, 1818, 'Nouv. Dict. Hist. Nat.,' nouv. éd., XX, p. 272—"Brésil" = neighborhood of Rio de Janeiro; cotypes in Paris Mus.

A good series of the present form is at hand from numerous localities in the states of Rio de Janeiro, Santa Catharina, southern Matto Grosso, Espirito Santo, São Paulo, Paraná, Minas Geraes, and north-central to south-central Bahia, Brazil, and from Misiones, Argentina. All the males have the white shoulder and white wing-bars that define this form, but not in perfectly uniform degree. Specimens from the northern part of central Bahia (Jaguarary, Ituassú, and Baixão, and two "Bahia" trade-skins) have the outer margin of the alula broadly white, forming a white stripe connecting the shoulder-patch and the lower wing band, but this stripe is entirely lacking in all but one of twenty-seven males from more southern localities; the exception is one of the males from Guayra, Paraná, in which the character is developed noticeably less strongly than in the birds from northern Bahia. Nevertheless,

Hellmayr (Abh. K. Bayer. Akad. Wiss., II Kl., XXII, (3), p. 621, 1905) describes males from Rio and São Paulo as having a white border on the alula and outer primary-covert, so it is possible that the absence of this character in the birds at hand from those regions is purely incidental. The females show no definite characters. If a separable form should prove to be distinguishable from northern Bahia, Lichtenstein's *Lanius domicella* from Bahia would have to be examined as well as Swainson's *Drymophila trifasciata* from "S. Brazil," the figure of which latter bird shows the white border on the alula.

In other particulars the variations are without regard to locality. The width of the wing-bands is quite variable and the lower band is sometimes relatively narrow; in young birds it is sometimes reduced to a series of small whitish spots. The white shoulder-patch is frequently invaded by blackish areas on the feathers between the bases, and the tips and the gray bases may also be much widened so as to reduce the extent of white. Taken in conjunction with the fact that white markings sometimes appear on the shoulders of *P. l. marcapatensis* and *P. l. leuconota*, as detailed thereunder, and that there is very close approximation between the females of *leucoptera* and *P. l. pacifica*, except for the white interscapular patch of *pacifica* (a most variable character in the Formicariidae), the evidence points strongly to the specific unity of *leucoptera* and the members of *leuconota* group, and I have so considered the species.

The females have the upper part of the grayish lores slightly paler than the lower portion and separated from the rufous crown by a barely indicated dusky line. The pattern suggests the strongly marked superciliary stripe of *maura* which, in that form, is not quite uniformly developed. The rufescence of the upper parts in the females of *leucoptera* also is slightly variable.

The record from southern Matto Grosso ("Campanario, São Francisco Ranch") constitutes an extension of the known range of this form as do the records from northern Bahia.

Probably *P. atra*, which seems to be confined to the immediate environs of the city of Pará, should be treated as a subspecies of *leucoptera*. Its range is confined to the coast or coastal forests, so far as known, but is surrounded on three sides by that of *leucoptera* which does not conflict with it. Unfortunately no specimens of *atra* are available for comparative study.

***Pyriglena leucoptera leuconota* (Spix)**

Myiothera leuconota SPIX, 1824, 'Av. Bras.,' I, p. 72, Pl. LXXII, fig. 2—Pará; ♀; Munich Mus.

Specimens from eastern Pará and Maranhão seem to be relatively uniform in color and size and to belong to the present subspecies. Examples from eastern Pernambuco, however, are recognizably distinct in both particulars and in view of their apparently quite unconnected distribution may well be separated as a distinct subspecies, which is described hereunder.

One male from Utinga and one from Cametá show quite pronounced white markings on the outer scapulars and, in the Utinga specimen, also on the lesser upper wing-coverts. The other males are without such white. The variation seems to be pointedly in the direction of *leucoptera*.

***Pyriglena leucoptera pernambucensis*, new subspecies**

TYPE from Brejão, Pernambuco, Brazil; altitude 2500 feet. No. 243,131, American Museum of Natural History. Adult female collected February 11, 1927, by E. Kaempfer; original number 4387.

