Continued study of our Ecuadorian birds and an attempt to determine not only their names but their relationships has resulted in the following conclusions concerning the status of certain forms from that country and others from Venezuela, Panama, Colombia, Peru, and Bolivia.

Of special interest are the birds described from southwestern Ecuador and northwestern Peru, emphasizing as they do both the distinctness of the avifauna of the Subtropical Zone in that region and its pronounced Amazonian affinities.

For the loan of specimens for comparison, thanks are due Dr. Witmer Stone of the Academy of Natural Sciences, Dr. C. E. Hellmayr of the Field Museum, and Dr. J. Dwight of the American Museum.

**Thamnophilus unicolor longicaudus**, new subspecies

**Subspecific Characters.**—Similar to *Thamnophilus unicolor unicolor* (Sclater) of the Subtropical Zone of western Ecuador, but wing averaging longer, tail disproportionately longer; the outer tail-feathers narrowly tipped with white.

**Type.**—No. 133,403, Amer. Mus. Nat. Hist.; ♂ ad.; Barro Blanco, 7200 ft., Antioquia, Colombia; November 26, 1914; Miller and Boyle.

**Range.**—Subtropical Zone of Colombia (except Santa Marta group) south to at least Zamora, eastern Ecuador.

**Specimens Examined**

*Thamnophilus unicolor longicaudus.*—**Colombia:** (Western Andes) Ricaurte, Narino, 1 ♂, 1 ♀; Cerro Munchique, 1 ♀; Gallera, 1 ♂ im., 1 ♀; Cocal, 1 ♂, 1 ♀; San Antonio, 3 ♂, 1 ♀; (Central Andes) Barro Blanco, Antioquia, 2 ♂; La Palma, 1 ♂, 1 ♀; La Candela, 1 ♂, 1 ♀; (Eastern Andes) Fusugasugá, 1 ♂, 1 ♀. **Ecuador:** (Eastern Andes) Zamora, 1 ♂.

*Thamnophilus unicolor unicolor.*—**Ecuador:** Junction Rios Chimbo and Coco, 2 ♀; El Chiral (above Santa Rosa), 4 ♂, 2 ♀; near Zaruma, 4 ♂, 4 ♀; Salvias, 1 ♂, 1 ♀; San Bartolo, 1 ♀; La Piñas, 1 ♀.

I have previously\(^1\) commented on the larger size of certain Colombian specimens of *Thamnophilus unicolor* and the receipt of a specimen

from eastern Ecuador which agrees with the Colombian specimens in dimensions, together with additional topotypical specimens of true *unicolor*, has lead to a further study of the species. It appears that the differences in size shown by most Colombian and our one specimen from eastern Ecuador are accompanied by a slight and fairly constant color character in the male, the whole being sufficiently pronounced to be diagnostic. The white tip on the outer tail-feathers is present in all but one of our Colombian males, a specimen from Cocal in southwestern Colombia lacking it, while it is barely evident in but three of our Ecuadorian males. Excluding several specimens from southwestern Colombia, an area of intergradation, and no specimen from western Ecuador has a tail as large as our Colombian and east Ecuadorian specimens.

Females from the same locality vary in general tone from ochraceous-tawny to Dresden-brown.

I use the generic term "*Thamnophilus*" in this paper in a conventional sense while awaiting an authoritative treatment of the generic relations of all the species of this group.

**Measurements of Males**

<table>
<thead>
<tr>
<th>Locality</th>
<th>No. of Specimens</th>
<th>Wing</th>
<th>Tail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salvias, Prov. del Oro, Ecuador</td>
<td>1</td>
<td>69</td>
<td>55 mm.</td>
</tr>
<tr>
<td>Zaruma, &quot; &quot;</td>
<td>4</td>
<td>69</td>
<td>53–55</td>
</tr>
<tr>
<td>El Chiral, &quot; &quot;</td>
<td>4</td>
<td>67–70</td>
<td>53–56.3</td>
</tr>
<tr>
<td>Ricaurte, Nariño, Colombia</td>
<td>1</td>
<td>70</td>
<td>63.5</td>
</tr>
<tr>
<td>Cocal, W. Andes &quot; &quot;</td>
<td>1</td>
<td>68.5</td>
<td>56.5</td>
</tr>
<tr>
<td>San Antonio, W. Andes, Colombia</td>
<td>3</td>
<td>66–69</td>
<td>57–61</td>
</tr>
<tr>
<td>Barro Blanco, Antioquia, Colombia</td>
<td>1 (type)</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>&quot; &quot;</td>
<td>1</td>
<td>71</td>
<td>68</td>
</tr>
<tr>
<td>La Palma, Huila, Colombia</td>
<td>1</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>Above Fusugasugá, E. Andes, Colombia</td>
<td>1</td>
<td>71</td>
<td>64</td>
</tr>
<tr>
<td>Zamora, Prov. Loja, Ecuador</td>
<td>1</td>
<td>69.5</td>
<td>65</td>
</tr>
</tbody>
</table>

*Thamnophilus wethiops occidentalis*, new subspecies

**Subspecific Characters.**—Similar to *Thamnophilus wethiops wethiops* Sclater, of eastern Ecuador, but general coloration slaty-black rather than jet-black; more slaty below than above; the bill more slender. Wing, 71; tail, 55; tarsus, 23; culmen, 19.7, width at nostril, 5.4 mm.

**Type.**—No. 109,619, Amer. Mus. Nat. Hist.; ♂ ad.; Cocal, 4000 ft., Western Andes, Colombia; June 10, 1911; W. B. Richardson.

**Specimens Examined**

*Thamnophilus wethiops occidentalis.*—COLOMBIA: the type.

*Thamnophilus wethiops wethiops.*—Eastern ECUADOR: Sarayaçu, 1 ♂; "east Ecuador," 1 ♂.
I venture to describe this form on the authority of Dr. Hellmayr to whom the type was submitted some years ago for identification. The species has not before been recorded from west of the Andes or from any part of Colombia.

_Thamnophilus bernardi piura_, new species

**Subspecific Characters.**—An intermediate between _Thamnophilus bernardi cajamarca_ Hellmayr, of the Pacific slope of the Provinces of Cajamarca an La Libertad, Peru, and _T. bernardi bernardi_ Lesson of western Ecuador; nearer the former but averaging smaller with all the brown areas constantly and pronouncedly paler; the male with the upperparts between Brussels-brown and raw-umber, instead of deep brownish auburn; the female deep Sudan-brown, rather than bright auburn above, the rectrices without indistinct, subterminal black markings, present in most of our specimens of _cajamarca_, and with less suggestion of blackish markings on the breast; averaging larger than _T. bernardi bernardi_, the male with the back brighter brown, the front and sides of the throat with more whitish markings; the female brighter, deeper brown above, the hind-head usually more or less black, instead of largely or wholly Sanford's brown.


**Range.**—Tropical Zone, northwestern Peru (Provinces Piura and Tumbez) north into southwestern Ecuador; (also Valley of the Marañon?).

