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STUDIES OF PERUVIAN BIRDS. NO. XXXVII¹

THE GENERA SUBLEGATUS, PHAEOMYIAS CAMPTOSTOMA, XANTHO-MYIAS, PHYLLOMYIAS, AND TYRANNISCUS

By John T. Zimmer

I am greatly indebted to Mr. Rodolphe de Schauensee and Mr. James Bond of the Academy of Natural Sciences of Philadelphia for the loan of certain material that has been of much service in the study of some of the species included in the present paper.

Names of colors are capitalized, as in former papers, when direct comparison has been made with Ridgway's "Color Standards and Color Nomenclature."

Sublegatus modestus modestus (Wied)

M(uscipeta) modesta WIED, 1831, Beitr. Naturg. Bras., III (2), p. 923—Camamú and Bahia, Brazil; type lost.

Elainea Wiedii Pelzeln, 1869, Orn. Bras., II, p. 390—new name for Muscipeta modesta Wied.

Phyllomyia modesta REINHARDT, 1870, Vidensk. Medd. Naturhist. Foren., p. 348— Paracatú and Lagôa Santa, Minas Geraës; cotypes in Copenhagen Mus.

Phyllomyias platyrhyncha Sclater and Salvin, 1873, Nomencl. Av. Neot., p. 159—Goyaz,

Brazil; ♀; British Mus.

? Sublegatus griseocularis Sclater and Salvin, 1876, P. Z. S. London, p. 17—part; Maranura, Urubamba, Perú; cotypes in British Mus.

The genus Sublegatus appears to be far from satisfactorily arranged at present and with nearly one hundred and fifty specimens at hand certain facts become apparent that necessitate revision of the genus.

In the first place, birds from Paraguay and Argentina may be distinguished from southeast-Brazilian examples with a fair degree of certainty and seem to be entitled to bear the name *brevirostris* (D'Orbigny and Lafresnaye, 1837, Mag. Zool., Cl. 2,

"Syn. Av.," p. 49—Corrientes, Argentina). Birds from Goyaz, Pernambuco, Bahia, and Piauhy, representing true modesta, are characterized, in this analysis, by a slightly warmer color of the upper parts, with the top of the head especially contrastingly browner than the back and with broader dark centers on the crest feathers, but more particularly by relatively dull wing-bars. On the other hand, brevirostris has the upper surface averaging a little more grayish or olive-grayish in tone, with the crest somewhat less strongly developed and often more broadly margined with the color of the back, while the wing-bars are sharply whitish. Worn examples of modestus may have the wing-bars faded to a resemblance of those of brevirostris, but in fresh examples the difference often is pronounced. brevirostris, also, the gray of the chest averages clearer and more sharply contrasted with the vellow of the belly while in modestus there usually is a more gradual transition, with the breast dull and somewhat flammulated with yellowish.

Specimens from Chapada, Matto Grosso, are somewhat intermediate although nine of eleven skins in the series from that locality are much closer to *modestus*. Two are nearer brevirostris. Of three Bolivian specimens, one each from Mizque and Mission San Antonio may be assigned readily to brevirostris while one from farther north, at Trinidad, Río Mamoré, is like the Chapada skins of modestus.

Peruvian specimens present a greater problem. Four birds from Santa Ana, Urubamba Valley, are in worn plumage and show the wing-bars rather more pronounced and whitish than do fresher specimens from eastern Brazil, but even in their

¹ Earlier papers in this series comprise American Museum Novitates, Nos. 500, 509, 523, 524, 538, 545, 558, 584, 646, 647, 668, 703, 728, 753, 756, 757, 785, 819, 860, 861, 862, 889, 893, 894, 917, 930, 962, 963, 994, 1042, 1042, 1044, 1045, 1066, 1095, and 1108.

abraded condition they agree better with *modestus* than with *brevirostris*. The wingbars are still a little clouded and not as clear white or yellowish white nor as broad as in either fresh or worn Argentine specimens. Furthermore, the breast is not clear grayish but dull, exactly like *modestus*, and the dark centers of the cap are broader than in most *brevirostris*.

On the other hand, a skin from Chuchurras is closer to *brevirostris* and is discussed below. The apparent conflict in distribution may have its explanation in a migratory movement of brevirostris and in support of this possibility, two birds, one from near Manaos, north of the Amazon, and the other from Santa Clara, south of it, may readily be matched by Argentine specimens. The Manaos and Santa Clara birds, the Mission San Antonio skin, and the two Chapada birds are dated in August; the Chuchurras specimen, July. The Argentine, Paraguayan, and (one) Bolivian (Mizque) specimens bear dates from September to April. It seems likely, therefore, that brevirostris migrates to the northward in winter and occurs at that time at some places within the range of *modestus* which, in turn, probably is resident where found. The Chuchurras bird, therefore, may go under the following heading.

Sublegatus modestus brevirostris (D'Orbigny and Lafresnaye)

M(uscipeta) brevirostris D'Orbigny and Lafresnaye, 1837, Mag. Zool., VII, Cl. 2, "Syn. Av." p. 49—Corrientes, rep. Argentina.

Av.," p. 49—Corrientes, rep. Argentina. E(laenia) brevirostris Tschudi, 1844 (May), Arch. Naturg., X (1), p. 274—Perú [? = Chanchamayo Valley]; Mus. Neuchâtel.

Sublegatus griseocularis Sclater and Salvin, 1876, P. Z. S. London, p. 17—part; Mendoza, Argentina; cotypes in British Mus.

Sublegatus frontalis Salvadori, 1897, Boll. Mus. Zool. Torino, XII, No. 292, p. 14—Caiza, se. Bolivia.

As noted above, a single specimen from Chuchurras, Perú, agrees with Argentine specimens better than with east-Brazilian and appears to be a migrant of brevirostris. The bird is molting into its first adult plumage and still retains some of the immature feathers on the outer part of the wing and on the tail but most of the upper wing-coverts are fresh and show the sharp,

clear tips of brevirostris. The top of the head has the dark centers of the feathers very narrow as in some Argentine specimens, and the sides of the head are relatively pale. The chest is not as clear grayish as in most brevirostris but has its match in the series of that form.

The allocation of Peruvian records is difficult. Tschudi's "Elaenia brevirostris" appears to be a synonym of D'Orbigny and Lafresnaye's earlier "Muscipeta brevirostris" though independently described. Taczanowski's characterization of Tschudi's type (or a cotype) as having the throat and chest almost white medially and the wingbars three in number and broadly white applies best to brevirostris.

Sclater and Salvin's "Sublegatus griseocularis" was published almost without description, being based on two specimens from Maranura, Perú, and two from Mendoza, Argentina, with one of the Mendoza skins bearing a label with the unpublished name adopted by these authors. Taczanowski, however, described one of the Maranura specimens in some detail as having the breast grayish and the two wing-bars pale gray, and he kept "griseocularis" both specifically and generically distinct from Tschudi's brevirostris! The Maranura specimen thus may have been like the Santa Ana birds at hand, referable to modestus.

Berlepsch and Stolzmann record a female from La Merced with a tail so long (66 mm.) that I suspect the specimen in question belongs to a new form of S. glaber described on a later page.

These are all the Peruvian records in the genus *Sublegatus*, representing, apparently, three different forms.

Certain Peruvian specimens, from Río Tavara, Perené, and Santa Rosa, are neither modestus nor brevirostris but are more closely allied to obscurior. On account of the complexity of distribution in southern Perú, I think it best to consider obscurior and its affines as specifically distinct from the modestus group. Both in distribution and taxonomic details, obscurior shows affinity to glaber and arenarum and in the arrangement proposed

here a glaber group may be recognized for the forms mentioned.

It must be admitted that the characters that may be taken as specific criteria are not very strong. Both modestus and brevirostris have the bill extremely stubby and the tail little, if any, paler at the tips of the rectrices and usually only moderately double-rounded. The glaber group has a distinctly longer, narrower bill (with the nostrils averaging less broadly exposed), more strongly double-rounded tail, and with the rectrices usually distinctly paler at tips, sometimes quite whit-The general appearance of both species is, however, very similar and they are obviously very closely related. If the facts of their distribution can be made otherwise intelligible, the two groups need not be kept specifically distinct.

The distribution of forms within the glaber group is not perfectly consistent. The specimens from the entire north coast of Venezuela are uniform enough to be referred to glaber glaber. This form appears to be recognizable among its conspecies by relatively large size; moderately dark olivebrown upper surface with the crest long and full and darker than the back; breast rather clear gray and rather abruptly differentiated from the yellow belly though continued a little posteriad on the upper flanks; wing-bars relatively dull and tinged with smoky gray though paler and more conspicuous in worn examples.

North-Colombian specimens (Empidonax atrirostris Lawrence, 1871, Proc. Acad. Nat. Sci. Phila., p. 234—"Venezuela" = Carthagena, Colombia: Amer. Mus. Nat. Hist.) have the throat and breast distinctly duller, not so clear gray, and graded imperceptibly into the color of the belly; the wing-bars are brighter and the color of the back paler than in the average of glaber though still brownish. Specimens from the islands of Bonaire, Curação, and Aruba are even more strongly marked in pallor and appear to be worthy of separate recognition as described below. Rican arenarum is a little darker and grayer on the back than atrirostris but has the anterior under parts light, clear ashy gray, clearer even than in glaber and relatively well defined from the yellow of the belly, while the wing-bars are about as in glaber, less conspicuous than in atrirostris. I cannot see that the top of the head is any more noticeably darker than the back than it is in either glaber or atrirostris.

Peruvian birds are equivocal as will be discussed below.

Examples from various localities on the middle Orinoco, in Venezuela, are recognizably distinct from north-coastal birds and although the exact geographical line of separation is somewhat doubtful, there appears to be justification for the recognition of a new form as described on a later page.

Coming to obscurior, specimens at hand from French Guiana are not uniform but show some agreement in respect to dark olive or even sooty (with a subdued greenish tinge) upper surface, light gray chest, and light, though clear, yellow belly, and with wing-bars only moderately conspicuous. One adult male from Mana is particularly sooty above but four adults, all sexed as males though two are small enough to belong to the other sex, are much brighter above and below, though the upper parts are not as light nor as brownish as those of most glaber. They are, however, not far removed from the north-Venezuelan form. Specimens from the upper Rio Negro and several localities south of the lower Amazon in Brazil are equally dark above but much less strongly yellow on the belly and are separated here as a new subspecies. Likewise, the Peruvian specimens differ from the Guianan by paler belly and are further distinguished by paler upper parts, being recognizable as a still different subspecies, described as follows.

Sublegatus glaber peruvianus, new subspecies

Type from the Río Tavara, southeastern Perú; altitude 1600 feet. No. 147,737, American Museum of Natural History. Adult male just completing molt (outer rectrices), collected June 6, 1915, by H. and C. Watkins.

Diagnosis.—Most nearly resembles S. g. obscurior of French Guiana but with upper parts paler and belly lighter, duller yellow. Differs from S. g. glaber of northern Venezuela by lighter upper parts and much paler yellow belly but with throat darker and grayer and gray of breast more gradually merging into the color of the belly.

RANGE.—Apparently restricted to eastern Perú. At present known only from the Río Tavara, Río Chanchamayo, and upper Río Ucayali.

DESCRIPTION OF TYPE.—Back browner than Deep Grayish Olive but brightening to Grayish Olive on the uropygium; upper tail-coverts browner; top of head with broad dusky brown centers, margined with the color of the back; forehead narrowly pale; lores above whitish, below dusky; a narrow whitish eye-ring; auriculars Mouse Gray X Deep Olive Gray, passing below into the color of the throat. Chin narrowly whitish; throat Pallid × Pale Neutral Gray, darkest laterally; belly Naphthalene Yellow; breast like the throat but with indistinct yellowish margins and posteriorly merging into the color of the belly; sides and flanks like the breast but paler. Wings dark fuscous, the secondaries and tertials narrowly margined with Pale Olive-Buff, the pale lines on the secondaries not reaching the tips of the coverts; inner primaries with faint suggestions of similar margins; lesser upper wingcoverts like the back but with inconspicuous pale tips; median and greater series with pale tips broader, near Smoke Gray, forming two wing-bars of moderate prominence; inner margins of remiges yellowish white; under wing-coverts Naphthalene Yellow. Tail fuscous brown with broad, dull Smoke Gray tips, not sharply defined. Bill and feet (in dried skin) blackish. Wing, 75 mm.; tail (incomplete) 67.5; exposed culmen, 8; culmen from base, 12; tarsus, 17.

Remarks.—Female like the male in color but apparently smaller; the single bird of that sex has the wing, 71.5; tail, 63.5. This female is in more worn condition than the type and has the wing-bars and tip of the tail much more conspicuous and whitish.

Sublegatus glaber sordidus, new subspecies

Type from Utinga, near Pará, Brazil. No. 148,599, American Museum of Natural History. Adult male collected May 9, 1915, by George K. Cherrie; original No. 19,054.

DIAGNOSIS.—Similar to S. g. obscurior of French Guiana but with upper parts more grayish brown; gray of throat and breast averaging darker; belly paler yellow. Differs from peruvianus by darker upper parts and anterior under parts.

RANGE.—Amazonian region of Brazil, from Pará west to the Rio Tapajoz and extending up the Rio Negro to the Rio Uaupés.