DIAGNOSIS.—Nearest to *P. l. leuconota* but with a longer tail. Females distinctly darker than those of *leuconota*, less reddish brown above, with the blackish subterminal border of the mantle feathers more pronounced and more sharply defined from the white bases, with a noticeable tendency to extend basally along the shafts in a small point; upper and under tail-coverts more sooty; ear-coverts darker; under parts decidedly darker and more grayish, less ochraceous, being nearer the color of *leucoptera* though slightly more buffy; bill slightly darker. Males colored very like *leuconota* but with the black tips of the feathers of the mantle frequently tending to extend basally along the shafts in a small point, not crossing the shafts so straightly as in *leuconota*; bill black to the tip.

RANGE.—Eastern portion of the state of Pernambuco, Brazil.

DESCRIPTION OF TYPE.—Exposed portions of the plumage of the upper back Prout's Brown; top of the head inclined toward Auburn with a more or less distinct central (concealed) area of more dusky brown; mantle with a large, concealed patch of white occupying most of the feathers and separated from the brown tips by a blackish band, graduated into the color of the tips but sharply defined from the white area; this black band extends slightly basad in a point along the shaft; lower back darker and duller brown, which passes into sooty black on the upper tail-coverts. Lores Deep Mouse Gray, more dusky on the lower portion, paler on the upper portion and continued posteriorly over the orbit to past its middle and separated from the crown by an obscure dusky line; forehead also tinged with dull gray; auriculars slightly duller than the crown and with a buffy line on the lower edge posteriorly; malar region light smoky gray. Chin rather broadly whitish, passing into pale, dull Cinnamon-Buff on the throat; sides of throat and breast broadly Buffy Brown x Saccardo's Umber, becoming deeper on the upper flanks and Mummy Brown on the lower flanks, leaving a narrow and ill-defined median area on the belly of a paler and more buffy tint; under tail-coverts brownish black, strongly tinged with Sepia

on the basal feathers. Exposed surface of wings a little brighter than the back; remiges otherwise fuscous; bend of wing and under wing-coverts Light Brownish Olive; tail black. Wing, 74 mm., tail, 68; exposed culmen, 17; culmen from base, 22; tarsus, 29.

REMARKS.—Male entirely black, except for a broad, concealed patch of white on the mantle, occupying most of the feathers and with the line of demarcation from the black tips sharply defined and tending to extend basad along the shaft in a small point; black tips relatively narrow as in *leuconota* and *leucoptera*. Males: wing, 79–82 mm. (av., 80.6); tail, 73–78.5 (av., 75.4); exposed culmen, 15–18 (av., 16.9); culmen from base, 21–23 (av., 21.9); tarsus, 29–31.5 (av., 30). Females (type and paratypes): wing, 74–77 mm. (av., 75); tail, 68–72 (av., 70.1); exposed culmen, 17–18 (av., 17.7); culmen from base, 22; tarsus, 28.5–29 (av., 28.7).

I am unable to see any difference in the size of the bill of this form and that of *leuconota* as indicated by Hellmayr (Abh. K. Bayer. Akad. Wiss., II Kl., XXII, (3), p. 623, 1905). Measurements of *leuconota* in the series at hand show the following figures. Males: wing, 76.5–81 mm. (av., 78); tail, 65.5–71.5 (av., 68.6); culmen from base, 21–22 (av., 21.4). Females: wing, 69–75 mm. (av., 72); tail, 62.5–67.5 (av., 64.3); culmen from base, 20.5–23 (av., 21.6). The length of the tail appears to be constantly different in the two forms and furnishes the best guide for the separation of the males.

The approach shown by the females toward *leucoptera*, in the coloration of the under surface, no doubt is significant in view of the relationship which is demonstrated in some of the other subspecies, as indicated elsewhere.

Pyriglena leucoptera similis, new subspecies

TYPE from Caxiricatuba, Rio Tapajoz (right bank), Brazil. No. 248,847, American Museum of Natural History. Adult female collected May 20, 1931, by A. M. Olalla.