**Specimens Examined**

_Thamnophilus bernardi piura._—PERU, Prov. Piura: Samate, 4 ♀, 4 ♂; Paletillas, 2 ♂, 1 ♀; Milagros, 1 ♂, 1 ♀; Sullana, 1 ♂, 1 ♀; Chilaco, 1 ♂, 2 ♀; Palambla, 4 ♂, 3 ♀; Prov. Tumbes, Tumbez, 1 ♂. ECUADOR: Prov. Loja; Lunama, 1 ♂, 1 ♀; Casanga Valley, 1 ♂, 1 ♀; Prov. del Oro, Sta. Rosa, 2 ♂, 5 ♀.

_Thamnophilus bernardi cajamarca._—PERU: Prov. La Libertad; Viru, 4 ♂, 5 ♀; Trujillo, 1 ♀.

_Thamnophilus bernardi bernardi._—ECUADOR: Manta, 3 ♂, 1 ♀; Machachilla, 1 ♂, 2 ♀; Sta. Elena, 1 ♀; Chongonceito, near Guayaquil, 3 ♂, 4 ♀; Guayaquil, 3 ♂, 1 ♀; Duran, 1 ♂; Daule, 3 ♀; Puná Is., 6 ♂, 3 ♀.

**Measurements**

<table>
<thead>
<tr>
<th>Locality</th>
<th>Sex</th>
<th>No. of Specimens</th>
<th>Wing</th>
<th>Tail</th>
<th>Culmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guayaquil, Ec.</td>
<td>♂</td>
<td>5</td>
<td>77-81</td>
<td>60-62</td>
<td>21.5-23.5</td>
</tr>
<tr>
<td>Samate, Peru</td>
<td>♂</td>
<td>4</td>
<td>79.5-85</td>
<td>61-65.5</td>
<td>23-23.7</td>
</tr>
<tr>
<td>Viru, Peru</td>
<td>♂</td>
<td>4</td>
<td>82-87</td>
<td>65.5-68</td>
<td>24-25.5</td>
</tr>
<tr>
<td>Guayaquil, Ec.</td>
<td>♀</td>
<td>5</td>
<td>75-77</td>
<td>58-61</td>
<td>21.5</td>
</tr>
<tr>
<td>Samate, Peru</td>
<td>♀</td>
<td>4</td>
<td>79-82</td>
<td>62-64</td>
<td>22.7-24</td>
</tr>
<tr>
<td>Viru, Peru</td>
<td>♀</td>
<td>4</td>
<td>78-83.5</td>
<td>63-65</td>
<td>23-24</td>
</tr>
</tbody>
</table>

Depth of Bill at Base of Nostril

- Guayaquil, Ec.: 7-7.3 mm.
- Samate, Peru: 7-7.5 mm.
- Viru, Peru: 7.5-8 mm.
- Guayaquil, Ec.: 6.5-7 mm.
- Samate, Peru: 7.3-7.5 mm.
- Viru, Peru: 7.3-8 mm.
While intermediate between true bernardi of the Guayaquil region, and bernardi cajamarcae of the Trujillo region, specimens from the Provinces of Piura and Tumbez, Peru, cannot satisfactorily be referred to either, and I therefore propose their separation as above. Specimens from extreme southwestern Ecuador are intermediate. Some might well be referred to bernardi, others to piura, but on the whole they are perhaps nearer the latter. A specimen recorded by Hellmayr from Callacate, in the Marañon Valley, is probably referable to piura. Thamnophilus bernardi cajamarcae Hellmayr, is, therefore, doubtless restricted to the coast and lower western slopes of the Andes in the Provinces of La Libertad and Cajamarca.

The latter is the largest, darkest form of the group. Its size may be associated with lower latitude, but it is difficult to correlate its richer coloration with increase (as compared with the Guayaquil region) in aridity.

Thamnophilus bernardi baroni Hartert (1917, Nov. Zool., XXIV, December 13), described from the Yonan River, east of Pascamayo, is obviously a pure synonym of Hypolophus bernardi cajamarcae1 Hellmayr (1917, Verh. Orn. Gesell. Bayern, XIII, Heft 2, September 20) described from approximately the same locality (Tembladera). The types of both were collected by Baron.

Myrmotherula multostriata australis, new subspecies

Subspecific Characters.—Male similar to the male of Myrmotherula longicauda longicauda Berlepsch and Stolzmann, of east central Peru and eastern Ecuador, female differing from the female of that form in being ochraceous-buff below, the breast faintly if at all streaked; the upperparts streaked with black and ochraceous-buff; the wing-bars tipped with buff or ochraceous-buff. Male and female wing, 49; tail, 35 mm.


Specimens Examined

Myrmotherula longicauda australis.—S. E. Peru: Rio Inambari, 2 ©; La Pampa, 1 ©, 2 ©; Rio Tavara, 2 ©, 2 ©. Bolivia: Locotal (5800 ft.), Dept. Cochabamba, 1 ©.

Myrmotherula longicauda longicauda.—Peru: Tulmayo (4000 ft.), 5 ©, 3 ©. Ecuador: Zamora (3250 ft.), 2 ©; Macas, 1 ©.

Myrmotherula surinamensis surinamensis.—Lower Orinoco and British Guiana, large series.

Myrmotherula surinamensis multostriata.—Brazil: Pará, 1 ©; Rio Tocantins, 1 ©; Rio Roosevelt, 1 ©.

1Dr. Hellmayr informs me that this assumption is correct.
Myrmotherula longicauda is apparently a representative of *Myrmotherula surinamensis*, and is found at the east base of the Andes and upward to the Subtropical Zone from Ecuador to Bolivia. From *surinamensis surinamensis* it differs in its longer, much more graduated tail, greater amount of white in the rectrices (the outer vane of the outer rectrix being wholly or largely white with a white tip 7–8 mm. in width). The male lacks a concealed white dorsal patch and has the throat and flanks white, unstreaked. The females of both true *longicauda* and *longicauda australis* have the crown essentially like the back and are, therefore, quite unlike true *surinamensis*. In its streaked underparts true *longicauda* resembles to some extent *surinamensis multostriata*, but is not so richly colored, while in the complete, or almost complete, absence of streaks as well as color of the underparts *australis* resembles true *surinamensis*. Aside from other characters, the difference in the length and shape of the tail induces the belief that *longicauda* is specifically distinct from *surinamensis* of which it is the Andean and chiefly Subtropical representative.

*Microbates cinereiventris peruvianus*, new subspecies

Subspecific Characters.—In its uniformly gray breast and abdomen, and absence of a postocular mark resembling *Microbates cinereiventris semitorquatus* (Lawrence) of Central America, but upperparts somewhat deeper, more rufescent than in that race; sides of the head deeper, ochraceous-tawny rather than ochraceous-buff; black malar-stripe and breast-streaks less pronounced.

Type.—No. 146,133, Amer. Mus. Nat. Hist.; s ad.; La Pampa, Tropical Zone, southeastern Peru; October 9, 1916; H. Watkins.