DESCRIPTION OF TYPE.—Back Hair Brown X Chaetura Drab, with the margins of the feathers grayer than the dark centers; top of head with the centers darker and more conspicuous, giving a darker appearance to the area; uropygium a

little clearer; upper tail-coverts a little browner. Sides of the head much like the back with a little indication of whitish on upper lores and around the eye; throat Light Neutral Gray; chest about the same but with a faint tinge of pale yellowish; belly whitish only tinged with Marguerite Yellow. Wings dusky brown; secondaries and tertials with narrow outer margins leaving a dusky patch beyond the tips of the upper wing-coverts; lesser upper wingcoverts like the back but with inconspicuous, narrow pale tips on the lower feathers; median and greater series with broader tips smoky gray, forming two quite dull wing-bars; under wing-coverts and inner margins of remiges whitish, slightly tinged with yellowish; tail dark brown with indistinctly defined pale tips. Bill and feet (in dried skin) blackish. Wing, 70.5 mm.; tail, 62.25; exposed culmen, 9; culmen from base, 13.5; tarsus, 18.

REMARKS.—Females like the males in color but with shorter wing and tail; wing, 67-70; tail, 56-62. Males measure: wing, 70-75; tail, 61-66. A single bird sexed as a female has the wing, 75; the tail, 65.1, and is probably a male.

Immature birds are brownish above, with the feathers all prominently tipped with dull whitish, preceded by a dusky subterminal mark; the throat and breast are pale grayish or whitish with small, subterminal dusky lunules; belly yellowish white; wings with three sharply defined wing-bars of whitish or yellowish; outer edges of inner remiges more conspicuous than in the adults. The same pattern is found in *modestus* and *brevirostris* as well as in other forms of *glaber*.

This is a very well-marked form in distinction from the modestus group and from the other forms of glaber, including obscurior which is its nearest relative. As noted above, obscurior varies in the direction of true glaber, with one extreme having a decidedly yellow belly and the other extreme darker above but paler below though the belly is still clear, pale yellow. In the present form, the belly is more whitish than in any specimen I have from French Guiana, with only a tinge of yellow, and the anterior under parts are darker and duller. It is the extreme of dull coloration within the genus as known at present.

Dr. Hellmayr (1927, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, pt. 5, p. 447, footnote b) has recorded specimens from

Obidos and Mexiana as intermediate between obscurior and modestus but the present series of sordidus hardly answers that characterization, having no close resemblance to modestus. One specimen from Mexiana, on the other hand, belongs to the modestus group. It is very worn but appears to belong to the typical form, modestus modestus, and hence probably is resident on Mexiana. It is most like the worn examples from the Urubamba Valley of Perú.

Sublegatus glaber orinocensis, new subspecies

Type from Altagracia, Río Orinoco, Venezuela. No. 499,767, American Museum of Natural History. Adult male collected December 29, 1897, by George K. Cherrie; original No. 9452.

DIAGNOSIS.—Differs from S. g. glaber of northern Venezuela by paler upper parts (on average), by smaller dimensions, and by paler and more sharply defined markings on wing and tail.

RANGE.-Middle Río Orinoco, Venezuela.

DESCRIPTION OF TYPE.—Back near Gravish Olive with some subdued mottling from the darker centers of the feathers; uropygium a little brighter; upper tail-coverts like mantle; top of head with centers of feathers dark brown with grayish Olive edges; forehead narrowly whitish. Lores above whitish, below dusky; a whitish eve-ring and subocular lunule; auriculars near Mouse Gray; throat whitish; breast Pallid × Pale Neutral Gray; belly Barium Yellow; flanks tinged with grayish. dark brown; primaries very narrowly margined with Pale Smoke Gray; secondaries and tertials more broadly margined with grayish white; lesser upper wing-coverts like the back but lower ones with pale tips; median and greater series with broader grayish white tips, moderately defined from the brown median portion of the feathers; under wing-coverts Sulphur Yellow; inner margins of remiges narrowly tinged with pale greenish yellow. Tail dusky brown with outer margin of outermost rectrix somewhat pale; tips of all rectrices smoky gray. Bill and feet (in dried skin) blackish ("black" on original label). Wing, 66 mm.; tail, 60; exposed culmen, 8; culmen from base, 12; tarsus, 18.2.

Remarks.—Females like the males in color but averaging smaller; wing, 62-67.5 mm. (66-68 in males); tail, 56-61 (59-63 in males).

Young birds have the pattern described for young sordidus but appear to have the

belly brighter yellow than in that form, as do the adults of orinocensis.

While twenty-three birds from Altagracia, Caicara, Quiribana de Caicara, and "Agua Salada de Ciudad Bolívar" (taken in January, February, April, and December) are fairly uniform in the characters given for orinocensis, five birds from "Ciudad Bolívar" and one from Maripa, Río Caura (dated April, December, and July) approach glaber glaber both in size and coloration. There undoubtedly is a junction of ecological habitats near Ciudad Bolívar and it is possible that the two sets of birds may have come from two kinds of country, but only a careful study in the field will elicit this information. aberrant specimens, all sexed as males, except one immature bird, have the wing 67-69 mm., the tail 61-66, and have a larger bill than most of the other skins, with culmen from base 13-13.5 mm, while orinocensis males show 13 mm. The general coloration is close to the more typical orinocensis, being paler than most glaber. but the wing-bars are broader and duller like those of *glaber*. For the present I can do no more than consider them as aberrant orinocensis.

For purposes of comparison, the measurements of some of the series of *glaber* may be included here.

MALES

Venezuela: Barquismeto, Lara; wing, 75

tail, 70

El Cuji, Lara; 70.25-75; 64.1-70 Cumaná; 68-69.1 [72]; 62-63

64]

Carúpano; 71-71.5; 61-67

Trinidad: 73; 68 Monos Is.: 70.1; 68

FEMALES

Venezuela: El Cuji; 70.5-71.25; 66-68 Puerto Cabello; 65.5; 60

Cumaná; 69.25; 62

Trinidad: 68.5; 65

Monos Is.: 66.5; 59

It will be noted that the Cumaná birds are smaller than the others although one specimen without given sex is of average size. Even though worn, these birds are browner above than most Orinocan skins and presumably are true glaber. Trinidad

specimens are the brownest of all though nearly matched by some individuals from the mainland. There is no good evidence that there is more than one form in northern Venezuela and the outlying islands to the northeastward.

As intimated earlier, a group of islands off the coast of northwestern Venezuela have a distinct, endemic form that may be known as follows.

Sublegatus glaber pallens, new subspecies

Type from Savonet, Curaçao Island. No. 499,782, American Museum of Natural History. Adult male collected June 15, 1892, by Ernst Hartert; original No. 66.

DIAGNOSIS.—Differs from S. g. glaber of northern Venezuela by much paler and grayer upper parts, more conspicuous and whiter wing-bars, purer white throat, and paler gray breast and sides. Differs from S. g. atriostris of northern Colombia by similar characters but differences less pronounced; hind neck grayer.

RANGE.—Islands of Aruba, Curação, and Bonaire.

DESCRIPTION OF TYPE.—Back Light Grayish Olive with centers of the feathers darker; uropygium brighter, Grayish Olive; upper tailcoverts Hair Brown; top of head with centers of the feathers Olive Brown, broadly edged with olive gray and with sides of head above the eye pale grayish; hind neck Smoke Gray; forehead whitish; upper part of lores and both eyelids white; a dusky spot in front of eye. Chin and throat white; breast broadly whitish, tinged with Pale Olive Gray; sides and upper flanks very little darker gray; belly Barium Yellow X Naphthalene Yellow; lower flanks narrowly obscured with olive. Wings dark brown; primaries finely paler along outer margins; secondaries and tertials more broadly edged with whitish, on secondaries faintly tinged with yellowish and tending to round the tips of the feathers; lesser upper wing-coverts like the back but the lower feathers with paler tips; median and greater series with tips broadly Pale Olive Buff; under wing-coverts Naphthalene Yellow; inner margins of remiges dull, pale yellowish. Tail dark brown with outer margin of outer rectrices paler than the remainder; tips of rectrices somewhat paler than the rest of the feathers (in half of the feathers there are sharp whitish terminal borders, in the remainder not so definite). Bill and feet blackish (in dried skin). Wing, 70.2 mm.; tail, 65; exposed culmen, 9; culmen from base, 13: tarsus 19.

REMARKS.—Female like the male in coloration but smaller; wing, 66.1-67; tail, 60-63.

This form is most like atrirostris and, indeed, one specimen of atrirostris from

Bonda, Santa Marta, is very like pallens, being worn and faded so that the throat and breast are nearly uniform whitish and the belly very pale yellow, but the upper parts are browner than in pallens agreeing better with fresh examples from Colombia than with the form described herewith. Fresher Colombian specimens are easily distinguished in the series at hand.

As noted earlier, Panamanian birds are uncertain. The small series at hand from that country shows more resemblance to atrirosiris than to arenarum in the color of the upper parts, and one of two birds from Coiba Island agrees with atrirostris also in the color of the under side. The others appear to be darker gray on the chest with better definition between chest and belly, but they are in rather poor condition for exact determination of this feature. For the present I consider them as intermediate between the two forms mentioned.

SPECIMENS EXAMINED

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S. m. modestus.
  BRAZIL:
    Bahia, Santa Ritta, 1 3;
    Pernambuco, Rio Branco, 1 3;
    Piauhy, Gilbues, 2 \circlearrowleft;
    Pindahyba, 1 ♀;
    Urussuhy, 1 ♀;
    Corrente, 1 ♀;
    Bello Horizonte, 1 ♀;
    Goyaz, Fazenda Esperança, 1 ♂, 1 ♀,
       1 "♂";
    Isla Mexiana, Santa Maria, 1 ♂;
    Matto Grosso, Chapada, 5 ♂, 2 ♀.
  BOLIVIA:
    Río Mamoré, Trinidad, 1 3.
  Perú:
    Santa Ana, 3 \circlearrowleft, 1 \circlearrowleft.
S. m. brevirostris .-
  ARGENTINA:
    Chaco, Laguna Llema, 1 o;
    Mocoví, 1 ♀;
    Salta, Embarcación, 1 9;
    Mendoza, San Vicente, 1 ♂, 2 ♀;
    Santa Fé, Ocampo, 3 👌, 1 (?);
    Santiago del Estero, Suncho Corral, 1 9.
  PARAGUAY:
    Puerto Pinasco, 1 9;
    Fort Wheeler, 1 ♀;
    west of Puerto Pinasco, 1 (?);
    Makthlawaiya, 3 \circlearrowleft, 2 \circlearrowleft.
  BOLIVIA:
    Cochabamba, Mizque, 1 3;
    Mission San Antonio, 1 9.
  Pert:
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Chuchurras, 1 ♀.

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BRAZIL:
    Rio Negro, Manaos, 1 ♀;
     Villa Bella Imperatríz, Santa Clara, 1 Q.
S. g. peruvianus.—
  Perú:
    Rio Tavara, 1 ♂ (type);
     Perené, 1 ♂;
     Santa Rosa, 1 Q.
S. g. sordidus .-
  BRAZIL:
     Utinga, 1 \circlearrowleft (type), 1 \circlearrowleft;
     Rio Tocantins, Mocajuba, 1 (?);
     Rio Tapajoz, Tauarý, 1 ♂;
     Rio Amazonas, Villa Bella Imperatríz, 2 07,
     Rio Negro, Yucabí, 2 \circlearrowleft, 1 \circlearrowleft, 1 \circlearrowleft;
     Rio Uaupés, Tahuapunto, 1 9.
S. g. obscurior .-
  FRENCH GUIANA:
     Mana, 1 \circlearrowleft;
     Isle Le Pere, 2 o, 2 "o";
     Cayenne, 1 Q.
S. g. orinocensis.-
  VENEZUELA:
     Río Orinoco, Altagracia, 4 o (inc. type),
       4 Q;
     Caicara, 6 \circlearrowleft, 4 \circlearrowleft;
     Quiribana de Caicara, 1 ♀;
     Agua Salada de Ciudad Bolívar, 2 ♂;
     Ciudad Bolívar, 4 ♂, 2 ♀;
     Maripa, 1 \, \circlearrowleft.
S. g. glaber .-
  Venezuela:
     Encontrados, 1 \circ 1;
     Lara, Barquismeto, 1 ♂;
     El Cuji, 3 o, 2 9;
Carabobo, Puerto Cabello, 1 9;
     Sucre, Cariaco, 1 "♂" [? ♀];
     Carúpano, 2 0, 1 (?);
     Cumaná, 2 (?);
     Plain of Cumaná, 2 3, 1 9.
  TRINIDAD:
  Pointe Gourde, 1 7, 1 9. Monos Island: 1 7, 1 9.
S. g. atrirostris.
  COLOMBIA:
     Carthagena, 1 [?\sigma] (type);
     Algodonal, 1 \circlearrowleft;
     La Playa, 2 ♂;
     Santa Marta, 1 [? \sigma];
     Bonda, 1 [9], 1 (?).
  PANAMÁ:
     Agua Dulce, 1 \circlearrowleft;
     La Colorado, 1 ♀;
     Pearl Islands, San José, 2 3;
     Pearl Islands, Pedro Gonzales, 1 9;
     Coiba Island, 2 3.
S. g. pallens .-
  Curação:
     Savonet, 1 of (type);
     St. Christoffel, 1 Q.
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ARUBA: 1 Q. BONAIRE: 2 Q.