DIAGNOSIS.—Strikingly similar to *P. l. picea* of central Perú from which it is separated geographically by a wide range of country. Males inseparable from those of *P. l. leuconota* of Pará and distinguishable from those of *P. l. picea* by a harder, glossier plumage and possibly longer bill; the feathers of the chin seem to be more blackish at the base. The female of *similis* is more brightly rufescent on the under parts, especially laterally, and somewhat paler rufescent on the upper parts; the blackish head and throat appear to be more sharply defined from the rufous of the breast and back as described below.

RANGE.—Lower Amazonia east of the Rio Tapajoz, not extending eastward farther than the Tocantins and possibly not so far (region between the Xingú and the Tapajoz uncertain).

DESCRIPTION OF TYPE.—Head all around to crown, superciliary region, posterior auriculars, and lower throat blackish; middle of crown to hind neck, sides of neck, and lower border of throat browner with blackish tips, forming a transitional area in which the amount of rufous increases from crown to nape and the width of the black tips decreases. (In *P. l. picea* the transition takes place by a different method. The tips of the feathers are rufous and the subterminal portion blackish, and the width of the rufous tips increases from crown to nape until the blackish portion of the feathers is entirely concealed. The transition thus appears more abrupt in *similis* than in *picea*.) Back and rump Argus Brown with a tinge of Auburn; mantle with a concealed patch of white at the bases of the feathers, separated from the rufous brown tips by an ill-defined dusky area; upper tail-coverts blackish, tipped with Prout's Brown; breast Argus Brown x Brussels Brown, with traces of blackish tips, becoming slightly paler and duller, approaching Saccardo's Umber, on the mid-line of the belly; sides of breast and flanks somewhat brighter and more reddish than Argus Brown. Wings Fuscous Black with exposed surfaces dark Auburn; under wing-coverts paler, mostly like the breast but the series at the base of the primaries grayish; inner margin of quills Drab-Gray; tail black with outer margins at base slightly brownish; outermost rectrix with a fine, white, terminal speck. Maxilla blackish (in dried skin); mandible whitish; feet brownish black. Wing, 78 mm.; tail, 78; exposed culmen, 16.5; culmen from base, 20; tarsus, 29.25.

REMARKS.—Males moderately glossy black with a sharply defined patch of white concealed at the bases of the mantle feathers. One of the adult males has a large amount of white at the bases of the scapulars, the inner upper wing-coverts of all three series, and even the innermost tertial.

A young male from Piquituba, taken May 23, apparently is passing from juvenal into first annual plumage. It is largely Sooty Black on head and mantle, nearer Dark Quaker Drab on rump and under parts. The apparently juvenal feathers of the mantle are without white, whereas the newly arriving feathers of the first annual plumage have distinct whitish sub-basal areas which are, however, distinctly less pure and less sharply defined than the white of the mantle feathers of fully adult birds; the new feathers also are deeper black at the tips than the juvenal ones and, quite naturally, somewhat more compact in texture, while compared with fully adult plumage they are less deeply black and a very little looser in texture. The tail feathers are all still in the sheaths though fully grown; the remiges have lost the remains of the sheaths.

A somewhat older male from Caxiricatuba, taken May 5, is leaving the first annual plumage for the adult and is labeled as having the testicles enlarged. Wings and tail have not been molted; the forehead is adult but the rest of the top of the head is just beginning the molt; the mantle shows many clear black and white feathers, including several in process of growth, with a number of the duller first annual feathers still in place;

the lower back is dull; the under surface is advanced in molt anteriorly, beginning the molt posteriorly.

***Pyriglena leucoptera maura* (Ménétrières)**

Formicivora maura MÉNÉTRIÈRES, 1835, Mém. Acad. Sci. St. Pétersb., (6), III, pt. 2 (Sci. Nat.), p. 506, Pl. VII, fig. 1—"Minas Geraës," errore = Matto Grosso (Hellmayr, 1924); ♂; Leningrad Mus.