Specimens Examined

*Microbates cinereiventris peruvianus*.—Peru: La Pampa, 2 s; Rio Tavara, lat. 7° 20' W., long, 13° 21' S., 1 s.

*Microbates cinereiventris semitorquatus*.—Panama: Canal Zone, 1 s (type).

Costa Rica: Parismina, 1 q. Nicaragua: Los Sabalos, 1 s.

*Microbates cinereiventris magdalena*.—Colombia: Malena, 1 s (type).

*Microbates cinereiventris cinereiventris*.—Western Colombia: Alto Bonito to Barbacoas, 2 s, 4 q, 2 ?. Eastern Panama: Darien, 5 s, 1 q. Western Ecuador: Rio de Oro to Alamar, 1 s, 2 q, 3 ?

The discovery of this slightly differentiated form of *Microbates cinereiventris* in southeastern Peru greatly extends the known range of the genus, no form of which has apparently hitherto been recorded from south of the Amazon. I have seen no specimens from eastern Ecuador, but it is not improbable that the two examples of *Microbates cinereiventris*
recorded by Sclater (1890, 'Cat. Birds Brit. Mus.,' XV, p. 262) from Sarayaçu should be referred to the form here described.

I append a key to the races of Microbates cinereiventris.

Postocular mark present. M. cinereiventris cinereiventris. Southwestern Ecuador to eastern Panama.

Postocular mark absent.

Tail tipped with white, abdomen centrally whitish. M. c. magdalene. Lower Magdalena Valley, Colombia.

Tail not tipped with white; breast and abdomen uniform gray.

Cheeks paler, ochraceous-buff. M. c. semitorquatus. Central Panama to Nicaragua.

Cheeks deeper, ochraceous-tawny. M. c. peruvianus. Southeastern Peru (to Eastern Ecuador?).

Myrmoderus griseiceps, new species

Specific Characters.—Male resembling male of Myrmoderus atrothorax ( Boddaert) of Amazonia, but entire head and nape deep neutral gray; flanks Dresden-brown; all but central rectrices and wing-coverts tipped with white. Female with throat and breast grayish; flanks as in the male.

Type.—No. 175,270, Amer. Mus. Nat. Hist.; o' ad.; Palambla (4000 ft.), west slope Western Andes, Dept. Piura, Peru; September 21, 1922; H. Watkins.

Adult Male.—Crown, sides of the head and entire nuchal region deep neutral gray to dark neutral gray; back near Dresden-brown, the interscapulars basally snow-white with a subterminal black band or mark; rectrices grayish black and all but the central pair blacker apically with distinct white tips; wing-quills fuscous-black, margined externally with brown apically, with black basally; wing-coverts jet black, very sharply tipped with white; primary coverts externally margined with white; extreme lesser coverts and wing "lining" white; throat and breast black, the former more or less veiled with gray; upper abdomen light neutral gray; flanks and ventral region washed with the color of the back; bill and feet blackish. Wing, 60.5; tail, 55; tarsus, 26; culmen, 17 mm.

Immature Male.—Similar to adult male but gray of head more or less washed with the color of the back; interscapulars with little or no white; tail browner; wing-quills basally as well as terminally margined with brown; wing-coverts with more or less brown, their tips ochraceous; little or no white on extreme lesser coverts; breast as well as throat veiled with gray; upper abdomen as well as lower abdomen washed with the color of the back. Wing, 58; tail, 53; tarsus, 24; culmen, 17 mm.

Adult Female.—Upperparts as in immature male; no black on the underparts, the breast soiled grayish, rest of underparts as in the immature male; white tail-tips much reduced; wing-quills as in immature male; wing-coverts black, the lesser ones tipped with whitish, the greater ones with ochraceous-buff; extreme lesser coverts white. Wing, 58; tail, 56; tarsus, 23.5; culmen, 17.5 mm.

Immature Female.—Similar to adult female but head with more brown; greater wing-coverts untipped; tips of lesser wing-coverts ochraceous-buff; no white on extreme lesser coverts; tail-tips almost obsolete. Wing, 58; tail, 56; tarsus, 23; culmen, 17.5 mm.

Range.—Subtropical Zone, northwestern Peru and southwestern Ecuador.
NEW FORMICARIIDÆ AND DENDROCOLAPTIDÆ 7

Specimens Examined

Myrmoderus griseiceps.—Peru: Palambla, 5 ♂, 4 ♀. Ecuador: Celica, 1 ♂, 1 ♀; Alamor, 6 ♂, 2 ♀; La Chonta, 1 ♂.

Myrmoderus atrothorax atrothorax.—Venezuela: Orinoco, 2 ♂, 2 ♀.

Myrmoderus atrothorax melanura.—Brazil: Prov. Matto Grosso, 6 ♂, 6 ♀.

Bolivia: Dept. Cochabamba, 3 ♂, 4 ♀.

This is an interesting addition to the growing list of birds from northwestern Peru and southwestern Ecuador which have apparently been derived from Amazonia through the valley of the Marañon.

Hylophylax1 lepidonota duidæ, new subspecies

Subspecific Characters.—Similar to Hylophylax lepidonota lepidonota (Sclater and Salvin) of eastern Ecuador, but male appreciably paler below, female with the head more rufescent; the crown and nape amber-brown; the forehead and side of the head brighter rufous; the underparts clearer with less of a dusky wash.

Type.—No. 120,712, Amer. Mus. Nat. Hist.; foot of Mt. Duida, upper Orinoco, Venezuela; March 19, 1913; Miller and Iglseder.

Range.—Upper Orinoco west to Bogotá region of northeastern Colombia.

Specimens Examined


Hylophylax lepidonota lepidonota.—Ecuador: Zamora, 2 ♂ ad., 2 ♀ ad.

Hylophylax poecilonota.—Venezuela: La Union, Caura, 1 ♀ ad.; Nericagua, Cen. Orinoco, 1 ♀ ad. British Guiana: Potaro River, 2 ♀ ad.; Kamakusa, 1 ♂ im.; Demarara, 1 ♂ ad.

Hylophylax griseiventris griseiventris.—Brazil: Borba, 2 ♂, 1 ♀ (topotypes); Rio Roosevelt, 1 ♀ im. S. E. Peru: Astillero, 1 ♀ ad. (less rufescent than Borba ♀).

Hylophylax griseiventris vidua.—Brazil: near Pará, 1 ♂ ad., 1 ♂ im., 1 ♀ ad (topotypes); Rio Tocantins, 1 ♂ ad.; Santarem, 1 ♂ im. (=H. poecilonota nigrigula Snethlage, founded on one male with a darker throat, possibly an individual variation).

Recent writers have treated the forms above listed as races of poecilonota. That they are representatives of one another is indicated by the fact that the males of all are essentially alike and that no two are found in the same place, but the nature of the differentiating characters shown by the females, together with the facts of their distribution, do not, in my opinion, warrant the assumption of their intergradation.