S. g. arenarum.— Costa Rica: Punta Piedra, 3 o⁷, 2 9.

Phaeomyias murina tumbezana (Taczanowski)

Phyllomyias tumbezana Taczanowski, 1877, P. Z. S. London, p. 325—Tumbez, Perú; &; type in Warsaw Mus.; paratype (?) in Vienna Mus.

This grayish form ranges from the Bahia de Caraques, Ecuador, south to Palambla, Perú. There is a slight possibility of distinction between the birds from the northern and southern parts of this range, but it requires confirmation. Three adults in worn condition and one wellgrown immature specimen from north of the Gulf of Guayaguil are paler above than the adults in fresher condition from Alamor and Palambla, but the distinction may well be due to the condition of plumage. single specimen from Milagros is paler above than most of the Palambla birds but is so nearly like the palest of them that its separation is doubtful. An Alamor bird is among the darkest. For the present, therefore. I refer the entire series to tumbezana.

Taczanowski, 1877, P. Z. S. London, p. 752, published a statement by Stolzmann that this was the commonest bird at Tumbez, with a pair in nearly every tree. Nevertheless he collected only the type and a single immature specimen. Jelski collected one bird, now in the British Museum. Watkins visited Tumbez but sent back not one of these birds from that locality. It is hoped that the next ornithologically minded visitor to Tumbez will obtain a series of this reputedly abundant species.

Stolzmann's sight record from Santa Lucia presumably belongs to tumbezana.

Phaeomyias murina inflava Chapman

Phaeomyias inflava Chapman, 1924 (June 20), Amer. Mus. Novit. No. 118, p. 10—Virú, Province of La Libertad, northern Perú; ♂; Amer. Mus. Nat. Hist.

This is the most strongly marked form of the species but I think it probably is best kept as a subspecies of *murina*. It is duller in coloration than the other forms, lacking all trace of yellow in the plumage, but in pattern and proportions it has nothing dis-

¹ Specimen in Instituto de La Salle, Bogotá.

tinctive other than that the bill inclines toward a little greater degree of slenderness than in *murina*, *tumbezana*, and *wagae*. In this respect, however, it is surpassed by a new subspecies, described below, which otherwise has the general appearance of the other members of the species *murina*.

Records assignable to *inflava* are from Pacasmayo, San Pedro (de Lloc), Chepen, Minocucho, and Guadalupe.

Various authors have noted the existence of some distinctions between the birds of the coastal regions and those of the middle Marañón Valley, but have not characterized the distinctions in detail. A small series at hand from several localities in that region shows enough difference to warrant the recognition of a new subspecies which may be known as follows.

Phaeomyias murina maranonica, new subspecies

Type from Jaen, Río Marañón, northern Perú; altitude 2400 feet. No. 185,853, American Museum of Natural History. Adult male with enlarged gonads collected June 6, 1924, by Harry Watkins; original No. 8094.

Diagnosis.—Nearest to P. m. wagae of eastern Perú in the color of the upper parts but rather darker and with a little more obvious dark centers on the feathers and with larger measurements; wing-bars brighter rufescent. Differs from P. m. tumbezana of extreme northwestern Perú and western Ecuador by lighter and browner upper parts, less purely grayish chest, and purer whitish throat. Differs from P. m.inflava of the neighborhood of Trujillo, western Perú, by less warmly brown back, more sharply marked wing-bars, whitish instead of fulvescent outer margins of the inner tertials, yellowish instead of white belly, darker chest and sides, longer bill, and shorter tarsus. The bill has much the shape of that of some inflava but is narrower and more elongated than that of the other forms mentioned.

RANGE.—Western side of the valley of the Middle Marañón, including the Chinchipe and the Chamaya, between the Marañón and the eastern side of the Western Andes.

DESCRIPTION OF TYPE.—Back Hair Brown X Olive-Brown with subdued mottling due to darker centers of the feathers; top of head darker and grayer, with a little paler grayish tinge on the forehead; upper part of lores and a broad superciliary stripe dull grayish; a darker area in front of orbit; sides of head dull grayish; auriculars light brownish toward tips; chin and throat centrally dull whitish; malar region darker; breast near Mouse Gray, darker on sides; belly Marguerite Yellow; flanks with

some indistinct, dark stripes. Wings dark brown; primaries with fine outer margins light Hair Brown; secondaries with broader margins Cinnamon-Buff, rounding the tips in a paler tint but not reaching basad quite to the tips of the greater upper wing-coverts; inner tertials with outer margins whitish; upper wing-coverts with tips dark cinnamomeous, dullest on lesser series, brighter and sharper on median and greater series where they form two prominent wing-bars; under wing-coverts Marguerite Yellow; inner margins of remiges dull, pale buff. Tail dark brown with outer margins of rectrices basally cinnamomeous brown; tips indistinctly and narrowly pale. Bill (in dried skin) dusky brown, paler at base of mandible; feet blackish. Wing, 65 mm.; tail, 65; exposed culmen 10.75; culmen from base, 14; tarsus, 18.75.

REMARKS.—Female similar to the male in coloration but with shorter wing and tail. Wing, 60-63 mm. (instead of 65-65.25); tail, 57-62.5 (instead of 65).

Two September birds, Sauces (3) and Huarandosa (2), are grayer on the back and paler yellowish (nearly whitish) on the belly than the rest of the series dated May and July, and in this respect approach tumbezana, but the other characters remain diagnostic.

One bird from Lomo Santo, without given sex, has the wing-markings approaching those of *inflava*, though not quite so uniform and dull, but the yellowish belly distinguishes it at once.

Taczanowski long ago (1884, "Orn. Pér.," II, p. 252) quoted Stolzmann's manuscript notes to the effect that Marañón birds (Guajango) differed from coastal examples (Tumbez, Pacasmayo, and Chepen) by slightly different color, longer bill, and different song. He overlooked the distinction between the Tumbez birds (tumbezana) and those from Pacasmayo and Chepen (presumably the later-described inflava), but the remark about the difference in the song of the Marañón bird is worthy of further investigation.

Phaeomyias murina wagae (Taczanow-ski)

Myiopatis Wagae Taczanowski, 1884, Orn. Pér., II, p. 253—Chirimoto, Perú; ♂; type formerly in Warsaw Mus., now lost; paratype in Berlepsch Collection, Frankfort Mus.

This form is confined, in Perú, to the eastern side of the Eastern Andes and the

Chanchamayo Valley but appears to have a very wide distribution down the Amazon. More than ninety specimens from Teffé to the Rio Tocantins and from the lower Rio Negro to the Jamundá are so like the east-Peruvian birds that I am unable to distinguish them. The much greater series of lower Amazonian birds shows a greater degree of individual variation than is apparent in the small number of Peruvian examples, occasionally having the throat more purely whitish, but, in general, the resemblance is greater than the distinction.

This distribution is of particular interest because it presents a buffer population between murina murina of eastern Brazil and m. incomta of Venezuela and Colombia, two forms that are very much like each other. Both have the back distinctly rufescent in tone whereas this region is more olivaceous brown in wagae. In fresh plumage, murina has a deeper tone of yellow on the belly than incomta, but in even moderately worn and faded specimens this distinction may be lost.

Specimens from the three Guianas, however, are distinctly more like wagae than incomta in respect to stronger yellow color on the belly, more olivaceous brown upper parts, yellowish, rather than grayish, breast, and less purely whitish throat. The color of the throat is not a very good character for the separation of incomta and wagae since worn examples of wagae may show no yellowish tinge on the gular area and some fresh examples are not very different from incomta in this respect. There seems to be only a slight tinge of vellow in the best examples I have seen, but it is enough to dull the whiteness of the area and give less contrast with the breast which also has a vellowish tinge in this subspecies. In *incomta* it is not often pure white.

The type-locality of wagae, Chirimoto, is the only locality among Peruvian records from which I have not seen material. The subspecies appears to be uncommon in Perú.

Four examples from Paraguay and one from northern Argentina may be distinct enough from *wagae* to bear recognition as a separate subspecies. They agree in the

olive color of the upper parts, being quite different from murina in that respect, and four of them differ from almost all of the series of wagae by their much paler vellowish belly, grayish chest, and pure white However, two of the Peruvian specimens of wagae in worn plumage are very similar to the Argentine-Paraguayan birds in fresher plumage and one Paraguayan bird has a strongly yellow belly. It seems hardly possible that the range of wagae would cross the tableland to the neighborhood of northern Argentina, particularly since murina occupies part of the tableland, in Matto Grosso, but until more evidence is available, I hesitate to separate another form in the south.

Typical murina is not constant in the color of the under parts although the rufous tinge of the upper parts holds well throughout the series, with some variation in shading. Fresh birds, as might be expected. are likely to have the belly more strongly vellow than worn specimens but this is not constantly true. Some fresh specimens have the under parts as pale as the Argentine-Paraguayan birds though the upper parts remain rufescent. Were there some geographic allocation possible on this ground, the recognition of another subspecies could be made, but I am unable to discover such consistency. In general the distinction is one of season.

SPECIMENS EXAMINED

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P. m. murina.-
  BRAZIL:
     Goyaz, Araguaya, 1 ♂, 1 ♀;
     Bahia, Bahia, 2 o;
    "Bahia," 1 (?);
Barra, 1 ♂, 1 ♀, 3 (?);
Bôa Nova, 2 ♂;
     Jaguaquara, 1 ♀;
     Santa Ritta, 1 ♂, 1 ♀;
     Ceará, Viçosa, 3 ♂;
     Piauhy, Veados, 1 o:
     Urussuhy, 1 (Q?);
     Bello Horizonte, 1 (?);
     Pernambuco, Rio Branco, 2 7;
     Garanhuns, 2 \circlearrowleft;
     Palmares, 1 ♀;
     Maranhão, Flores, 1 ♀;
     Manga, 1 ♀;
     Santa Filomena, 1 o:
     Pará, Pará, 1♀;
São Paulo, Ypanema, 1♂;
     Matto Grosso, Chapada, 3 ♂, 2 ♀, 1 (?).
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BOLIVIA:
     Sara, "Camp-woods," 2 9.
P. m. wagae.-
  Perú:
     La Merced, 1 \circlearrowleft, 2 \circlearrowleft;
     Utcuyacu, 1 ♂;
     Río Colorado, 1 ♂1;
     San Ramón, 3 \sqrt{3};
     Moyobamba, 3 ♂1, 2 ♀1.
  BRAZIL:
     Rio Amazonas, Teffé, 1 ♂, 5 ♀;
     Rio Madeira, Borba, 1 7, 1 9;
     Santo Antonio de Guajará, 1 7, 2 9;
     Villa Bella Imperatríz, 5 \circlearrowleft, 2 \circlearrowleft, 1 \circlearrowleft;
     Rio Tapajoz, Tauarý, 1 ♂, 3 ♀;
     Urucuritiba, 1 ♀;
     Rio Xingú, Porto de Moz, 1 ♂, 1 ♀;
     Rio Tocantins, Baião, 3 ♂, 1 ♀;
     Rio Jamundá, Faro, 6 3, 3 9, 1 (?);
     Rio Negro, Igarapé Cacao Pereira, 10 o,
        4 Q, 3 (?);
     Muirapinima, 5 ♂, 6 ♀;
     Manaos, Campos Salles, 5 ♂, 1 ♀;
     Hacienda Rio Negro, 9 ♂, 3 ♀;
     Cravoeira, 1 ♂;
     Tauapessasu, 1 ♀;
     Rio Surumú, Frechal, 1 ♂, 1 ♀;
     Rio Cotinga, Limão, 1 Q.
   FRENCH GUIANA:
     Cayenne, 14 \circlearrowleft, 3 \circlearrowleft, 1 (?);
     Roche Marie, 3 ♂, 2 ♀;
     Isle Le Pere, 1 \circlearrowleft.
   DUTCH GUIANA:
     Kwata, 1 ♀;
     near Paramaribo, 2 \circlearrowleft, 1 \circlearrowleft, 3 \circlearrowleft;
     "interior," 1 (?);
"savanna," 1 (?).
   BRITISH GUIANA:
     Annai, 1 \circlearrowleft.
P. m. subsp.?-
   PARAGUAY:
     Río Negro, 1 \eth;
      east of Caaguassú, 1 ♂;
      Zanja Morotí, 1 ♂;
      80 kil. west of Pinasco, 1 (?).
   ARGENTINA:
      Jujuy, Perico, 1 \circlearrowleft.
P. m. inflava.-
   Perú:
      Virú, 7 ♂, 2 ♀;
      Trujillo, 1 \, \eth, 2 \, \lozenge, 1 \, \eth^{1};
      Poroto, 1 \sigma^{1};
      Minocucho, 1 O^{1}.
 P. m. tumbezana.—
   Perú:
      Palambla, 3 \circlearrowleft, 3 \circlearrowleft, 2 (?);
      Milagros, 1 \ Q.
   ECUADOR:
      Alamor, 2 \circlearrowleft;
      Santa Elena, 2 3;
      Chongocito, 1 ♀;
      Bahia de Caraques, 1 9.
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P. m. maranonica.
  Perú:
     Jaen, 1 ♂ (type);
     Sauces, 1 o7;
     Lomo Santo, 1 \circ 1 (?);
     Perico, 3 9;
     Huarandosa. 1 ♀.
P. m. incomta.
   COLOMBIA:
     Carthagena, 1 (?);
     Calamar, 1 3, 1 (?);
     Cali, 3 ♂, 4 ♀;
     Honda, 2 \circlearrowleft, 2 \circlearrowleft;
     Jiménez, 1 ♂;
     Fusugasugá, 1 ♂;
     Chicoral, 1 ♀;
      "Bogotá," 3 (?);
      Santa Marta, 1 \circlearrowleft, 1 \circlearrowleft, 1 (?);
      Cacagualito, 1 \ 7, 1 \ 9
     Bonda, 9 0, 11 9, 25 (?).
   Panamá:
      El Villano, 1 ♀.
   VENEZUELA:
      Lara, El Cuji, 1 \supset 1 , 1 \circlearrowleft ;
      Falcón, Tucacas, 1 \circlearrowleft, 1 \circlearrowleft, 1 \circlearrowleft, 1 \circlearrowright;
      Cumaná, Plain of Cumaná, 1 9;
      Carúpano, 1 (?);
      Cristóbal Colón, 1 3;
      Cariaco, 1 ♀;
      Cuchivano, 1 (?);
      Río Orinoco, Caicara, 5 3, 2 9;
      Quiribana de Caicara, 1 👌;
      Ciudad Bolívar, 1 ♂, 6 ♀
      Agua Salada de Ciudad Bolívar, 1 ♂, 1 ♀;
      Altagracia, 3 ♂, 5 ♀;
      Ayacucho, 1 \circlearrowleft;
      Río Apure, San Fernando, 1 (?).
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Phaeomyias leucospodia leucospodia (Taczanowski)

Elainea leucospodia Taczanowski, 1877, P. Z. S. London, p. 325—Tumbez, Perú; type formerly in Warsaw Mus., now lost.