Five males and four females from Urucum and Tapirapoan, Matto Grosso, represent this subspecies in the collection. The females have the tips of the upper wing-coverts slightly paler than the remainder, suggesting, in an obscure manner, the wing pattern of the males of *leucoptera*; the males have their plumage somewhat softer than that of *leuconota* and *hellmayri*, with suggestions of glossy margins on the feathers of a different nuance, giving a slightly different appearance to the plumage in certain lights. The black margins on the mantle are rather wider than in *leuconota* and less sharply defined from the white base, due to a tendency for the black to become brownish at the line of demarcation, while in *leuconota* it remains black to the very edge.

No definite differences in size are observable between *maura* and *leuconota*.

The Tapirapoan specimens seem to be equivocal and could be referred to *hellmayri* about as satisfactorily as to *maura*. The male is not fully adult, but such adult plumage as it has is of the harder texture of *hellmayri*; the measurements are equivocal. The female is very distinctly lighter in color than those from Urucum; the back and flanks are more olivaceous brown, and the general color of the under surface is much paler buff and less deep ochraceous. Above the eye, the superciliary stripe is buff instead of white and there is less of a whitish tinge below the eye. The measurements agree better with those of *maura* than with those recorded for *hellmayri*, of which I have no females.

However, Hellmayr has assigned a series of specimens from Engenho do Cap. Gama to *maura*, and Tapirapoan is between that locality and Urucum, so the Tapirapoan specimens must be called *maura*, at least until a larger series from that locality is at hand for study.

***Pyriglena leucoptera hellmayri* Stolzmann and Domaniewski**

Pyriglena leuconota hellmayri STOLZMANN AND DOMANIEWSKI, 1918, Compt. Rend. Soc. Sci. Varsovie, XI, fasc. 2, pp. 179, 184—Chulumani, Yungas, western Bolivia; Warsaw Mus.

Four males are at hand, three from Vermejo and one from Mapiri, Bolivia, but no females. The males are not clearly separable from those

of *marcapatensis*, except by slightly shorter bill, but the tail is usually longer than that of *maura* and the texture of the plumage is slightly "harder," as exhibited by the series at hand.

***Pyriglena leucoptera marcapatensis* Stolzmann and Domaniewski**

Pyriglena leuconota marcapatensis STOLZMANN AND DOMANIEWSKI, 1918, Compt. Rend. Soc. Sci. Varsovie, XI, fasc. 2, pp. 180, 185—Huaynapata, Marcapata, southeastern Perú; ♀; Warsaw Mus.

Two females from the Carabaya district of southeastern Perú agree well with the description of this subspecies, as do three males from the same region.

One of the females (from Santo Domingo) is a little less rufescent than the other (from the Río Távára); the upper parts are more yellowish brown, the under parts more ochraceous, including the auriculars; the chin is more extensively white, the white subocular lunule is more pronounced, and the posterior part of the superciliary stripe is whiter, less buffy. These features show a variation in the direction of *maura* of western Matto Grosso, Brazil, from which the Santo Domingo bird is separable principally by a generally darker coloration.

A Río Távára male has quite distinct, though small, white markings on the lesser upper wing-coverts at the radial margin of the wing. This, as in the case of *leuconota*, apparently indicates the close relationship of *leucoptera*.

***Pyriglena leucoptera picea* Cabanis**

Pyriglena picea CABANIS, 1847, Arch. Naturg., XIII, (1), p. 212—Peru = Chanchamayo (Hellmayr, 1920); ♂; Neuchâtel Mus.

The present form is known definitely only from the subtropical zone of the highlands in the Junín region. Collected there first by Tschudi, it was found subsequently by Jelski and Kalinowski, and six skins from Tulumayo, Chelpes, and Utcuyacu, collected by Watkins, add other records to the list from the same general region.