The range of griseiventris is separated from that of poecilonota by the lower Amazon, an effective barrier for such small birds. If, therefore, intergradation occurs, it appears to be accomplished through

1Hylophylax Ridgway (type H. naucides Lafrenaye), Stictomyrmornis Chubb (type H. navia Gmelin) and Dichropogon Chubb (type H. poecilonota) are not, in my opinion, generically separable from Hylophylax.
true lepidonota, and the differences between females of griseiventris and lepidonota are not of a kind which ordinarily separate subspecies. The problem underlying the relationships of the members of this group are, however, too interesting and too important to be dealt with adequately in this connection.

**Grallaria hypoleuca castanea**, new subspecies

**Subspecific Characters.**—Similar to Grallaria hypoleuca hypoleuca Sclater of the Bogotá region but smaller and with the entire upperparts, including wings and tail, much deeper in color, the sides, and particularly flanks, more strongly washed with the color of the back.

**Type.**—No. 176,060, Amer. Mus. Nat. Hist.; e ad.; Baeza, 5000 ft., eastern Ecuador; November 25, 1922; Olalla and Sons.

**Range.**—Subtropical Zone of eastern (and western?) Ecuador.

**Specimens Examined**

Grallaria hypoleuca castanea.—Ecuador: Baeza, 4 ♂, 1 ♀; Papallacta, 1 ♂; "Mindo," 1 ♂.

Grallaria hypoleuca hypoleuca.—Colombia: above Fusugasugá, 3 ♂, 1 ♀ (topotypes); La Candela, 1 ♂.

This form of Grallaria hypoleuca is apparently not a common bird in Ecuador, whence it has previously been recorded only by Taczanowski and Berlepsch, from Machay and Mapoto in the eastern Subtropical Zone, east of Baños, and by Goodfellow from Papallacta and Pichincha. The latter, however, seems to have observed it only in the eastern Andes, and its occurrence in western Ecuador requires confirmation, our "Mindo" specimen having been taken by a native collector some twenty years ago.

A specimen from La Candela, in the central Andes of Colombia, at the head of the Magdalena Valley, while nearer true hypoleuca, is intermediate between that race and the one here described, both in size and in color.

**Measurements of Males**

<table>
<thead>
<tr>
<th>Localities</th>
<th>No. of Specimens</th>
<th>Wing</th>
<th>Tail</th>
<th>Tarsus</th>
<th>Culmen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above Fusugasugá, Colombia</td>
<td>3</td>
<td>91-93</td>
<td>50-54</td>
<td>45.5-51</td>
<td>24-25.5 mm.</td>
</tr>
<tr>
<td>Baeza, Ecuador</td>
<td>4</td>
<td>88-90</td>
<td>47-50</td>
<td>43-45</td>
<td>22.5-23</td>
</tr>
</tbody>
</table>

**Grallaria albigula**, new species

**Specific Characters.**—With a general resemblance in color to Grallaria ruficapilla above and to Grallaria hypoleuca below; in size nearer to former.

**Type.**—No. 146,167, Amer. Mus. Nat. Hist.; ♂ ad.; Santo Domingo, 6000 ft., S. E. Peru; September 14, 1916; H. Watkins.
NEW FORMICARIIDÆ AND DENDROCOLAPTIDÆ

**Description of Type.**—Crown, nape and auricular region between bright Sanford’s brown and burnt sienna; lores, orbital ring, and anterior malar region white with a slight admixture of black; back olivaceous medal-bronze; upper tail-coverts and tail, browner, more rufescent; wing-quills, externally, like tail; wing-coverts like back; throat to lower posterior margin of auriculars snowy white perceptibly demarked from the grayer breast and underparts, which centrally and abdominally are whiter and laterally, grayer; under tail-coverts grayish washed with brownish; tibie much like back; tarsi, toes, and bill blackish. Wing, 101; tail, 65; tarsus, 55; culmen, 28 mm.

**Female and Immature Male.**—Similar to adult male, but underparts with a slight brownish tinge, the flanks and sides more or less washed with the color of the back.

**Specimens Examined**

*Grallaria albigua*—Peru: Santo Domingo, 2♂, 1♀.
*Grallaria hypoleuca.*—See above under *Grallaria hypoleuca castanea*.

While this species more nearly resembles *G. hypoleuca* of Ecuador and Colombia than any other known member of the genus, it is so distinct from that form that one cannot say whether or not they are representative species.

**Grallaria ruficapilla connectens**, new subspecies

**Subspecific Characters.**—Intermediate between *Grallaria ruficapilla ruficapilla* Lafresnaye, of Colombia and northern Ecuador, and *Grallaria ruficapilla albitoris* Taczanowski, of northern Peru; nearer the latter. Differs from the former in its lighter colored upperparts; less heavily streaked, more fulvous underparts, with the external margins to the wings more olivaceous, less rufescent. Differs from the latter in its slightly darker crown, more olivaceous, less grayish back; with more orange-rufous on the lore, malar, and auricular regions; and with the streaks below darker and broader.


**Specimens Examined**

*Grallaria ruficapilla connectens.*—Ecuador: Taraguacocha, 2♂, 1♀; El Chiral, 1♀; above Zaruma, 1♀; Salvias, 1♂; Guachanamá, 1♂, 1♀; San Bartolo, Alamar Range, 3♂, 5♀; Celica, 2♂.

*Grallaria ruficapilla albitoris.*—Peru: Levanto, 1♂; Huancabamba, 1♂; Palambla, Dept. Piura, 1♂, 4♀. Ecuador: Prov. of Loja, 1♂.

*Grallaria ruficapilla ruficapilla.*—Ecuador: Pichincha, 3♂, 3♀, 1♂; above Huigra, 1♂; Baeza, 1♂, 2♀. Colombia: 7♂, 4♀.

Examination of the material listed above shows that in Colombia and in northern Ecuador, at least as far south as Baeza on the eastern side, and as far as the Valley of the Chanchan on the western side, *Grallaria ruficapilla* shows essentially no variation; when, however, we reach southwestern Ecuador, at least as far north as Zaruma and both
on the western and eastern slopes of the coast range, a form of Grallaria ruficapilla occurs which is clearly a connectant between ruficapilla on the north and albiloris on the south, but differs sufficiently from them both to make it impossible satisfactorily to refer it to either, and I have therefore described it as above.

Grallaria ruficapilla taczanowskii Domaniewski and Stolzmann,1 from Cayandeled, near Huigra, whence we have a specimen, is evidently to be referred to true ruficapilla, since the place at which the type was collected is within the range presumably occupied by that race. Specimens from Palambla, Dept. of Piura, on the western slope of the coast range, between Paita and Huancabamba, are to be referred to albiloris rather than to connectens, but the characters they present indicate the intergradation of these two forms, while our specimens of the latter demonstrate its intergradation with ruficapilla, thereby completing the evidence proving the intergradation of ruficapilla ruficapilla with albiloris.

Grallaria watkinsi, of which we have a large series, occupies essentially the range of Grallaria ruficapilla connectens, from which it is evidently therefore specifically distinct. It may be at once distinguished from connectens, and form albiloris, by its pale flesh-colored tarsi and toes, and the shaft streaks on the crown and back.