Tumbez, 1 σ , 2 \circ ; Samate, 2 σ , 1 (?); Lamor, 1 \circ ; Chilaco, 1 \circ ; Virú, 5 σ ; Tembladera, 1 σ .

Compared with three examples of M. l. cinereifrons from western Ecuador (Santa Elena, Isla Puna, and Isla La Plata). The differences are very slight and not appreciable in worn specimens. Young examples of leucospodia have quite pronounced yellow coloration on the lower flanks and under tail-coverts but the adults have only a tinge of such color while adults of cinercifrons also have a slight tinge of it though it apparently is less than in leuco-Furthermore, the sides of the breast in *cinereifrons* are a little darker and clearer (less tinged with drab) than in the typical form and have the back very

¹ Specimens in Field Museum of Natural History, Chicago.

slightly clearer gray. Whether these differences would disappear in a larger series is problematical.

The young of *leucospodia* differ further from the adults by having the wing-bars decidedly broader and paler and, if young enough, may lack all trace of white in the center of the crown. In this condition they have considerable resemblance to the members of the genus Phaeomyias although they are paler above than any species of that genus and have the outermost (tenth) primary proportionately longer. There is also considerable resemblance in the scutellation of the "tarsus" since leucospodia usually has two to four small scutellae separating the three basal scutellae of the acrotarsium from the hinder edge of the "tarsus" on the inner side. This condition is carried to a still greater extreme in the other species of Phaeomyias and, in fact, is not unusual in various genera of the Tyrannidae, but Elaenia, where leucospodia has long been placed, has a typical exaspidean tarsus, rarely with one or two fine, supernumerary scales developed at the tarsal joint.

The closest point of resemblance between leucospodia and the members of the genus Elaenia or Myiopagis is found in the presence of a white crest and this is hardly a generic character, being absent in some Elaenia and not of typical Elaenian form in leucospodia.

Thus, while *leucospodia* is not a typical *Phaeomyias*, it appears closer to that genus than to any other and in preference to the erection of a monotypic genus for it, I place it here.

Peruvian records of *leucospodia* are from Chepen, Sullana, Guadalupe, and Paucal.

Camptostoma obsoletum sclateri (Berlepsch and Taczanowski)

Eupsilostoma pusillum SCLATER (not Myiopatis pusilla Cabanis and Heine, 1859), 1860, P. Z. S. London, XXVIII, p. 68—Pallatanga, Ecuador; ♀; British Mus.

Ornithion sclateri Berlepsch and Taczanowski, 1883, P. Z. S. London, p. 554—new name for Eupsilostoma pusillum Sclater.

Apparently the Peruvian range of this form is restricted to the extreme north-western part of the country. Two Tumbez

birds are fairly typical sclateri and twelve specimens from Chilaco, Sullana, Lamor, and Samate, northern Piura, are closer to this form than to any other. These latter birds nearly all show more avellaneous coloration on the upper tail-coverts than the Ecuadorian birds but I am not convinced of the taxonomic value of this character in the present instance. Most of the Ecuadorian birds have the upper tailcoverts a deep olive-buff but some examples have a very definite avellaneous tinge, as strong as that of some of the Peruvian birds although none is as deeply colored as the darkest Peruvian specimen. Individual specimens of some of the other subspecies of obsoletum sometimes show a cinnamomeous or rufous coloration in the posterior feathering similar to that described here or even more pronounced, although I have seen no preponderance of this aberrational tendency in any other single region as exhibited here. If future collections from the region show the constancy of this character, it may be possible to recognize a distinct form for these north-Piura birds, but at present I prefer to place them in sclateri.

Camptostoma obsoletum griseum (Carriker)

Camptostoma obsoletum griseum Carriker, 1933 (March 24), Proc. Acad. Nat. Sci. Phila., LXXXV, p. 26—Suchimán, Río Santa, Dept. Ancash, Perú; 3; Acad. Nat. Sci. Phila.

Birds from the coastal region of Perú, from Lima northward to Pacasmavo, are very dull and drab-colored on the anterior under parts, have a less pronounced vellowish tinge on the flanks, and have the wingbars relatively dull and inconspicuous. Birds from the southern part of this range are the dullest of all while those from the north show some approach toward sclateri, with stronger and sometimes more rufescent wing-bars and a little brighter tinge of yellow on the flanks. One bird from Lima, one from Poroto, and one from Pacasmayo have the upper tail-coverts warm, cinnamomeous brown, but on average the feathers of this region are much like the back.

Records that presumably belong to griseum are from Chosica, Santa Eulalia,

Minocucho, Trembladera, Paramonga, Yuramarca, and Chicama Valley. Paucal I place here with a slight query in view of the fact that a Palambla bird belongs to maranonicum as discussed below.

Camptostoma obsoletum maranonicum Carriker

Camptostoma obsoletum maronica (sic) [maranonica in text] CARRIKBR, 1932 (March 24), Proc. Acad. Nat. Sci. Phila., LXXXV, p. 27—San Pedro, lower Río Sihuas, Dept. Ancash, Perú; ♂; Acad. Nat. Sci. Phila.

Birds from the Middle Marañón Valley are grayer above than either sclateri or griseum and have a minimum of yellowish tinge on the flanks. The chest is pale with a slight grayish tinge and the sides of the breast are gray, without the drab tinge found in griseum. The bill averages longer and more slender and has the maxilla paler than in griseum or sclateri although this distinction is not perfectly diagnostic. The wing-bars are broad and distinct, usually quite rufescent. The forehead is inclined to be somewhat paler than the crown, sometimes even whitish, a variation less commonly noted in the adjacent forms.

This form occupies the Middle Marañón Valley, between the river and the crest of the Western Andes, crossing to the western side of this cordillera at Palambla. Records from Callacate, Guajango, Chusgon, Malea, Soquián, Cochabamba (below Huamachuco), and Hacienda Limón are referable here without much question. I have seen no specimens from east of the Marañón but there are records of "sclateri" from Chirimoto, Huambo, and Chachapoyas that are likely to belong here although olivaceum is recorded from Tarapoto west of the lower Huallaga.

Camptostoma obsoletum olivaceum (Berlepsch)

Ornithion pusillum olivaceum Berlepsch, 1889, Jour. für Orn., XXXVII, p. 301—Iquitos, Perú; ♀; Frankfort Mus.

Ornithion pusillum juruanum IHERING, 1905, Rev. Mus. Paul., VI, p. 434—Rio Juruá, Brazil.

This brightly colored form appears to be restricted to the Upper Amazonian Valley, almost to northeastern Perú since skins from Teffé belong to napaeum. Hellmayr, however, found the type of *juruanum* to be closest to *olivaceum* whose range, therefore, may include extreme western Brazil.

Peruvian records are from Iquitos, Tarapoto, and "Upper Ucayali" [= near Cashiboya].

Although napaeum has an extensive range over lower Amazonia, on both sides of the Amazon, northward along the Rio Negro and in the neighborhood of Mt. Duida, Venezuela, and in the three Guianas, the birds from northern and central Venezuela are quite readily separable as described below.

Camptostoma obsoletum venezuelae, new subspecies

Type from La Cascabel, Río San Feliz, Venezuela. No. 438,789, American Museum of Natural History. Adult male collected May 27, 1907, by George K. Cherrie; original No. 14, 819.

DIAGNOSIS.—Differs from C. o. napaeum of the Amazonian region of Brazil by paler and more brownish (less greenish) olive back and more buffy yellow under parts; cap lighter and browner on centers of feathers, less obviously margined with olive.

Differs from C. o. pusillum of Santa Marta and adjacent areas in northern Colombia [and northwestern Venezuela] by darker back and cap and usually more obvious dark shading on the sides of the breast.

RANGE.—Central and northern Venezuela and the Island of Trinidad.

DESCRIPTION OF TYPE.—Back and upper tailcoverts Citrine-Drab, a little brighter on the rump; whole top of the head Dark Olive, grading into the color of the back over the hind neck which is most like the back. Lores, eyelids, and a subocular lunule buffy whitish with an indistinctly darker spot in front of the eye; auricular and postocular regions much like the back but paler; throat and breast yellowish Olive-Buff, darker on the sides; chin and upper throat paler; belly Colonial Buff × Primrose Yellow; flanks narrowly a little darker. Wings grayish brown; remiges exteriorly margined with a tint of light grayish olive, narrowest on the primaries and obsolete at the basal end of the secondaries where there is a dark patch; tertials with margins broader and paler; lesser upper wing-coverts like the back; median and greater series broadly tipped with Ivory Yellow, forming two distinct wing-bars; under wingcoverts Ivory Yellow × Marguerite Yellow; inner margins of remiges narrowly dull whitish. Rectrices grayish brown, with outer margins like the back and with narrow terminal borders Ivory Yellow. Bill (in dried skin) with maxilla

brown, mandible flesh-color; feet slaty brown. Wing, 54 mm., tail, 40.5; exposed culmen, 7.25; culmen from base, 9; tarsus, 14.

Remarks.—Females like the males in color but with shorter wing and tail on average. Wing, 46-50 mm. (as against 50-54); tail, 29-36 (as against 32-42.5).

The Venezuelan birds stand out well, both individually and in series, from napensis. Most of the series of venezuelae have the top of the head predominantly brown, with indistinct, if any, olive margins on the feathers although a few examples have such margins, apparently never as broad and pronounced as in napensis. A single specimen, a male from Suapure, has the top of the head sooty rather than brown, approaching napensis in this respect.

Birds from southwestern Venezuela, in the neighborhood of Mt. Duida, belong to napensis and not to the present form, and Hellmayr (1927, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, pt. 5, p. 459) assigns a specimen from extreme northwestern Venezuela (Río Aurare) to pusillum.

Four "Bogotá" trade-skins are recognizably distinct from both pusillum and venezuelae, as well as from caucae of the more western parts of Colombia. It is unfortunate that a series of fresh specimens with full data is not available for comparative study, but the characters of the form are of a sort and amount likely to appear equally well in fresher skins. The form may be known as follows.

Camptostoma obsoletum bogotensis, new subspecies

Type from "Bogotá," Colombia, probably from the eastern side of the Eastern Andes. No. 499,933, American Museum of Natural History. Adult without given sex, probably a male, judging by measurements. Collector and date unknown.

Diagnosis.—Nearest to *C. o. venezuelae* in general coloration, having the upper parts more brownish, less greenish, olive and the under parts a little more golden yellow on average than in *C. o. napensis* of Amazonian Brazil, but the dark color of the top of the head is broadly extended over the hind neck and grades into the color of the back on the upper mantle. Wingbars apparently slightly stronger than in the other two mentioned forms.

RANGE.—Presumably the eastern side of the Eastern Andes of Colombia.

DESCRIPTION OF TYPE.—Back dark Citrine-Drab; top of head and hind neck dark Olive-Brown; lores and circumocular area dull whitish; auricular region Deep Olive-Buff, passing into dull whitish on chin and throat; breast Deep Olive-Buff, tinged with Colonial Buff; belly Primrose Yellow tinged with Colonial Wings brown; remiges with exterior Buff. margins a little grayer than Light Yellowish Olive, narrowest on primaries and not reaching the bases of the secondaries where there is a broad, dark brown patch; tertials with margins broader and paler; lesser upper wing-coverts like the back; median and greater series broadly tipped with Ivory Yellow; under wing-coverts light Colonial Buff; inner margins of remiges yellowish white. Tail brown; outer margins of rectrices brownish olive; tips Ivory Yellow. Maxilla (in dried skin) brown; mandible brownish flesh-color; feet dusky slate. Wing, 53.5 mm.; tail, 38.5; exposed culmen, 7; culmen from base, 10; tarsus, 13.5.