To the northward, south of the Marañón, only two specimens have been taken and both of these are males—one from Nuevo Loreto and one from Vista Alegre. Beyond the Marañón, as will be detailed below, *castanoptera* replaces *picea*, still in the subtropical zone, and continues northward into eastern Ecuador and Colombia. The males of this form are indistinguishable from those of *picea* and the question thus arises as to whether the Nuevo Loreto and Vista Alegre birds represent *picea*, *castanoptera*, or some unknown form, intermediate or not between these two. Judging by the distribution of various other Peruvian birds, and

by the distinctly restricted ranges inhabited by most of the forms of the present species, it is probable that the birds from the Huallaga Valley either are *picea* or some unknown race and are not *castanoptera*. Until females are taken in the Huallaga drainage, it will be impossible to settle the status of that form with any greater certainty.

A young male from Tulumayo, taken on May 25, 1921, shows the immature plumage of that sex to be largely black, though with a brownish tone and with brownish tips on the greater upper wing-coverts, and with no more than a suggestion of the white interscapular patch. Another male from Chelpes, taken on May 3, has acquired more of the adult plumage, but the remains of the immature plumage are decidedly more rufescent than in the Tulumayo bird, and some of the newly acquired black feathers of the back have slight suggestions of the same rufescent tone at the extreme tips.

***Pyriglena leucoptera castanoptera* Chubb**

Pyriglena castanoptera CHUBB, 1916 (Febr.), Bull. Brit. Orn. Club, XXXVI, p. 47—"Braza" = Baeza, e. Ecuador, 6000 ft.; ♀; British Mus.

Two females from Santa Rosa (near Tutumberos), 6100 ft., and two males and a female from Chaupe (near San Ignacio), 3900 ft., show that the range of *castanoptera* extends southward into Perú. Comparison of these birds with others from southeastern Colombia and eastern Ecuador shows very close agreement throughout this entire area. A certain amount of variation is exhibited by the females in the matter of the presence or absence of a rufescent brown suffusion on the lower flanks, but it is shown in all parts of the entire range and apparently is without taxonomic significance.

***Pyriglena leucoptera pacifica* Chapman**

Pyriglena pacifica CHAPMAN, 1923 (April), Amer. Mus. Novit., No. 67, p. 6—Puente de Chimbo, western Ecuador; ♀; Amer. Mus. Nat. Hist.

The extremely close resemblance between the females of this most northwesterly form and those of *leucoptera*, the most southeasterly form, probably is significant. It is possible to pick out specimens that, viewed from below, are startlingly like the females of *leucoptera*, with the throat less whitish and more grayish olive but with no other features of note. Above, *leucoptera* females are usually distinctly more rufescent (though extremes are not so decidedly marked) while the absence of a white interscapular patch in the southeast-Brazilian form furnishes a safe guide for the separation of the two subspecies.

The males of *leucoptera* have the white shoulder and white wing-bands; males of *pacifica* have the inner margins of the remiges and an occasional area on the under wing-coverts white. The measurements, which vary in the forms that occupy the intervening regions, are not widely different in these two.

On the theory that the peripheral forms not uncommonly represent the least modified survivals of the original species while the forms occupying the intervening area are the survivors of those individuals whose ability to vary allowed them to remain more stationary, this similarity between *pacifica* and *leucoptera* becomes significant. In any case this resemblance must be taken into consideration in viewing the specific relationship of the various members of the group.

SPECIMENS EXAMINED

P. l. leucoptera.—BRAZIL: (Rio) Therezopolis, Organ Mts., 1 ♂; Ponte Maromba, Serra do Itatiaya, 2 ♂, 1 ♀; Monte Serrat, Itatiaya, 1 ♂; (Santa Catharina) Palmital, 3 ♂, 1 ♀; Joinville, 1 ♂, 4 ♀; (Matto Grosso) Campanario, 1 ♂; (Espírito Santo) Lagoa Juparanã, 2 ♂; (São Paulo) Alto da Serra, 1 ♂; (Paraná) Foz de Iguaçu, 1 ♂, 1 ♀; Guayra, 5 ♂, 2 ♀; Porto Britania, 2 ♂; Porto Mendes, 1 ♂; (Minas Geraes) São Benedicto, 1 ♂; Resplendor, Rio Doce, 1 ♂; (Bahia) Cajaseiros, Rio Grungogy, 4 ♂, 4 ♀; Jaguaquara (= Jaguarary?), 1 ♂; Itirussú (= Ituassú), 2 ♂, 1 ♀; Baixão, 2 ♂, 1 ♀; "Bahia," 2 (♂). ARGENTINA: (Misiones) Puerto Segundo, 1 ♂.