Schizoaca helleri, new species

Specific Characters.—Resembling Schizoaca harterti Berlepsch of Bolivia, but chin ochraceous-orange, black on throat wanting; superciliary and sides of the head grayer; auriculars less rufescent. Related to Schizoaca palpebralis Cabanis from Maraynico, east central Peru, but upperparts, and particularly the crown, less rufescent, the forehead and sides of the head grayish instead of cinnamon-brown; no conspicuous white eye-ring; a grayish superciliary.

Type.—No. 166,536, Amer. Mus. Nat. Hist.; e ad.; Cedrobamba, 12,000 ft. (Machu Picchu) Peru; May 29, 1915; E. Heller.

Description of Type.—Upperparts Brussels brown, the crown slightly, the tail decidedly more rufescent; forehead grayish; lores and superciliary reaching posterior margin of brownish auriculars, grayish; outer wing-quills margined with grayish; remainder and wing-coverts externally like the back; chin ochraceous-orange, underparts mouse-gray, slightly paler on the abdomen; flanks and under tail-coverts washed with the color of the back; feet and bill blackish, the mandible basally whitish. Wing, 56; tail, 103; tarsus, 24; culmen, 16 mm.

Female.—The female resembles the male. Wing, 55; tail, 100; tarsus, 24; culmen, 16 mm.

Specimens Examined

*Schizoeaca helleri.*—Peru: Cedrobamba, 1 ♂; above Torontoy, 14,000 ft., 1 ♀.

*Schizoeaca palpebralis.*—Peru: Maraynioc, 10,850 ft., 2 ♂, 1 ♀ (topotypes).

*Schizoeaca harterti.*—Bolivia: Unduavi, 11,400 ft., 1 ♀.

Since the publication of my 'Distribution of Bird Life in the Urubamba Valley' (Bull. U. S. Nat. Mus., No. 117) the receipt of topotypical specimens of *Schizoeaca palpebralis* shows that the specimens therein provisionally referred to that species are nearer to *S. harterti*. They combine, in fact, certain characters of both these species and, while apparently representative of them and thus a link in the chain of the members of this genus which stretches from Venezuela to Bolivia, they seem to deserve specific rank. This I accord them not alone on the basis of their characters but on the probability that their ranges, like those of many other species inhabiting the mountain "islands" of the humid Temperate Zone, are not connected.

I have named this bird in honor of its collector Mr. Edmund Heller who, as naturalist of the Yale University-National Geographic Society's Expedition to the Urubamba Valley, and, more recently, as the representative of the Field Museum in east Central Peru, has made contributions of the first importance to our knowledge of the Peruvian fauna.

**Synallaxis gujanensis canipileus**, new subspecies

*Subspecific Characters.*—Most nearly related to *Synallaxis gujanensis huallage* Cory, of the lower Huallaga, but crown deep mouse-gray instead of dull mummy-brown; the back somewhat browner than the crown and passing gradually into Saccondo's umber on the rump; tail and wings (externally) slightly paler than in *huallage*; underparts decidedly grayer than in *huallage*.


Specimens Examined

*Synallaxis gujanensis canipileus.*—Peru: Rio Tavara, 1 ♂, 1 ♀.

*Synallaxis gujanensis huallage.*—Peru: Lagunas, lower Huallaga, 1 ♂ (the type).

*Synallaxis gujanensis columbianus.*—Colombia: near Villavicencio, 5.


This is the grayest form of this species which has as yet been described. *Synallaxis gujanensis inornata* Pelzeln I have not seen. It is described by Hellmayr\(^1\) as having the "underparts nearly uniform rusty buff" indicating that it differs widely from the form here named.

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Synallaxis brachyurus griseonuchus, new subspecies

Subspecific Characters.—Most nearly related to Synallaxis brachyurus brachyurus,1 Lafresnaye but smaller, the wing under 60 mm., the tail under 80 mm.; forehead and nape averaging grayer; the tail lighter; the blackish throat-patch less evident; resembling S. b. nigrofumosus, but paler in color throughout.

Type.—No. 171,442, Amer. Mus. Nat. Hist.; ♂ ad.; Santa Rosa, Prov. del Oro, Ecuador; July 18, 1921; Cherrie and Gill.

Specimens Examined

Synallaxis brachyurus griseonuchus.—Ecuador: Esmeraldas, 3 ♂; Rio de Oro, 3 ♂, 1 ♀; Coast of Manaví, 1 ♂; Duran, 1 ♂, 1 ♀; Naranjo, 1 ♂, 1 ♀; Bucay, 7 ♂; Chimbo, 1 ♂, 3 ♀; Rio Jubones, 1 ♀; Santa Rosa, 2 ♂; Portovelo, 6 ♂, 1 ♀; Rio Pindo, 1 ♀; Salvias, 1 ♂.

Synallaxis brachyurus brachyurus.—Colombia: La Frijolera, 1 ♂; San Agustin, 1 ♂, 1 ♀; Fusugasugá, 1 ♀; Anolaima, 1?; Andalucía, 4 ♂, 2 ♀.

Synallaxis brachyurus cauca.—Colombia: Caucá Valley, 5 ♂ (inc. type).

Synallaxis brachyurus nigrofumosus.—Nicaragua: Rio Grande, 1 ♂; San Rafael del Norte, 1 ♂; Matagalpa, 2 ♂; Los Sabalos, 1 ♀. Costa Rica: El Pozo, 3 ♂; Bonilla, 4 ♂, 2 ♀; Boruca, 1 ♂, 2 ♀; Puerto Jiménez, 2 ♂, 2 ♀; Atalanta, 1 ♂; Gualipes, 1 ♂; Rio Jesus Maria, 1 ♀. Panama: Canal Zone, 1 ♂, 1 ♀; Rio Tuyra, 3 ♂. Colombia: Bagado, 1 ♂; Iguaquindo, 1 ♂; Alto Bonito, 1 ♂, 3 ♀; Noanama, 1 ♀; Dabeiba, 1 ♂; Novita, 1?; San José, 1 ♂, 1?; Los Cisneros, 2 ♂; Ricuarte, 1 ♂; Barbacoas, 4 ♂.

The variations of Synallaxis brachyurus are well illustrated by the specimens listed above. Central American and West Colombian birds are the darkest in the series. Specimens from the Canal Zone are perceptibly paler, and in fact do not differ appreciably from the Magdalena Valley, Colombia, form. In eastern Panama and in western Colombia increased humidity is apparently reflected in greater intensity of color, and the form inhabiting this region while, on the whole, averaging darker than that found in Nicaragua and Costa Rica is in my opinion not separable from it. I came to this conclusion when writing on the birds of Colombia. Since then Bangs and Penard, in treating of the relationships of birds from this region, consider that they differ sufficiently from true nigrofumosus to be worthy of recognition, and have honored me by naming them Synallaxis brachyurus chapmani.2

With the additional material now available, including a very beautiful series of fourteen adults from Costa Rica in Dr. Dwight’s collection, I reach the conclusion presented in my Colombian work and therefore apply the name nigrofumosus to the birds of western Colombia. I find, for example, that in a series of sixteen adults from the lowlands of

2Loc. cit., p. 25.
western Colombia, no less than twelve are essentially like the birds in our Costa Rican series.