Remarks.—The evidence as to the probable distribution of this form is found in a worn female from Villavicencio and a specimen without sex from Cunday. The Villavicencio bird, as well as may be determined from its poor condition, is boyotensis whereas the bird from Cunday, in the upper Magdalena Valley, is distinctly nearer caucae, to which I refer it. It is not typical caucae, being grayer on the back than the others of that form at hand, but it has the same sooty crown and gray-tinged breast and sides, and it is closer to the Cauca Valley form than to any other.

On the other hand, a female from Chicoral, also in the upper Magdalena Valley, is less easily placed. The upper parts are only a little lighter in color than those of caucae but the under parts are decidedly brighter and more yellowish, agreeing better with those of pusillum of northern Colombia although the upper parts are much too dark. In general appearance, the bird resembles venezuelae but association with that form is problematical. Probably this bird is best considered as intermediate between pusillum and caucae.

There is still some study required of the typical form, obsoletum, and its near relative, cinerascens. From the material at hand, cinerascens appears to range westward from Bahia and Maranhão to northern Matto Grosso while obsoletum occupies

an area farther south, from Rio de Janeiro to Rio Grande do Sul and westward an indeterminate distance. A single specimen from Misiones, northeastern Argentina, agrees well with typical obsoletum. Birds from Paraguay and northwestern Argentina are as large as obsoletum but are not as brightly colored, as a rule, though they are paler below than either obsoletum or cinerascens. Skins from southern Matto Grosso are much like them in coloration though their size is more like cinerascens. It is questionable, however, whether any subspecific distinctions can be maintained for the Paraguayan and Argentine birds.

On the other hand, ten Bolivian specimens show a rather decided differentiation from both typical *obsoletum* and *cinerascens* and may be known as follows.

Camptostoma obsoletum bolivianum, new subspecies

Type from Pulque, Prov. Sucre, Bolivia; altitude 9400 feet. No. 139,457, American Museum of Natural History. Adult male collected November 27, 1915, by Miller and Boyle; original No. 14,436.

DIAGNOSIS.—Similar to *C. o. obsoletum* of southeastern Brazil but distinctly darker and grayer in dorsal coloration, grayer on the chest and less yellowish on the belly; size averaging larger.

RANGE.—Central Bolivia.

DESCRIPTION OF TYPE.—Back Deep Grayish Olive, becoming a little brighter on the rump but again dark on the upper tail-coverts; top of head with broad centers of the feathers Deep Mouse Gray, margined with clearer dark gray; lores dull grayish with a narrow whitish line above connecting with a narrow whitish eyering and white subocular lunule; auriculars pale, dull grayish; sides of neck grayer than Smoke Gray. Chin and center of throat dull whitish; sides of throat, breast, and sides washed with Pale Smoke Gray; belly medially white; flanks tinged with Deep Olive-Buff. Wings dark brown; primaries narrowly margined with pale olivaceous gray; secondaries with broader and brighter margins not reaching the tips of the greater wing-coverts; tertials with margins broader and more whitish; lesser upper wing-coverts like the back; median and greater series broadly tipped with Cinnamon X Pinkish Cinnamon, forming two conspicuous wing-bars; under wing-coverts Ivory-Yellow X Marguerite Yellow with a brownish area at base of primaries; inner margins of remiges pale yellowish. Tail dark brown with olive outer margins on the rectrices and with inconspicuous and narrow pale tips. Maxilla (in dried skin) blackish: mandible brown, darker at tip: feet blackish. Wing, 63 mm.; tail, 53; exposed culmen, 8; culmen from base, 11; tarsus, 15.

Remarks.—Female colored like the male; size not certainly different; wing, 59 mm.; tail, 44.

Most of the Bolivian specimens at hand are sexed as males. One is sexed as a female and one is without given sex. Two of the males are from uncertain places in the Province of Sara, elevations 450 and 750 meters, respectively, and are relatively small (wing, 53.5 and 54 mm., respectively; tail, 43 and 44). They also are a little brighter in color on the back, resembling northwest-Argentine specimens in this respect, though they are small enough to be cinerascens if correctly sexed, which is doubtful. The remaining males show the wing 57-63 mm., average, 60.1.

The corresponding figures for the birds of the other regions may be of interest.

| | Wing | | |
|-----------------|-----------------------|-------------------------|--|
| | MALES | FEMALES | |
| Bahia-Maranhão | 56.5-60 | 52 - 59.5 | |
| Paraguay | 56.5-58 | 51 -57 | |
| n. Argentina, | 56 - 59 | 52 - 54 | |
| s. Matto Grosso | 55 - 56.5 | 50.4-54 | |
| n. Matto Grosso | 50.5-56.5 | 50 . 5–56 | |
| Rio-R.G. do Sul | 52 -57 | 50 -53.25 | |

SPECIMENS EXAMINED

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C. o. obsoletum.—
  BRAZIL:
     Rio Grande do Sul, Erebango, 1 ♂;
     Lagôa dos Patos, 1 ♀:
     Campo Bom, 1 (?);
     Sinimbú, 1 3;
     Paccaria, 1 9;
     Nonohay, 1 \circlearrowleft, 1 (?);
Santa Cruz, 1 \circlearrowleft;
     São Francisco de Paula, 2 3;
     São Paulo, Ypanemá, 1 9;
     Victoria, 2 \sigma;
     Paraná, Roca Nova, 1 9;
     Rio de Janeiro, Monte Serrat, 1 7, 1 (?);
     Ponte Maromba, 1 ♂;
     Matto Grosso, Tapirapoan, 1 ♂;
     Urucum, 1 ♂, 1 ♀;
     Belvedere de Urucum, 1 9:
     Campanario, 1 ♂, 1 ♀;
     São Francisco Ranch, 1 (?).
  PARAGUAY:
     Fort Wheeler, 1 \circlearrowleft, 1 (?);
     Puerto Pinasco, 1 \, \circ;
La Fonciere, 1 \, \circ; 1 "\, \circ" [? = \, \circ], 1 (?);
Zanja Moroti, 1 \, \circ', 3 \, \circ, 1 (?);
     Ipane River, 1 ♀;
     east of Yhú, 1 o;
     east of Caaguassú, 1 3;
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| upper Rio Igassú, 1 ♂; | Choquisongo, 1 (?); |
|---|--|
| Colonia Independencia, 1 ♂, 1 ♀; | Pacasmayo, 2 o. |
| Makthlawaiya, 1 ♀. | C. o. sclateri.— |
| Argentina: | Perú: |
| Misiones, Puerto Segundo, 1 Q ; | Chilaco, $1 \circlearrowleft$, $1 \circlearrowleft$, $2 (?)$; |
| Santa Fé, Ocampo, 2 o, 2 Q, 1 "Q" | Sullana, $1 \circlearrowleft, 2 \circlearrowleft;$ |
| $[? = \circlearrowleft];$ | Lamor, 2 9, 1 (?); |
| Tucumán, Tapia, 1 ♀; | Somate, $1 \circlearrowleft, 1 \circlearrowleft;$ |
| Tafí Viejo, 1 👌; | Tumbez, $1 \circlearrowleft, 1 \circlearrowleft$. |
| Chaco, Avia Terai, 1 \circlearrowleft ; | ECUADOR: |
| San Vicente, 1 %. | Esmeraldas, 1 Q ; |
| C. o. cinerascens.— | Paramba, $1 \circlearrowleft, 2 \circlearrowleft;$ |
| Brazil: | Valle de Cumbaya, $1 \circlearrowleft$; |
| (No locality = Espirito Santo, Barra do | Valle Tumbaco, 1 σ ; |
| Jucú), 1 (?) (type); | Duran, 5 σ ; |
| Bahia, Bahia, 1 (?); | Isla Puna, $1 \circlearrowleft$, $1 \circlearrowleft$, $2 (?)$; |
| Morro de Chapeu, $4 \circlearrowleft$, $1 (?)$; | Manaví, $2 \circlearrowleft$, $1 \circlearrowleft$; |
| Tambury, 1 \circlearrowleft ; | Chone, 4 Q ; |
| Santa Ritta, 1 Q, 1 (?); | Bahia de Caraques, 1 \circ ; |
| Bôa Nova, 1 σ ; | Bucay, 1 ♀; |
| Orobo, 1 σ ; | Casanga, $1 \sigma^{\gamma}$; |
| Tambury, 1 Q; | Río Pindo, 1 σ ; |
| "Bahia," 4 (?); | Chimbo, 2 ♂; |
| Espirito Santo, 1 ♂; Ceará, São Pedro, 1 ♂; | Santa Rosa, $4 \circlearrowleft$, $2 \circlearrowleft$, $1 (?)$; |
| Piauhy, Parnaguá, 1 3; | Cebollal, $2 \circ 7$; |
| Corrente, 1 \circlearrowleft ; | Río Jubones, 1 \mathcal{O} ; |
| Goyaz, Rio Thesouras, 1 Q; | Portovelo, 2 o'; |
| Maranhão, Miritiba, 1 \eth ; | Lunamá, 1 σ ; |
| Anil, 1 9; | Chongocito, 1 ♂, 1 ♀; |
| Flores, 1 (?); | Río Jubones, 1 o'; |
| Matto Grosso, Chapada, 3 ♂, 5 ♀, 5 (?). | Guayaquil, $2 \ \emptyset$; Alamor, $1 \ \emptyset$. |
| C. o. bolivianum.— | |
| Bolivia: | C. o. olivaceum.— |
| Sucre, Pulque, 2 or (incl. type); | Perú: |
| Río Cachimayo, 1 ♂; | Orosa, 1 σ^{7} ; |
| Santa Cruz, Valle Grande, 1 \circlearrowleft ; | Apayacu, 2 9; |
| Monos, 1 ♂; | Puerto Indiana, 2 Q. |
| Cordillera, Río Parapeti, 1 σ ; | C. o. napaeum.— |
| Cochabamba, Todos Santos, 1 ♀; | Brazil: |
| Mission San Antonio, 1 (?); | Teffé, 1 $\sqrt{2}$, 1 $\sqrt{2}$; |
| Sara, "Camp Woods," 2 \eth . | Rio Madeira, Rosarinho, 5 3, 2 9; |
| C. o. maranonicum.— | Borba, 1 ♂; Igarapé Auará, 1 (?); |
| Perú: | Rio Amazonas, Villa Bella Imperatríz, 5 🗸 |
| Pucará, 1 σ ; | 2 \(\rangle\), 1 (?); |
| Huancabamba, 1 \circlearrowleft , 1 \circlearrowleft ; | Rio Tapajoz, Caxiricatuba, 1 ♂, 2 ♀; |
| San Ignacio, 1 9; | Igarapé Amorin, $2 \circlearrowleft$, $1 \circlearrowleft$; |
| Huarandosa, 1 σ ; | Aramanay, 1 σ ; |
| Perico, 1 \circlearrowleft , 3 (?); | Igarapé Brabo, 1 (?); |
| Sauces, 1 \circlearrowleft ; | Rio Xingú, Tapará, 1 9, 1 (?); |
| Sondorillo, 1 (?); Lomo Santo, 1 \circlearrowleft , 1 \circlearrowleft ; | Rio Tocantins, Baião, 1 7, 2 9; |
| Cabico, 2 \(\rangle ; | Mocajuba, 1 (?); |
| Jaen, $1 \circlearrowleft 1 \circlearrowleft 1$ | Pará, Utinga, 1 ♂, 2 ♀; |
| Viña, 3 7, 2 9; | Prata, $1 \circlearrowleft$; |
| Palambla, 1 Q. | Rio Maicurú, 1♀; |
| C. o. griseum.— | Isla Marajó, São José, 1 ♂; |
| Perú: | Rio Jamundá, Faro, $1 \circlearrowleft$, $5 \circlearrowleft$, $1 (?)$; |
| Lima, 1 o, 2 9; | Rio Negro, Manaos, $5 \circlearrowleft$, $2 \circlearrowleft$; |
| Huaral, $7 \circlearrowleft$, $5 \circlearrowleft$, $2 (?)$; | Igarapé Cacao Pereira, 4 o, 2 Q, 1 (?); |
| Huacho, 4 7, 3 9, 1 (?); | Yucabí, 10 ⁷ , 1 9; |
| Sayan, 1 σ ; | Santa Isabel, 1 \emptyset , 1 \circ . |
| Vitarte, $4 \circlearrowleft 1 \circlearrowleft 1 \circlearrowleft$ | BRITISH GUIANA: |
| Poroto, 2 0, 1 9; | Rockstone, 1 σ ; |
| Trujillo, $2 \sqrt{1}$, $1 \sqrt{2}$, $(?)$; | Potaro Landing, 1 Q. Dutch Guiana: |
| Virú, 1 ♂, 3 ♀, 1 (?): | DUIGH GUIANA. |