P. l. pernambucensis.—BRAZIL: (Pernambuco) Brejão, 7 ♂, 3 ♀ (incl. type).

P. l. similis.—BRAZIL: Caxiricatuba, Rio Tapajoz (right bank), 3 ♂, 1 ♀ (type); Piquiatuba, 1 ♂.

P. l. leuconota.—BRAZIL: (Pará) Utinga, 2 ♂, 2 ♀; Cametá, 1 ♂; Mocajutuba, 1 ♂; (Maranhão) Rosario, 1 ♀.

P. l. maura.—BRAZIL: (Matto Grosso) Urucum, 4 ♂, 3 ♀; Tapirapoan, 1 ♂.

P. l. hellmayri.—BOLIVIA: Vermejo, 3 ♂; Mapiri, 1 (♂).

P. l. marcapatensis.—PERÚ: Río Távvara, 1 ♂, 1 ♀; Santo Domingo, 2 ♂, 1 ♀.

P. l. picea.—PERÚ: Tulumayo, Dept. Junín, 3 ♂; Chelpes, 1 ♂, 1 ♀; Uteuyacu, 1 ♀; Vista Alegre, Dept. Huánuco, 1 ♂.¹

P. l. castanoptera.—PERÚ: Chaupe, 2 ♂, 1 ♀; Santa Rosa, middle Marañón Valley, 2 ♀. ECUADOR: Oyacachi, 3 ♂, 3 ♀; lower Sumaco, 1 ♂, 1 ♀; Sabanilla, 1 ♀. COLOMBIA: Andalucia, Huila, 1 ♂, 1 ♀; La Candela, 1 ♀ (immature).

P. l. pacifica.—ECUADOR: Chimbo, 1 ♀ (type); Esmeraldas, 2 ♂, 2 ♀; Naranjo, Prov. Guayas, 4 ♂, 1 ♀; La Puente, Prov. del Oro, 1 ♂, 2 ♀; Bucay, 1 ♂, 1 ♀; Alamor, 1 ♂; Cebollal, 1 ♀.

Pithys albifrons peruviana Taczanowski

Pithys albifrons, peruviana TACZANOWSKI, 1884, 'Orn. Pérou,' II, p. 73—Monterico, Amable Maria, Chayavetas; type from Monterico, formerly in Warsaw Mus., now lost.

Thirteen Peruvian skins seem all to be referable to the same form and, so far as the adults are concerned, are mostly recognizably distinct

¹Specimen in Field Museum of Natural History, Chicago.

from *P. a. brevibarba*. Specimens with uncompleted molt have the gular plumes (and crest) shorter than in the others and suggesting the style of *brevibarba*, but the lower throat is usually blacker and in fully developed individuals is less exposed.

A male of *brevibarba* from Tahuapunto, Rio Uaupés, Brazil, is interesting as showing the white postocular line of *albifrons*. In skins from Tatú, at the mouth of the Uaupés, there is an occasional trace of white on one or two feathers in the postocular region, but the birds are distinctly closer to *brevibarba* than to *albifrons*.

The occurrence of *brevibarba* on the Napo at the mouth of the Río Curaray makes it almost certain that it will be found at the mouth of the Napo in Perú, but at present there are no specimens to substantiate this belief.

SPECIMENS EXAMINED

P. a. albifrons.—FRENCH GUIANA, 1 ad., 1 juv. BRITISH GUIANA: Potaro Landing, 3♂, 3♀, 1 juv.; Essequibo R., 1(?); Rockstone, 1♂, 1♀; Minnehaha Creek, 2♂; Tumatumari, 1♂, 1♀; Kamakusa, 1♂, 2♀, 1(?). VENEZUELA: Caño Seco, Mt. Duida, 8♂, 5♀; Boca de Sina, upper Orinoco, 4♂, 2♀; Suapuré, 2♂; El Llageral, 1♂. BRAZIL: Faro, 4♂, 2♀; Obidos, 1♂, 1♀.