Passing to the eastward in Colombia, we find that in ascending the northern end of the Western Andes, at Alto Bonito, we are already approaching the paler *Synallaxis brachyurus brachyurus*; and the characters of this form, consisting in paler coloration and larger size, are fully developed in the Magdalena Valley. The Cauca Valley form, one of the few races known to be restricted to this Valley, is distinguished by its paler crown-cap.

Returning now to the west coast of Colombia and proceeding southward, a decreasing rainfall is reflected in the coloration of specimens from western Ecuador, the paler coloration of which is already noticeable in examples from Esmeraldas, and is marked in specimens from the comparatively dry southwestern Ecuador which closely approach those of the Magdalena Valley, but differ from them as above described under the name *griseonuchus*.

**Siptornis graminicola azuay**, new subspecies

Subspecific Characters.—Similar to *Siptornis graminicola graminicola* Sclater, of central Peru, but black streaks on the upperparts darker and wider; chin-patch deeper; rufous margins of the wings brighter; all the wing-coverts bright cinnamon-rufous; fourth tail-feather blackish only on the inner border of the inner web; wing and tail slightly shorter; bill longer. Wing, 65; tail, 75; culmen, 18.5 mm.

Type.—No. 156,229, Amer. Mus. Nat. Hist.; ♀ ad.; Bestion, 10,100 ft., Prov. del Azuay, Ecuador; January 4, 1921; Geo. K. Cherrie.

Specimens Examined

*Siptornis graminicola azuay.*—The type.

*Siptornis graminicola graminicola.*—PERU: Dept. of Junin; Oroya, 1 ♀; Chica, 13,000 ft., 1 ?; Tirapata, 2 ♀; Ticá-Tica, 2 ♀ (the four last-named specimens probably represent a distinct form).

The well-marked characters shown by this form seem to warrant its description from but one specimen. The species has not before been recorded from Ecuador, nor indeed north of Lake Junin, the type-locality, in east central Peru.

It is worthy of note that, instead of approaching *Siptornis wyatti aequatorialis* of central Ecuador, that species is nearer to true *graminicola* than to the form here described.

**Siptornis antisiensis palambla**, new subspecies

Subspecific Characters.—Similar to *Siptornis antisiensis antisiensis* (Sclater) of southwestern Ecuador, but superciliaries snowy white; ear-coverts and back grayer; underparts pronouncedly whiter; sides and flanks grayer.
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TYPE.—No. 175,034, Amer. Mus. Nat. Hist.; ♂ ad.; Palambla, (about 4000 ft.) west slope Western Andes, Dept. Piura, Peru; October 18, 1922; H. Watkins.

SPECIMENS EXAMINED

Siptornis antiensis palambla.—PERU: Palambla, 4 ♂, 1 ♀, 1 ?
Siptornis antiensis antiensis.—ECUADOR: above Zaruma, 1 ♂, 2 ♀, 1 ?; Alamar, 8 ♂, 1 ♀; Celica, 3 ♂.
Siptornis curtata.—COLOMBIA: Fusugasuga, 1 ♂, 1 ♀; La Candela, 1 ♂.
ECUADOR: below Oyacachi (east of Quito), 1 ♂; Zamora, 1 ♂.

This is evidently the form provisionally identified by Bangs and Noble1 as Siptornis cisandina (Taczanowski). The latter, however, which is from the humid eastern slope of the Eastern Andes, at Huambo, southeast of Chachapoyas, is described as darker than antiensis, whereas palambla is decidedly paler than that form. Taczanowski states, indeed, that cisandina is nearer curtata than to antiensis, and, since the latter is a West Andean species, it is possible that cisandina is a race of curtata rather than of antiensis. Our two specimens of curtata from eastern Ecuador differ from topotypical curtata curtata much as cisandina is said by Taczanowski2 to differ from it.

Pseudocolaptes boissonneauti intermedianus, new subspecies

SUBSPECIFIC CHARACTERS.—Most closely resembling Pseudocolaptes boissonneauti johnsoni Lönnberg and Rendahl, of the Temperate Zone of eastern Ecuador, but crown more abruptly defined from back, the nuchal region and forehead less heavily margined with black; the bill shorter. Similar to P. b. boissonneauti (Lafresnaye), of the Temperate Zone of Colombia and northwestern Ecuador, but underparts and rump paler in color; back more olivaceous, the shaft-streaks ochraceous-buff rather than ochraceous-orange; size, larger. In general tone of coloration resembling P. b. medianus Hellmayer of central interior Peru, but throat white, not tinged with sulphur, and bill longer.


RANGE.—Temperate Zone, northwestern Peru and southwestern Ecuador.

SPECIMENS EXAMINED

Pseudocolaptes boissonneauti intermedianus.—PERU: Tambo, 1 ♂, 1 ♀; Palambla, 1 ♂. ECUADOR: Loja, 1 ♂; San Bartolo, Alamar Range, 1 ♂; Zaruma-Zaguar Trail, 10,000 ft., 3 ♂, 2 ♀.

Pseudocolaptes boissonneauti johnsoni.—ECUADOR: above Baeza, 3 ♂, 2 ♀ (topotypes); below Papallacta, 1 ♂, 1 ♀.

Pseudocolaptes boissonneauti boissonneauti.—COLOMBIA: "Bogotá," 4 ♂, 1 ♀; above Fusugasuga, 1 ♀; La Candela, 1 ♀; Central Andes, 4 ♂, 2 ♀; Western Andes, 2 ♂, 1 ♀. ECUADOR: west of Quito, 5 ♂, 1 ♀.

1The Auk, 1918, p. 453 (Huancabamba).
Pseudocolaptes boissonneauti auritus.—Peru: Maraynic, 1 ♂; Chelpes, 1 ♂; Torontoy, 1 ♂; below Limbani, 2 ♂; above Santo Domingo, 3 ♂.

This is a link in the chain which doubtless joins P. b. auritus, of central eastern Peru to Bolivia, with P. b. boissonneauti of Colombia, and, possibly, meridæ of western Venezuela. It has the general coloration of P. b. medianus but lacks the yellow-tinged throat of that form and has a longer bill, the longest, indeed, of any known race.

It is surprising to find this form of the comparatively dry region of northwestern Peru so closely resembling the race of intensely humid northeastern Ecuador. The latter in fact might be expected to be more richly, instead of less richly, colored than the form of northwestern Ecuador. Our specimens from the last-named region, it should be added, are not separable from a Colombian series, whence I conclude that P. b. oberholseri Cory is a synonym of P. boissonneauti boissonneauti.