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Paramaribo, 4 \circlearrowleft, 5 \circlearrowleft, 2 (?);
     Kwata, 2 o, 1 (?).
  French Guiana:
     Cayenne, 2 \circlearrowleft, 2 \circlearrowleft;
     Roche Marie, 1 7.
  VENEZUELA:
     Río Orinoco, Ayacucho, 1 7, 1 9;
     Esmeralda, 1 \circlearrowleft, 3 \circlearrowleft;
Lalaja, 1 \circlearrowleft, 1 \circlearrowleft;
Mt. Duida, Valle de los Monos, 1 \circlearrowleft.
C. o. venezuelae.
   VENEZUELA:
     Río San Feliz, La Cascabel, 1 or (type);
     Río Orinoco, Caicara, 5 3, 4 9, 1 (?);
     Altagracia, 2 \circlearrowleft, 3 \circlearrowleft, 2 (?);
     Ciudad Bolívar, 1 7, 3 (?);
     Agua Salda de Ciudad Bolívar, 1 9;
     Suapure, 2 \circlearrowleft, 3 \circlearrowleft;
     Maripa, 1 ♀;
     Río Caura, La Prición, 1 9;
     Río Apure, San Fernando, 1 (?);
      Cumaná, San Fernando, 1 "o" [? = Q];
     Bermúdez, Cumancoa, 2 \( \varphi \);
Rincón San Antonio, 1 "\( \varphi \)" [? = \( \sigma^2 \)];
      San Antonio, 2 3;
      Cocallar, 1 ♂;
     El Pilar, 1 ♂;
Falcon, Tucacas, 1 ♂;
      Carabobo, Las Trincheras, 1 9;
      "Venezuela," 1 (?).
   TRINIDAD:
      Caparo, 2 ♂, 3 ♀;
      Princestown, 3 Q;
      Heights of Aripo, 1 \circ ;
      Geelet, 1 ♀;
      "Trinidad," 1 (?)
C. o pusillum .-
   COLOMBIA:
      Río Atrato, 1 \circ 7;
      Río Magdalena, Banco, 1 ♀;
      Carpintero, 1 ♀;
      Algodonal, 1 ♀;
     Santa Marta, Bonda, 1 Q, 5 (?).
C. o. bogotensis.-
   COLOMBIA:
      "Bogotá," 4 (?) (incl. type);
      Villavicencio, 1 ♀.
C. o. caucae.-
   COLOMBIA:
      Río Frío, 2 d' (incl. type);
      east of Palmira, 1 \circlearrowleft, 1 (?);
      Media Luna. 1 \sigma:
      Cunday, 1 (?);
      Río Coello, Chicoral, 1 \circ (\times pusillum).
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Xanthomyias sclateri subtropicalis (Chapman)

Mecocerculus subtropicalis Chapman, 1919 (Dec. 31), Proc. Biol. Soc. Wash., XXXII, p. 262—San Miguel Bridge, Urubamba Valley, Perú; ♂; U. S. Nat. Mus.

Idma, $1 \circlearrowleft$, $2 \circlearrowleft$; San Miguel, $1 \circlearrowleft$, 1 ?)

This well-marked form seemingly is confined to the Urubamba Valley.

Phyllomyias griseiceps griseiceps (Sclater and Salvin)

Tyranniscus griseiceps Sclater and Salvin, 1871, P. Z. S. London for 1870, p. 841—Babahoyo, Ecuador; British Mus.

Twenty-nine examples of this rather uncommon species show sufficient differentiation in various parts of the entire range that I believe several subspecies ought to be recognized. All the birds from western Ecuador, true griseiceps, are characterized by the strong sooty crest indistinctly margined with dark gray and with the dark shading carried well over the hind neck to the upper border of the mantle; the back is clear olive, rarely with a trace of darker centers on the feathers; the throat is They differ from P. g.broadly white. cristatus of northeastern Colombia by graver and shorter crest with less obvious dark centers.

Chapman's caucae (1915, Bull. Amer. Mus. Nat. Hist., XXXIV, p. 645—Miraflores, Colombia; 57; Amer. Mus. Nat. Hist.) is a larger bird with definite dark centers on the feathers of the mantle which thus is less differentiated from the top of the head than in the Ecuadorian series. The higher elevations at which the two known specimens were found (6800 and 7000 feet) furnish added weight to the apparent distinctions of caucae.

The other Colombian specimens comprise nine examples from the Bogotá region and two from Minca, Santa Marta, all of which differ from both caucae and griseiceps by having the dark centers of the crest-feathers narrower and the light edges broader and paler with a consequent appearance of spotting that is absent from The centers of the the other forms. feathers, moreover, are not as blackish as in caucae and griseiceps but have a decided brownish tone even in unworn plumage. Occasionally there is a slight trace of olivaceous color on the margins of some of the crest-feathers but in most of them the margins are light gray. Though the crest is long, the hind neck is grayish or olive, not sooty like the crest.

Berlepsch (1884, Jour. für Orn., XXXII, p. 250) described *Phyllomyias cristatus* from Bucaramanga, Colombia, distinguishing it from *griseiceps* by reason of its brownish crest, margined with grayish olive, and a yellowish throat, with only the chin whitish. Recent authors have not recognized the form as distinct. Nevertheless, Bu caramanga lies between Bogotá and Santa Marta and with Bogotá and Santa Martan specimens similar, it would be expected that the same form would be found at Bucaramanga. Some of the Bogotá birds have the throat less purely white than the chin, all have the crown brownish rather than sooty blackish, and I have mentioned the occurrence of an olive tinge on the margins of the posterior crest-feathers in some cases. It seems advisable, therefore, to adopt the name *cristatus* for the birds of this general region.

One "Bogotá" specimen has traces of immature plumage which show the crest-feathers light, warm brown finely tipped with white and have broad whitish tips on the greater upper wing-coverts.

A single specimen from the Lawrence Collection, without data, is very strongly marked in the characters of *cristatus*, going far beyond any specimen I have from Bogotá or Santa Marta. The top of the head is quite pale brown with strongly olivaceous margins; the whole under parts are yellow, with even the chin of that color though it is paler than the throat; the auriculars are yellowish instead of white and the superciliary stripe has a suggestion of yellow. This may be an extreme development of *cristatus* or it may belong to an unknown form from an unknown locality.

One specimen from Zamora, eastern Ecuador, differs from the west-Ecuadorian birds principally by a restriction of the dark hue of the cap to the top of the head, leaving the hind neck greenish, but the hue of the crest is as dusky as in the palest of the western birds and I am not convinced that a separable form is involved.

On the other hand, a single specimen from the lower Rio Negro, Brazil, the first example to come from that particular region, is distinct enough from Ecuadorian and Colombian birds to warrant subspecific separation. Supporting the proposed separation, a number of specimens from apparently associated localities show the same

general features of the Rio Negro bird within certain limits of individual variation. The new form may be known as follows.

Phyllomyias griseiceps pallidiceps, new subspecies

Type from Hacienda Rio Negro, Manaos, Rio Negro, Brazil. No. 309,969, American Museum of Natural History. Adult male collected July 20, 1928, by Carlos Olalla and sons.

DIAGNOSIS.—Distinguishable from *P. g. griseiceps* of western Ecuador by paler cap, predominantly grayish with the dark centers reduced to inconspicuous shaft-lines; crest shorter; hind neck like the back, not like the top of the head.

Range.—Lower Rio Negro, Brazil; south-eastern Venezuela (Mt. Auyan-tepui and probably Mt. Roraima); probably British Guiana; Chanchamayo Valley, Perú.

DESCRIPTION OF TYPE.—Top of head near Deep Neutral Gray with fine shaft-lines darker; a slight suggestion of olive tinge on the edges of the occipital feathers; crest moderately developed; back slightly grayer than Krönberg's Green, the same color covering the hind neck; upper part of lores and a narrow superciliary stripe whitish: a broad dusky space before and behind the orbit; subocular lunule white; malar and auricular regions grayish white; chin whitish; throat tinged with pale yellow; breast and sides dull Mignonette Green with brighter yellow edges on the central feathers; belly Citron Yellow with a slight tinge of Straw Yellow; under tail-coverts paler and duller. Wings sooty brown; secondaries exteriorly margined with Primrose Yellow, not reaching the tips of the greater upper coverts but reaching the shaft at the terminal margin in a more whitish tint; tertials with outer margins whitish; lesser upper wing-coverts like the back; median and greater series with tips Citrine Drab forming inconspicuous wing-bars; under wing-coverts Marguerite Yellow; inner margins of remiges dull yellowish; tail dark brown with outer margins of rectrices olive. Bill and feet (in dried skin) blackish. 48 mm.; tail, 41; exposed culmen, 7; culmen from base, 9; tarsus, 14.

Remarks.—Female (from Mt. Auyantepui) like the male.

One male from Mt. Auyan-tepui and one from Perené, Perú, have the chest duller grayish olive than the rest of the series, with the throat less whitish. One Auyan-tepui female has the throat as whitish as the type, and three of the Venezuelan specimens have only the chin white but the rest of the under parts as bright as, or brighter than, the type. The Venezuelan

male and the Perené male have the top of the head more brownish than the others but this area is worn in both specimens while fresh in the remainder of the series. I have little hesitation, therefore, in assigning the Venezuelan and Peruvian birds to this new form. Individually and in series they show good distinction from the west-Ecuadorian griseiceps. It is highly probable that the records from Annai, British Guiana, and from Mt. Roraima are assignable to the same form. There are no earlier Peruvian records except of the specimens listed below.

I am unable to say what the birds recorded from Carabobo and Lake Valencia, Venezuela, may be. The specimens should be examined to determine their proper allocation.

SPECIMENS EXAMINED

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P. g. griseiceps .-
  ECUADOR:
     Esmeraldas, 2 \circ;
     Cebollal, 2 ♂;
     Hacienda Ana Maria, Quevedo, 1 ♂;
     "Quito," 1 (?);
"Ecuador," 1 (?);
     Zamora, 1 ♀.
P. g. caucae.-
  COLOMBIA:
     Miraflores, 1 ♂ (type);
     San Antonio, 1 Q.
P. g. cristatus.—
  COLOMBIA:
     Cunday, 1 (?); "Bogotá," 8 (?);
     Santa Marta, Minca, 1 o, 1 (?).
P. g. pallidiceps.
  BRAZIL:
     Manaos, Hacienda Rio Negro, 1 of (type).
  VENEZUELA:
     Mt. Auyan-tepui, 1 \circlearrowleft, 3 \circlearrowleft, 1 (?).
  Perú:
     Perené, 1 \sigma;
     Río Colorado, Chanchamayo, 1 011.
P. g. subsp. ?-
  (No locality), 1 (?).
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Tyranniscus nigro-capillus nigro-capillus (Lafresnaye)

Tyrannulus nigro-capillus LAFRESNAYE, 1845, Rev. Zool., VIII, p. 341—Bogotá, Colombia.

Five specimens from northern Perú are inseparable from Ecuadorian and Colombian birds (except from flavimentum of the Santa Marta region of northern

Colombia) although old Bogotá tradeskins have browner caps.

I have seen no specimens from central Perú which Taczanowski (1884, Orn. Pér., II, p. 257) noted as differing slightly from north-Peruvian specimens.

On the other hand, ten specimens from the Mérida region of western Venezuela are easily separable from the type and three other examples of flavimentum and may be recognized as described below.

Peruvian records of *nigro-capillus* are from Cutervo, Molinopampa, and Pumamarca.

Tyranniscus nigro-capillus aureus, new subspecies

Type from Escorial, near Mérida, Venezuela; altitude 2500 meters. No. 499,977, American Museum of Natural History. Adult male collected February 22, 1896, by Salomon Briceño and Sons.

DIAGNOSIS.—Nearest to *T. n. flavimentum* of the Santa Marta region, Colombia, but more golden in coloration. Back more yellowish green; under parts more chrome-tinged yellow; top of head lighter and more brownish, less sooty.

RANGE.—At present known only from the region of Mérida, Venezuela.

DESCRIPTION OF TYPE.—Top of head dark Clove Brown; nasal feathering, upper part of lores, and a superciliary stripe Olive Yellow, becoming darker and greener posteriorly back Warbler Green × Citrine, passing into Citrine on the upper tail-coverts. A dusky spot in front of eye; sides of head Yellowish Citrine; throat, breast, and belly Strontian Yellow X Wax Yellow; chin and throat similar but with white subterminal area of the feathers lightening the general hue. Wings fuscous; primaries with fine outer margins pale olivaceous; secondaries with broader outer margins Old Gold, leaving a dusky patch just beyond the tips of the greater wing-coverts; tertials with outer margins Naphthalene Yellow; lesser upper wing-coverts like the back; median and greater series with broad terminal spots of Naphthalene Yellow forming two conspicuous wing-bars; under wing-coverts Barium Yellow, deeper and more golden on bend of wing; inner margins of remiges dull buffy whitish. light brown with outer margins of the rectrices near Citrine. Bill (in dried skin) dusky brown; feet dark brown. Wing, 65 mm.; tail, 49; exposed culmen, 6.8; culmen from base, 10; tarsus, 17.

Remarks.—Female like the male.

An immature bird from El Valle, July 7, 1896, Q, has the top of the head dull

¹ Specimen in Field Museum of Natural History, Chicago.

brownish, the back dull greenish, the rump and upper tail-coverts distinctly brown, the under parts duller than in the adults and with a slight buffy tinge, the wing-bars near Isabella Color, and the outer margins of the secondaries golden brown.