P. a. brevibarba.—ECUADOR: lower Río Suno, 3♂ (incl. type); Río Suno, above Avila, 1♂; Napo, 4(?); mouth of Río Curaray, 1♂. COLOMBIA: Río Guatequia, Bogotá region, 1(?). BRAZIL: Tatú, Rio Negro, 5♂, 4♀, 1(?); Tahuapunto, Rio Uaupés, 1♂.

P. a. peruviana.—PERÚ: Santa Rosa, upper Ucayali, 2♂; Río Seco, 30 miles west of Moyobamba, 6♂, 2♀, 1(?); Pomará, lower Río Marañón, 1♂, 1♀; Puerto Bermúdez, Río Pichis, 1♂, 1♀.¹

Drymophila caudata caudata (Sclater)

Formicivora caudata SCLATER, "1854" (=Jan. 1855), P. Z. S. London, XXII, p. 254, Pl. LXXIV—Bogotá; cotypes in British Mus.

Drymophila caudata peruviana DOMANIEWSKI AND STOLZMANN, 1922, Discipl. Biol. Arch. Soc. Scient. Varsov., I, No. 8, p. 3—Garita del Sol, Junín, Perú.

Two skins from Junín and three from northern Perú (Chaupe) have been compared with twenty specimens from Colombia and Ecuador without finding any basis for the recognition of *D. c. peruviana*, either on the characters given by the authors or on any others.

A male from Santa Elena, Colombia, approaches *hellmayri* of the Santa Marta region by having the middle of the occiput and nape without white margins.

¹Specimens in Field Museum of Natural History, Chicago.

SPECIMENS EXAMINED

D. c. caudata.—COLOMBIA: Cocal, 1♂, 1(?) ; Gallera, 1♂ ; Sabanalarga, 1 (♂) ; Santa Elena, 3♂, 1♀ ; El Eden, 1♀ ; El Roble, 1(♂) ; above Salento, 1♂ (type of *D. c. striaticeps* Chapman). ECUADOR: Baeza, 2♂, 1♀ ; below Mindo, 1♂, 1♀ ; upper Sumaco, 4♂, 1♀. PERÚ: Chelpes, Junín, 1♂, 1(♂) ; Chaupe, 2♂, 1(♀).

D. c. hellmayri.—COLOMBIA: Minca, Santa Marta, 1(♀).

D. c. klagesi.—VENEZUELA: Cotiza, 1♂, 1♀.

***Drymophila devillei devillei* (Ménégaux and Hellmayr)**

Formicivora devillei MÉNÉGAUX AND HELLMAYR, 1906, Bull. Soc. Philom. Paris, (9), VIII, p. 38—"n. e. Perú [Pebas or Nauta]" = Prov. Cuzco, s. e. Perú.

A single specimen from the upper Ucayali, six birds from eastern Ecuador, and eight from Bolivia show very little variation among themselves. The intensity of the rufous color of the rump and of the ochraceous color of the flanks varies without regard to locality. Possibly Ecuadorian males have an average of slightly broader white markings above, but it is almost unrecognizable. The Ecuadorian and Peruvian birds seem to have somewhat shorter tails and smaller bills than the Bolivian examples and a larger series might show a recognizable difference in these particulars, but since some of the northern specimens have the tails in molt, the evidence in that respect is not conclusive. The Ucayali bird in any case is more or less intermediate.

SPECIMENS EXAMINED

D. d. devillei.—BOLIVIA: Jatumpampa, 1♂ (type of *D. phantatis* Cherrie) ; Mission San Antonio, Río Chimoré, 4♂, 3♀. PERÚ: Lagarto, upper Ucayali, 1♂. ECUADOR: below San José, 3♂ ; Río Suno, above Avila, 2♂ ; mouth of Río Curaray, 1♂.