**Measurements of Males**

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<thead>
<tr>
<th>Locality</th>
<th>No. of Specimens</th>
<th>Wing</th>
<th>Culmen</th>
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<tr>
<td>P. b. boissonneauti</td>
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</tr>
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<td>109-113</td>
<td>22</td>
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<td>&quot; intermedianus &quot; Southwest Ecuador</td>
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<td>20.5-22</td>
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<tr>
<td>&quot; auritus &quot; Central Peru</td>
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<tr>
<td>&quot; auritus &quot;</td>
<td></td>
<td>111-117</td>
<td>20-20.5</td>
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**Measurements of Females**

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<th>Culmen</th>
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<td>26-27.5 mm.</td>
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<td>107</td>
<td>26.5</td>
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<td>&quot; intermedianus &quot; Southwest Ecuador</td>
<td>2</td>
<td>103-107</td>
<td>27-27.5</td>
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<td>&quot; &quot; Northwest Peru</td>
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<td>119</td>
<td>30.5</td>
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<td>&quot; medianus &quot; Panao Mts., Peru</td>
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<td>&quot; auritus &quot; Southeastern Peru</td>
<td>2</td>
<td>97-99</td>
<td>23</td>
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</table>

*Philydor montanus bolivianus*, new subspecies

Subspecific Characters.—Similar to *Philydor montanus montanus* (Tschudi) of east central Peru, but plumage throughout darker, more rufescent, less olivaceous; underparts old gold rather than buffy citrine; wing-lining ochraceous-buff, rather than light ochraceous-buff.

Type.—No. 137,823, Amer. Mus. Nat. Hist.; ♂; Locotal, 5800 ft., Dept. Cochabamba, Bolivia; May 28, 1915; Miller and Boyle.

Range.—Subtropical Zone, Bolivia and southeastern Peru.
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Specimens Examined

Philydor montanus bolivianus.—BOLIVIA, Dept. Cochabamba: Locotal, 5; Yungas, 1; Roquefaldas, 1. PERU: Santo Domingo, 5; Rio Inambari, 2200 ft., 3.

Philydor montanus montanus.—PERU: Prov. Junin; Chelpes, 3; Utcuyacu, 3.

Philydor montanus striaticollis.—COLOMBIA: a series.

The acquisition of a topotypical series of true montanus reveals the characters of the form inhabiting Bolivia and southeastern Peru.

Xenicopsis subalaris tacarcunae, new subspecies

Subspecific Characters.—General color of underparts grayer, less olivaceous than either Xenicopsis subalaris subalaris (Selater) of the Subtropical Zone of western Ecuador and western Colombia, or Xenicopsis subalaris lineatus (Lawrence) of the Subtropical Zone of Chiriqui and Costa Rica; streaks below as broad as in subalaris but paler; throat-patch slightly paler than in subalaris but smaller and more sharply defined from the chest and thus more like that of lineatus; upperparts more as in subalaris than as in lineatus but crown averaging browner, the streaks on back wider.

Type.—No. 135,838, Amer. Mus. Nat. Hist.; cI ad.; east slope Mt. Tacarcuna, 4600 ft., eastern Panama; H. E. Anthony.

Range.—Tropical Zone, eastern Panama.

Specimens Examined

Xenicopsis subalaris tacarcunae.—PANAMA: Tacarcuna, 17.

Xenicopsis subalaris subalaris.—Western ECUADOR, 16. Western COLOMBIA, 8.

Xenicopsis subalaris lineatus.—COSTA RICA, 5. CHIRIQUI, 2.

Although this form is geographically intermediate between subalaris and lineatus, it differs more from them both than they do from one another, except in the character of the throat-patch, which in color is like that of subalaris but in size and definition of outline is more like that of lineatus. Although the ranges of tacarcunae and lineatus are separated by the “Panama fault” (cf. Bull. Amer. Mus. Nat. Hist., XXXVI, 1917, p. 151), both the extent and nature of the differences which separate these forms indicate that their relationships are racial rather than specific.

Xenops acutirostris, new species

Specific Characters.—Most nearly related to Xenops tenuirostris Pelzeln of the Madeira River region to southeastern Peru, but bill even more slender, the mandible not recurved, the bill, therefore, more acute, the culmen straighter; general coloration of the upper and underparts much as in Microxenops but tail-pattern essentially as in X. tenuirostris.


Description of Type.—Crown fuscous with fine buffy shaft-streaks; superciliary from eye to nape whitish; auriculæ mixed blackish and whitish, bordered
below by a silvery white subauricular band; back warm Dresden-brown with broad, lanceolate warm buff stripes; color of back passing into bright ochraceous-tawny on the rump and upper tail-coverts; tail ochraceous-tawny; the first (outer) pair of feathers with a barely noticeable amount of black at the base of the inner web, inner web of second pair black for basal third, third pair black, except at tip and terminal third of outer web, fourth pair wholly black, fifth pair black on outer web; central pair without black; wing-quills fuscous; outer and inner quills margined externally with ochraceous-tawny; tertials wholly this color; all but six outer quills tipped with ochraceous-tawny; a band of buffy ochraceous-orange begins at the middle of the third primary (from without) and increasing in width crosses the remaining feathers; wing-pattern, therefore essentially as in X. rutilus and X. tenuirostris; underparts grayish-olive; broadly streaked with olive-buff to and including the under tail-coverts; chin and throat olive-buff unmarked; feet jet-black; bill black, the mandible whitish for its basal and lower half. Wing, 65; tail, 43; culmen, 13; depth of bill at gonydeal angle, 3.3 mm.

**Specimens Examined**

Xenops acutirostris.—ECUADOR: Zamora, 1 ♂ ad., 1 ♂ im.; Rio Suno, 1 ♂ ad.
Xenops tenuirostris.—BRAZIL: Rio Roosevelt, 1 ♂; Baron Melgaco, Matto Grosso, 1 ♂, 1 ♀.

Xenops rutilus and races, large series including one specimen from Zamora.

Microzenops milleri milleri.—VENEZUELA: Ft. of Mt. Duida, 1 ♀ (the type).

Brazil: Manacapuru, Rio Solimoes, 1 ♂.

In the shape of its bill, color and pattern of its upper and underparts, this exceedingly interesting bird bridges, in a measure, the differences between Xenops and Microzenops. Were it not for Xenops tenuirostris it might be accorded generic rank but, in spite of its straight mandible, its resemblance in wing and tail-pattern to tenuirostris indicates its close relationship to that form.

If, therefore, I am correct in believing that acutirostris is a near ally, and perhaps representative, of tenuirostris its occurrence at Zamora with rutilus heterurus is evidence of the specific distinctness of these two forms.

Since the above was written, I find that Dr. Hellmayr, in recording Xenops tenuirostris from southeastern Peru (Archiv für Naturg., 1919, p. 76), has also concluded it is specifically distinct from rutilus. Doubtless the specimens from Sarayaçu, east Ecuador, and Nauta, Peru, which Hellmayr (loc. cit.) mentions are referable to the bird I have here described.

**Sclerurus albigularis zamora**, new subspecies

Subspecific Characters.—Similar to Sclerurus albigularis albigularis Swainson of northern South America, but more intensely colored throughout; the throat grayish instead of whitish; the breast-band hazel instead of ochraceous-tawny; the upperparts auburn rather than raw-umber.