SPECIMENS EXAMINED

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T. n. nigro-capillus.—
  Perú:
     Taulis, 1 \circlearrowleft;
     La Lejia, 1 ♂, 2 ♀, 1 (?).
  ECUADOR:
     Pichincha, 1 ♂;
     upper Sumaco, 2 ♀.
  COLOMBIA:
     Almaguer, 1 \ \emptyset;
     Santa Elena, 3 ♀;
     Salento, 1 \circlearrowleft;
     coast range west of Popayan, 1 ♀;
     Fomeque, 1 (?);
     Páramo de Chingosa, 1 (?);
     "Bogotá," 13 (?).
T. m. flavimentum.
  COLOMBIA:
     Santa Marta, San Lorenzo, 1 ♂ (type);
     El Libano, 1 9, 2 (?).
T. n. aureus.-
  VENEZUELA:
     Escorial, 2 \circlearrowleft (incl. type), 4 \circlearrowleft;
     El Valle, 2 \circlearrowleft, 1 \circlearrowleft;
     El Loro, 1 ?.
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Tyranniscus uropygialis (Lawrence)

Mecocerculus uropygialis LAWRENCE, 1870, Ann. Lyc. Nat. Hist. N. Y., IX, p. 266—"supposed to be Ecuador"; Amer. Mus. Nat. Hist. Chipa, 1 ♀.

I can find no distinctions in birds from Bogotá, northern and southern Ecuador, and Perú. The type is very warmly colored on the whole upper surface, particularly bright on the uropygium, but this coloration presumably is due to postmortem change in the specimen.

Peruvian records are from Ollachea, Tabaconas, mountains above Huánuco, and Surco.

Tyranniscus cinereiceps (Sclater)

Tyrannulus cinereiceps Sclater, 1860, P. Z. S. London, XXVIII, p. 69—Pallatanga, Ecuador; φ ; British Mus.

I have not enough material to explain satisfactorily the variations that appear in a series of twelve birds from various localities in Colombia, Ecuador, and Perú. The Ecuadorian, east-Colombian, and north-Peruvian (Chaupe) birds are in

good agreement, having the under parts deep yellow (except in one young specimen) and the base of the auriculars similarly brightly colored.

Two specimens from the Urubamba Valley are distinctly duller yellow on the belly and less strongly greenish on the chest, but they are very closely matched by a single specimen from Santa Elena, Colombia. Two other Colombian birds, an adult from above Salento and an immature bird from El Eden, are decidedly pale yellowish on the under parts and strongly tinged with gravish on the back. The Urubamba Valley skins and the Santa Elena specimen have particularly small, slender bills; all the other examples have heavier bills. The value of these characters is in question until more material from all parts of the range is available.

Another Peruvian record is from Ropay-bamba.

SPECIMENS EXAMINED

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T. cinereiceps.-
  COLOMBIA:
    El Roble, 1 (?);
    Santa Elena, 1 7;
    El Eden, 1 \ \emptyset;
    above Salento, 1 ♀;
     "Bogotá," 1 (?).
  ECUADOR:
    Intag, 2 \circlearrowleft;
    upper Sumaco, 1 ♀;
    above Baeza, 1 7.
  Perú:
    Chaupe, 1 ♀;
    San Miguel, 1 \sigma;
    Idma, 1 \circlearrowleft;
    Río Jelashte, 1 \eth^{1}.
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Tyranniscus bolivianus viridissimus Sclater

Tyranniscus viridissimus SCLATER, 1874, P. Z. S. London for 1873, pp. 780, 782—Cosñipata, Perú; British Mus.

It is with considerable hesitation that I recognize viridissimus as distinct from bolivianus. Three females from Idma and one from Santo Domingo are brighter green above and brighter yellow below than any of five Bolivian birds of the same sex although one female from Roquefalda, Cochabamba, approaches the dullest of the Peruvian birds. On the other hand, a

¹ Specimen in Academy of Natural Sciences of Philadelphia.

male from Idma and one from La Pampa are rather exactly like a male from Incachaca and one from Sandillani while a Yungas male and two of that sex from Locotal are grayer and duller above and below.

Hellmayr (1920,Arch. Naturg., LXXXV, A, Heft 10, p. 53) found a male from "Chuhuasi" [= Uruhuasi] like Bolivian birds but a male from Idma, Urubamba Valley, a little brighter in color. He later assigned the "Chuhuasi" specimen to bolivianus and the Idma bird to viridissimus. The type locality of viridissimus is more closely associated with Uruhuasi than with Idma and there is little likelihood of taxonomic distinction between the two places. Furthermore, the Santo Domingo female now before me is inseparable from Idma specimens.

It appears, therefore, that there is a tendency toward brighter coloration in the Peruvian birds, particularly noticeable in the females and, although there is some doubt as to the advisability of maintaining two forms, *viridissimus* may be provisionally recognized. The geographic boundary also is a matter for debate but the material at hand suggests that this boundary may nearly coincide with the political one between Perú and Bolivia.

With this arrangement, the Uruhuasi record should go with viridissimus.

SPECIMENS EXAMINED

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T. b. bolivianus.—

BOLIVIA:
Chaco (Yungas), 1 o, 2 9;
Sandillani, 1 [o];
Pitiguaya, 1 [o];
Locotal, 2 o, 1 [o];
Incachaca, 1 o;
Roquefalda, 1 o.
T. b. viridissimus.—

PERÚ:
La Pampa, 1 o;
Santo Domingo, 1 o;
Idma, 1 o, 3 o.
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Tyranniscus chrysops (Sclater)

Tyrannulus chrysops SCLATER, 1858, P. Z. S. London, XXVI, p. 458—Gualaquiza and Zamora, Ecuador; cotypes in British Mus.

T(yranniscus) flavifrons Cabanis and Heine, 1859, Mus. Hein., II, p. 58, footnote—Bogotá; Frankfort Mus.

Typical chrysops from eastern Ecuador

is a relatively brightly colored bird, with the upper parts bright olive-green (darker on the head), the forehead deep yellow and the superciliary stripe broadly of the same color, the chin strongly yellow, and the belly nearly always definitely yellowish. The tips of most of the rectrices are noticeably pale.

Specimens from northern Perú and the eastern Andes of Colombia agree very well with the east-Ecuadorian specimens although an occasional specimen shows a darker upper surface, duller frontal band, or more whitish under parts.

Birds from southwestern Ecuador are distinctly darker above (Roman Green X Dark Greenish Olive), with the forehead duller yellowish, frequently obscured by dark tips on many of the feathers, and with the superciliary stripe duller and narrower, sometimes confined to the upper eyelid; the under parts are sometimes like those of *chrysops*, sometimes less strongly yellowish in an apparent approach toward albigularis of northwestern Ecuador. The tips of the rectrices are indistinctly, if at all, pale. Since there is a name available for a form from this region, flavidifrons (Tyrannulus flavidifrons Sclater, 1860, P. Z. S. London, XXVIII, p. 69—Pallatanga, ♂♂; western Ecuador: cotypes in British Mus.), it may be used in this case. T. c. flavidifrons (Sclater) probably occurs in Perú since I have specimens from the border of Perú and Ecuador though none from localities definitely within the boundaries of Perú.

Specimens from central and western Colombia are slightly different from the east-Colombian birds when examined in series, but the distinctions are not clearly enough defined to justify the separation of a new form in this area. The central and western birds are a little darker on the back, suggesting the paler examples of flavidifrons, but the yellow front and superciliary stripe are better developed on average and the tips of the rectrices are distinctly pale as in chrysops. Though seemingly intermediate between chrysops and flavidifrons, this dark population is separated from the range of flavidifrons by the range of albigularis. I believe it best, therefore, to keep all the Colombian birds together in *chrysops* except, of course, the Santa Martan *minimus* which, in Colombia, is confined to the Santa Martan region. I suspect that Santa Marta comprises the entire range of this form since available Venezuelan examples appear to be recognizably distinct as described below.

Peruvian records of *chrysops* are from Huambo, Huayabamba, Ray-Urmana, Chirimoto, and Poco Tambo (Pucatambo).

Tyranniscus chrysops cumanensis, new subspecies

Type from Los Dos Rios, State of Cumaná, Venezuela. No. 500,044, American Museum of Natural History. Adult male collected April 3, 1898, by Caracciola; original No. 1226.

DIAGNOSIS.—Agrees with *T. c. minimus* of the Santa Martan region of northern Colombia in respect to size and the relative inconspicuousness of the yellow frontal band, but differs from it by distinctly brighter, more yellowish coloration above and below, being the brightest of the forms known at present.

RANGE.—Northeastern Venezuela.

DESCRIPTION OF TYPE.—Back light Olive-Green X Serpentine Green; top of head a little darker; forehead narrowly rather dull yellow (a little more golden than Reed Yellow), not sharply defined; lores slightly duller and a narrow superciliary line still paler and not very distinct; auriculars and upper tail-coverts with a slight brownish tinge. Chin near Reed Yellow; throat a little deeper, pale Primrose Yellow; breast Olive-Buff with indistinct yellowish flammulations; belly Primrose Yellow with some dull, pale grayish striping anteriorly and laterally, merging with the color of the breast, and with traces of Reed Yellow flammulations; flanks a little grayer than Light Yellowish Olive. Wings dark brown; ninth (subexternal) to sixth primaries with basal third of outer margins narrowly Sea-foam Yellow; tenth and fifth to first without pale outer margins; secondaries with outer margins more broadly Olive-Yellow except at the bases of the outer three or four and more greenish at the bases of the others; tertials margined with Primrose Yellow; lesser upper wingcoverts like the back; median and greater series with outer margins and tips bright Primrose Yellow; under wing-coverts Marguerite Yellow except for a brownish patch at the base of the primaries; inner margins of remiges Pale Olive-Buff. Tail lighter brown than the wings with outer margins of the rectrices near Light Yellowish Olive. Bill (in dried skin) blackish; feet dark brown. Wing, 51.5 mm.; tail, 45; exposed culmen, 7; culmen from base, 10; tarsus, 16.

Remarks.—Females similar to the males

in coloration but with distinctly shorter wing and tail. Wing, 44.5-48; tail, 36-38. Males: wing, 50-53; tail, 40-45.

Five birds in the series of fifteen specimens appear to be wrongly sexed. The evidence of a long series of the entire species leaves little doubt that there is a positive difference of size in the two sexes. On the same basis, the type of *minimus* is a female and not a male as noted on the original label.

A specimen, presumably a female, obtained by Alexander and labeled as from British Guiana, belongs to cumanensis without question but is doubtful as to locality. I have never succeeded in tracing Alexander's itinerary but have found various species, from time to time, whose right to inclusion in the fauna of British Guiana is based solely on the unsupported evidence of specimens labeled, briefly, like the present bird, "Alexander, British Guiana."

SPECIMENS EXAMINED

T. c. chrysops.-Perú: La Lejia, 2 ♂; Uchco, 1 ♂; Nuevo Loreto, 1 (?). Ecuador: Zamora, 4 ♂, 1 ♀; Baeza, $2 \circlearrowleft$, $1 \circlearrowleft$; Oyacachi, 3 ♀, 1 (?). COLOMBIA: (Santa Elena, San Antonio, Primavera, Las Lomitas, Los Cisneros, Honda, Aguadita, Ricaurte, Villavicencio, Buena Vista, Fusugasugá, Chocó, Gallera, Puerto Valdivia, "Yuntas" [? = Juntas de Tamaná], Río Frío, La Palma, east of Palmira, Quinta, "Río Cauca," and "Bogotá"), 13 3, 18 9, 15 (?). T. c. flavidifrons .-ECUADOR: Alamor, $6 \circlearrowleft$, $6 \circlearrowleft$, 1 (?); Punta Santa Ana, 1 3, 2 9; Las Piñas, $1 \circlearrowleft$, $2 \circlearrowleft$; Cebollal, 6 ♂; El Chiral, 2 9:

T. c. albigularis.—

ECUADOR:

Mindo, 2 &, 2 &;

Esmeraldas, 1 & (type);

Río de Oro, 1 &;

Gualea, 1 &;

Guaracilla, 1 &, 2 &;

Pallatanga, $1 \circlearrowleft$; Pullango, $1 \circlearrowleft$;

Chimbo, $1 \circlearrowleft$, 1 (?).

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Santo Domingo, 5 \circlearrowleft, 4 \circlearrowleft;
        Paramba, 4 \circlearrowleft, 2 \circlearrowleft;
        Naranjo, 1 \circlearrowleft, 1 (?); "Quito," 1 [\ \ \ \ ].
T. c. minimus.-
    COLOMBIA:
        Santa Marta, Minca, 1 "\circlearrowleft" [= Q] (type),
             1 9, 2 [9].
T. c. cumanensis.
     VENEZUELA:
         Cumaná, Los Dos Ríos, 2 o (incl. type);
        Campos Alegre Valley, 1 \ \circ, 1 \ \circ \circ \circ [= \ \circ];
Los Palmales, 1 \ \circ \circ, 1 \ \circ \circ \circ [= \ \circ];
Quebrada Seca, 1 \ \circ \circ \circ [= \ \circ], 1 \ \circ;
La Tigrera, 1 \ \circ, 1 \ \circ \circ \circ [= \ \circ];
La Montaña del Guácharo, 1 \ \circ \circ \circ [= \ \circ];
         Cuchivano, 1 ♂;
         San Antonio, 1 9:
         Cristóbal Colón, 1 \ \emptyset.
    "British Guiana": 1 [Q].
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Tyranniscus viridiflavus (Tschudi)

E(laenia) viridiflava TSCHUDI, 1844, Arch. Naturg., X (1), p. 274—Perú [coastal region given by Tschudi, 1846, Faun. Per., Aves, p. 160, but this almost certainly is an error]; Mus. Neuchâtel.

Tyranniscus frontalis BERLEPSCH AND STOLZ-MANN, 1894, Ibis, p. 390-Garita del Sol and San Emilio, Perú; a 🗗 from Garita del Sol in Warsaw Mus. claimed as type by Stolzmann and Domaniewski, 1927, Ann. Zool. Mus. Pol. Hist. Nat., VI (2), p. 145; the San Emilio paratype is in the Amer. Mus. Nat. Hist.