D. d. subochracea.—BRAZIL: Rio Curuá, 1♀.

***Liosceles thoracicus erithacus* Selater**

Liosceles erithacus SCLATER, 1890, 'Cat. B. Brit. Mus.,' XV, p. 344—Sarayacu, w. (=e.) Ecuador; cotypes in British Mus., and one in Amer. Mus. Nat. Hist.

Eleven specimens of this species are at hand from eastern Ecuador and eastern Perú, including a cotype of *erithacus*, and ten from the east bank of the Rio Madeira and the south bank of the Amazon, opposite Obidos in Brazil. The Brazilian birds presumably represent typical *thoracicus* which was described from the left bank of the Madeira. The Peruvian and Ecuadorian birds are somewhat different and substantiate the validity of Selater's *erithacus* though on somewhat different grounds than those given by the describer.

The cotype apparently lacks any yellow on the breast, but the skin is prepared with the pectoral area foreshortened and there is actually

considerable yellow on the subterminal portions of the feathers, which is concealed by the overlapping webs. If this skin had the head and neck outstretched as do the other specimens at hand, it would show no difference from some of the others in respect to the extent and tint of this coloration.

On comparing the Ecuadorian and Peruvian birds with the Brazilian skins, there is a quite noticeable difference in the tone of yellow but not always in its extent. The Brazilian *thoracicus* has the yellow more intense, varying from Citron Yellow to near Pale Lemon Yellow; in *erithacus* from Perú and Ecuador, the yellow is lighter, from Primrose Yellow to Barium Yellow. In series, the difference is pronounced. Furthermore, *thoracicus* sometimes has the throat and even the sides of the neck strongly tinged with yellow though not always. The brown pectoral patch is paler in *erithacus* and averages more extensive; the flanks average less rufescent and more sooty; the upper parts average very slightly grayer and less clear rufescent. There is no apparent difference in size. The cotype tends to invalidate the degree of rufescence, however, since it is more intensely marked than any other of either series, but as it is nearly fifty years older than the others it can not be accepted without some allowance for foxing.

The specimens of *erithacus* which show an unusual reduction in the amount of yellow on the breast have the brown patch reduced even more. An immature male from Orosa, Perú, and a more adult male from the mouth of the Río Curaray, Ecuador, have very little brown; the yellow is pale but is as extensive as in most of the other skins of this subspecies. The throat of the immature bird and the pectoral feathers, also, are narrowly tipped with dusky; there are traces of the dusky tips on the breast and sides of the throat in various other skins, though they are lacking in most of them.

Curiously, a male from Borba shows no trace of yellow on the breast, while the brownish area is pale and much restricted. It looks very like the cotype of *erithacus* which, however, has more yellow than this specimen. The lores on the left side are brownish buff, on the right side whitish, and the wings and bill are the shortest of any in both series. Probably the specimen represents nothing more than a partially underdeveloped or abnormal individual. It is not quite fully adult, though the pectoral region appears to be in adult plumage, but there is no resemblance to the immature specimen of *erithacus*; a definitely immature skin of *thoracicus*, from Lago Andirá, has the yellow and brown patch of the adult very strongly developed.

SPECIMENS EXAMINED

L. t. thoracicus.—BRAZIL: Borba, 3 ♂, 1 ♀; Igarapé Auará, Rio Madeira, 1 ♂; Villa Bella Imperatriz, Lago Andirá, 4 ♂, 1 ♀.

L. t. erithacus.—ECUADOR: Sarayacu, 1(?) (cotype); mouth of Río Curaray, 1 ♂, 2 ♀; mouth of Lagarto Cocha, 2 ♀. PERÚ: Orosa, 1 ♂; Puerto Indiana, 1 ♂; Lagarto, upper Ucayali, 1 ♂; mouth of Río Urubamba, 1 ♂, 1 ♀; Puerto Bermúdez, Río Pichis, 1 ♂.¹

¹Specimen in Field Museum of Natural History, Chicago.