Type.—No. 129,816, Amer. Mus. Nat. Hist.; ♀ ad.; Zamora, Prov. Loja, eastern Ecuador; October 29, 1913; W. B. Richardson.
AMERICAN MUSEUM NOVITATES

Specimens Examined
Sclerurus albigularis zamora.—Ecuador: Zamora, 1♂, 3♀; Guayaba, 1♀.

Sclerurus albigularis has not before been recorded from Ecuador, and this well-marked new form not only extends our knowledge of its racial variations but also of its range.

Glyphorhynchus cuneatus albigularis, new subspecies

Subspecific Characters.—Bill large as in Glyphorhynchus cuneatus cuneatus (Lichtenstein) of eastern Brazil, but throat and breast-stripes whitish, slightly, if at all, tinted with buff instead of decidedly buff; the underparts light brownish olive without rufescent tinge.

Type.—No. 137,354, Amer. Mus. Nat. Hist.; ♂ ad.; Mission San Antonio (1300 ft.), Rio Chimoré, Dept. Cochabamba, Bolivia; August 17, 1915; Miller and Boyle.

Range.—Base of the Andes (and eastward ?) in Bolivia and southeastern Peru.

Specimens Examined
Glyphorhynchus cuneatus albigularis.—Bolivia: Mission San Antonio, 1; Mouth San Antonio, 1; Tres Arroyas, Espiritu Santo, 1. Southeastern Peru: Rio Tavara, 1; La Pampa, 2; Rio Inambari, 3; Astillero, 1; Candamo, 1.
Glyphorhynchus cuneatus cuneatus.—Brazil: Bahia, 1; near Pará, 4; Tapajoz, 3.
Glyphorhynchus cuneatus castelnaudi.—Peru: La Merced, 1; Tulmayo, 2; Pebas, 1.

Large series have also been examined from north of the Amazon, western Ecuador and Central America.

In the almost complete absence of buff on the throat this is the most distinctly marked form of the genus. In general coloration of the body it is nearest G. c. castelnaudi but its whitish throat at once distinguishes it from that form.

Lepidocolaptes souleyeti esmeraldse, new subspecies

Subspecific Characters.—Resembling Lepidocolaptes souleyeti souleyeti (Des Murs) of the Tropical Zone of northwestern Peru and southwestern Ecuador, but throat darker; stripes of underparts deeper buff, their black borders less intense, the margins of the feathers much browner less gray (tawny-olive rather than Saccardo's umber); margins to crown feathers averaging browner; bill shorter. Similar to Lepidocolaptes albolineatus albolineatus (Lafresnaye) of the Tropical Zone of Colombia, eastern Panama, and northwestern Venezuela, but maxilla paler, crown-stripes broader;

dark tips to outer primaries shorter, throat paler, the unmarked area larger, stripes below broader and more buffy.

**Type.**—No. 118,712, Amer. Mus. Nat. Hist.; c ad.; Esmeraldas, northwestern Ecuador; November 10, 1912; W. B. Richardson.

**Range.**—Tropical Zone from southwestern Colombia to southwestern Ecuador.

**Specimens Examined**

*Picolaptes souleyeti esmeralda.*—COLOMBIA: Barbacoas, 5; Tumaco, 1. ECUADOR: Esmeraldas, 3; Rio de Oro, 2; Chone, 6; Daule, 1; Chongoncito, 5; Chongon Hills, 1; Guayaquil, 3; Duran, 1; Santa Rosa, 7; Portovelo, 2.

*Picolaptes souleyeti souleyeti.*—PERU: Prov. Piura; Paletillas, 4; Lamor, 4; Milagros, 1; Pilares, 1; Samate, 3; Chilaco, 5; Sullana, 7; Palambla, 2; Prov. Tumbes, 2. ECUADOR: Prov. Loja, Alamar, 1; Pullango, 1; Guainche, 2; Casanga, 1; Prov. del Oro, Rio Pindo, 2.

*Lepidocolaptes albolineatus albolineatus.*—COLOMBIA: Rio Frio, 1; Cali, 1; Puerto Valdivia, 2; Honda, 3; Villavicencio, 3; Rio Salaqui, 1. PANAMA: Rio Tuyra, 1; Tapaliza, 1; Canal Zone, 2.

Lacking specimens of *souleyeti*, I formerly referred Ecuador and southwest Colombia examples to *Lepidocolaptes albolineatus albolineatus*, but a more thorough review of the variations of this group shows that the affinities of these birds are with the northwest Peru form, with which they geographically intergrade. On the other hand, in view of the preference of this species for open country, it is quite possible that its range is not continuous in western Colombia, and as the characters separating *esmeralda* from *albolineatus* are constant, I have no evidence of their intergradation. I may add that with a better understanding of the variations which occur in this group I am by no means certain of the status of the birds of the Canal Zone, to which the name *lineaticeps* Lafresnaye is applied. East Panama specimens are not separable from Colombian ones, but two Galbraith, Canal Zone, skins appear to be somewhat paler; a series is needed to determine their status. Four specimens from Villavicencio and Buena Vista, east of Bogotá, have the throat and streaks below paler, the margins of the feathers grayer, the crown darker, its streaks whiter than in specimens from the interior of Colombia, from which, indeed, they differ much as *souleyeti* does from *esmeralda*. But in default of an adequate series from the coast of Venezuela (*T. a. "littoralis"* Hartert and Goodson) and in view of the uncertainty in regard to the type-locality of *albolineatus* I do not describe this form.

Specimens from near Guayaquil approach true *souleyeti*, and in southwestern Ecuador it is difficult to draw a line separating the ranges of the two forms.
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<th>Locality</th>
<th>Sex</th>
<th>No. of Specimens</th>
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<tr>
<td>Chone, Ec.</td>
<td>♂</td>
<td>4</td>
<td>30-33 mm.</td>
</tr>
<tr>
<td>Near Guayaquil, Ec.</td>
<td>♂</td>
<td>4</td>
<td>31-34 mm.</td>
</tr>
<tr>
<td>Sullana, Peru</td>
<td>♂</td>
<td>4</td>
<td>36-38 mm.</td>
</tr>
<tr>
<td>Chilaco, Peru</td>
<td>♂</td>
<td>3</td>
<td>35-37 mm.</td>
</tr>
<tr>
<td>Chone, Ec.</td>
<td>♂</td>
<td>2</td>
<td>29-31 mm.</td>
</tr>
<tr>
<td>Near Guayaquil, Ec.</td>
<td>♀</td>
<td>4</td>
<td>29-34 mm.</td>
</tr>
<tr>
<td>Tumbez, Peru</td>
<td>♀</td>
<td>1</td>
<td>40 mm.</td>
</tr>
<tr>
<td>Sullana, Peru</td>
<td>♀</td>
<td>2</td>
<td>35-36 mm.</td>
</tr>
<tr>
<td>Lamor, Peru</td>
<td>♀</td>
<td>2</td>
<td>34-35 mm.</td>
</tr>
</tbody>
</table>

*Measurements*

*Lepidocolaptes souleyeti esmeraldae*