It is only by Berlepsch and Hellmayr's study of Tschudi's type of E. viridiflava (1911, Jour. für Orn., LIII, p. 11) that it is possible to place "frontalis" in the same species with viridiflavus. Tschudi's description and the figure in the Fauna Peruana, Aves, Pl. 1x, fig. 2, are unrecognizable and the supposed locality, the coastal region of Perú, is misleading.

A good series from central Perú shows relative uniformity in characters and size but there is still a noticeable amount of individual variation. The green of the back is usually fairly bright but two November specimens, perhaps a little more worn than the others (December, January, March, and May) are darker on the back and a little grayer on the chest. The pale yellowish frontal band usually is well marked and broad but some examples have it obscured by fine dusky tips and one specimen has it relatively narrow. every case, however, there is a strong dusky spot in front of the eye and a broad yellow eye-ring. The cap is always definitely gray, with dusky central spots on the feathers. The under parts are predominantly yellow, including the breast.

There is thus a definite, though not exceptionally broad, distinction between this species and chrysops and I should not be surprised to find this difference overcome by specimens from intermediate localities. For the present, however, the two groups may be kept specifically distinct with the realization that they are very closely re-

Peruvian records are from Garita del Sol and Paltaypampa.

SPECIMENS EXAMINED

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T. viridiflavus.—
  Perú:
      San Emilio, 1 o (paratype);
      Pozuzo, 1 ♀;
      Chanchamayo, 1 9;
      Tulumayo, 2 \circlearrowleft, 3 \circlearrowleft;
      Utcuyacu, 1 ♂, 1 ♀;
      Vista Alegre, 4 \circlearrowleft<sup>1</sup>, 3 \circlearrowleft<sup>1</sup>;
      Eneñas, 1 \ Q^2;
      San Juan, 1 ♂2, 1 ♀2.
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Tyranniscus gracilipes gracilipes Sclater and Salvin

Tyranniscus gracilipes Sclater and Salvin, 1867, P. Z. S. London, p. 981—Pebas, Perú; ♀; British Mus.

I have no Peruvian specimens from the northern part of the country but two examples from the lower Río Napo, southeastern Ecuador, are not far from topotypical. One of these, a female, shows some remaining traces of immaturity but the other, a male, is fully adult. A moderate series from the upper Rio Negro, Brazil, Mt. Duida, the Río Cassiquiare, and the upper Orinoco are in close agreement and obviously represent the same form. One bird from Mt. Roraima shows some approach toward acer of British Guiana, having a tendency toward a whitish tint on the upper throat, but it remains closer to gracilipes.

The Guianan acer is recognizable by the whitish throat, ashy-tinted chest, and paler yellow belly, but some examples of the two forms are very similar as is discussed again below.

¹ Specimens in Field Museum of Natural History, Chicago.

² Specimens in Academy of Natural Sciences of

A series of specimens from southeastern Perú, northern Bolivia, and the upper Rio Madeira region of Brazil are recognizably distinct from true gracilipes and are described below.

A record from Chamicuros is difficult to assign without seeing the specimen in question but for purely geographical reasons is left with *gracilipes*.

Tyranniscus gracilipes gilvus, new subspecies

Type from La Pampa, southeastern Perú. No. 146,237, American Museum of Natural History. Adult male collected October 10, 1916, by Harry Watkins; original No. 252.

DIAGNOSIS.—Similar to T. g. gracilipes of southeastern Ecuador, northeastern Perú, the upper Rio Negro, Brazil, and southern Venezuela, but differs by brighter green back, average paler gray cap, brighter yellow under parts, and somewhat less sharply defined wing-bars.

RANGE.—Southeastern Perú, northern Bolivia, and southwestern Brazil (upper Rio Madeira region).

DESCRIPTION OF TYPE.—Top of head Deep Neutral Gray with dusky centers on the feathers, giving a somewhat spotted appearance. Hind neck similar, tinged with Iron Gray; back Roman Green × Serpentine Green with the scapulars showing some dusky centers. Lores, superciliary region, and a subocular area indistinctly paler, hardly whitish; auriculars Buffy Olive, yellower basally; throat Reed Yellow X Citron Yellow with chin paler but not whitish; sides of breast Yellowish Olive, the color lightening toward the center of the breast where there are some yellowish margins, not conspicuous; flanks like sides; belly broadly deep Citron Yellow but with some light olivaceous stripes on upper portion, merging the colors of breast and belly. Wings blackish; ninth (subexternal) to sixth primaries with greenish-yellow outer margins on basal half; secondaries with Reed Yellow outer margins, not reaching the bases of the feathers; tertials with margins paler and duller; lesser upper wingcoverts like the back; median series with a dull Primrose Yellow spot on outer margins at the tips of the feathers, not crossing to the inner web; greater series with outer margins narrowly Primrose Yellow except where concealed by the median coverts; under wing-coverts Barium Yellow; inner margins of remiges Marguerite Yellow. Tail brown, a little paler than the wings and with outer margins Dull Citrine. Bill (in feet slaty blackish. dried skin) blackish; Wing, 50.5 mm.; tail, 43; exposed culmen, 7.75; culmen from base, 10.5; tarsus, 15.25.

Remarks.—Females like the males in color but smaller. Wing, 43-45 mm. (3, 48-52.25); tail, 33.5-39 (3, 40-45).

There is not a great deal of variation among the adults of this form and the series is easily distinguished from typical gracilipes. The lores and superciliary region are sometimes a little paler and more conspicuous than ordinarily and one female from the Río Tavara has a very narrow pale line crossing the forehead, suggesting possible affinity with T. viridiflavus, certain examples of which are hardly better marked in that respect though all of them have much more pronounced superciliaries, a rather strong dusky spot in front of the eye, a much broader and more conspicuous eyering, and longer wings and tail. Whether these differences ought to be considered as specific is questionable, but I have yet seen no specimen that is not instantly determinable as either one or the other of these forms. The same holds true with viridiflavus and chrysops. Material from intervening regions may, sometime, show the intergradation of these three groups.

The case is different with regard to gracilipes and acer. While typical examples of these two forms are easily distinguishable, some examples of acer have a definite tinge of yellow on the throat and opposite extremes of gracilipes have their normal coloration reduced to near the same tints. Both forms have been recorded from Roraima but it is not impossible that there has been some confusion due to intergradation at that point. Most of the specimens recorded from Roraima have been referred to gracilizes and only one to acer. Our single specimen from Roraima is somewhat intermediate though closer to gracilipes but a skin from Carimang River and one from Potaro Landing, British Guiana, are both acer.

More puzzling are three specimens from southeastern Perú which show a decided approach toward acer although it is difficult to see how they could be subspecific hybrids in view of the far distant range of acer. These three birds have the yellow pigment reduced throughout, giving the back a dull grayish olive tone, the throat a pale yellowish, almost whitish, tint, the breast a somewhat decided grayish color with slight yellowish flammulations, and the belly a Primrose Yellow hue while the

wing-bars are duller and more greenish yellow than even most acer. There is a great similarity between these specimens and the brightest examples of acer. One of the three birds, a male, is marked as having the testes much enlarged but all three have a certain immaturity of appearance, especially in the texture of the plumage. I believe they are but imperfectly colored examples of gilvus with which they agree in dimensions, pattern, and, in one case, exact locality. They do not suggest any other species.

However, I believe acer should be placed as a subspecies of gracilipes and have so considered it.

There are no previous records from Perú that are certainly assignable to gilvus.

SPECIMENS EXAMINED

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T. g. gracilipes .-
  ECUADOR:
     mouth of Río Curaray, 1 ♂, 1 ♀.
  BRAZIL:
     Rio Negro, Yucabí, 2 3;
     Camanaos, 1 ♂;
     Cucuhy, 1 ♂;
     Rio Uaupés, Ianarete, 2 ♂;
     Tahuapunto, 2 \circlearrowleft.
  VENEZUELA:
     Río Cassiquiare, Solano, 1 \circlearrowleft, 2 \circlearrowleft, 1 \circlearrowleft);
     Buena Vista, 2 o, 1 Q, 1 (?);
Mt. Duida, Caño Seco, 1 Q;
     Boca de Sina, 1 9;
     (western) foot of Duida, 1 ♂, 1 ♀;
     Río Orinoco, Maipures, 1 9;
     Mt. Roraima, 1 ♀.
T. g. acer.-
  BRITISH GUIANA:
     Potaro Landing, 1 3;
     Carimang River, 1 3.
  DUTCH GUIANA:
     near Paramaribo, 1 ♂, 1 ♀;
     "Interior," 1 (?).
  Brazil:
     Faro, 2 ♂, 1 ♀;
     Rio Negro, Manaos, 2 ♂, 2 ♀;
     Igarapé Cacao Pereira, 1 ♀;
     Pará, Belem, 1 \mathcal{O}^{1};
     Rio Tocantins, Arumatheua, 1 Q:
     Mocajuba, 4 \circlearrowleft, 2 \circlearrowleft;
     Baião, 3 ♂, 2 ♀;
Rio Xingú, Tapará, 2 ♂, 1 ♀,
     Rio Tapajoz, Santarem, 1 (?);
     Aramanay, 1 \, \circlearrowleft, 1 \, \circlearrowleft;
     Piquiatuba, 1 ♀;
     Igarapé Brabo, 1 ♂;
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Igarapé Amorin, 1 (?).

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T. g. gilvus.—

PERÚ:

La Pampa, 1 ♂ (type), 1 ♂ ¹, 2 ♀ ¹;

Río Tavara, 1 ♀;

Huacamayo, 2♂ ¹ (one abnormally grayish);

Candamo, 2 ♂ (abnormally grayish).

Bolivia:

Río Beni, Salinas, 1 [♀];

Río Chaparé, Todos Santos, 2 ♂ ¹;

Río Mapiri, Huanay, 1 ♂ ¹.

Brazil:

Río Preto, Santa Isabel, 1 ♂ , 1 ♀.
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Tyranniscus cinereicapillus (Cabanis)

Phyllomyias cinereicapilla Cabanis, 1873, Jour. für Orn., XXI, p. 67—Monterico, Dept. Ayacucho, Perú; ♀; type formerly in Warsaw Mus., now lost.

A specimen in the American Museum from Chanchamayo was compared with the type of this form by Hellmayr and found to agree closely except for a certain paler coloration of the type probably due, according to Hellmayr, to the fact that the type was originally preserved in spirits. The Academy of Natural Sciences of Philadelphia has two males and a female, kindly lent to me by Mr. Bond of that institution, which agree in all essential respects with the American Museum specimen. Most surprising has been the discovery of still another example in the American Museum collections from the upper Río Suno, northeastern Ecuador, a locality far from the suspected range of the form.

With this material it is now possible to give the essential diagnostic characters of cinereicapillus, some of which appear to have been overlooked, and to remove it from the gracilipes group where, I am sure, it is out of place.

There is a superficial resemblance to g. gracilipes and g. gilvus. The spotted gray crown is very similar in both groups but in cinereicapillus the gray averages a little lighter and duller with some definite olive green margins on the back of the head. The back is a little lighter and clearer green than even in gilvus. The sides of the head have even less suggestion of pale markings on the lores and around the eye, being relatively uniform grayish. The throat is definitely whitish or pale grayish, with a very slight yellowish tinge. The breast and

 $^{^{\}rm 1}\,{\rm Specimens}$ in Academy of Natural Sciences of Philadelphia.

belly are very similar to those of *gilvus* but the flanks are lighter and not so olivaceous as in most gracilipes or gilvus. The wingmarkings are very nearly the same in pattern as those of the gracilipes group except that, whereas in the gracilipes group the yellowish border of the inner tertial is narrow and sharply defined, in cinereicapillus it is broader and has its inner border somewhat more diffuse. The wingbars are noticeably paler yellow than in the gracilines group. The bill has a curious purplish or reddish tone, sometimes obscured on the darker maxilla but quite pronounced on the mandible. The feet, also, show a reddish tinge in the dried skins. In addition, the bill is flatter and with a somewhat broader outline and rather less sharply ridged culmen than the other species. There is some resemblance to the bill of certain species of Phyllomyias, where the species was placed by its describer, but the general characteristics are those of Tyranniscus, including the peculiar wing-pattern. This pattern, of probable taxonomic significance, comprises the pale basido-lateral margins of four or five subexternal primaries and uniform black margins of the external and the four or five inner ones, and in the narrow yellowish margining of the median and greater wing-coverts. This combination is found in a number of species of *Tyranniscus* that are fairly closely related and *cinereicapillus* presumably belongs with them.

T. cinereicapillus agrees in size with viridiflavus which occurs in the same region though they differ from each other otherwise more than either does from gracilipes. Since viridiflavus is the more likely contender for a place in the gracilipes group, I consider cinereicapillus to be certainly specifically distinct.

Aside from the type and the specimens listed herewith, there are no records of this species.

SPECIMENS EXAMINED

T. cinereicapillus.—

PERÚ:

Chanchamayo, 1 ♀;

San Juan, Chanchamayo, 2 ♂¹; 2 ♀¹.

ECUADOR:

Rio Suno, above Avila, 1 ♂¹.

¹ Specimens in Academy of Natural Sciences of Philadelphia.