AMERICAN MUSEUM NOVITATES

Number 1044

Published by
THE AMERICAN MUSEUM OF NATURAL HISTORY
New York City

October 11, 1939

STUDIES OF PERUVIAN BIRDS. NO. XXXII¹

THE GENUS SCYTALOPUS

By John T. Zimmer

Scytalopus

A series of over three hundred skins from South America representing latrans, unicolor, femoralis, acutirostris, griseicollis, and latebricola and their representatives has given a better comprehension of the probable distinctions and relationships of the various species and subspecies than has been possible heretofore. Even with this material, there are some confusing portions of the picture that more material will be needed to clarify. The following notes, therefore, may require elaboration or modification at some future time when this additional material may be available.

The group is an unusually difficult one and although there are a number of species that must be recognized, there is such similarity of pattern and color, all in browns and grays without striking differences, that exact definitions are not easy. Furthermore, there is enough overlapping of at least superficial characters here and there throughout the series that it seems almost possible to show intergradation of one species to another and to tie the entire assemblage together into one co-ordinated species with many altitudinal and geographical forms, some of which would occur together while others would remain in sole occupancy of particular regions.

This confusion has been responsible for some early misidentification of numerous specimens in the present series. Since the resemblances between species are so close, I have found it necessary to refine the definitions of the subspecies and utilize what, in other groups, might be thought very

trivial characters, but in no other way have I been able to separate the species themselves. This, in turn, has obliged me to recognize several new subspecies which cannot be referred to previously known forms without extending the characteristics of these forms to a point of confusion with something still different.

It is hoped, therefore, that the following contribution will be of service to future students of a very interesting group of birds.

My grateful thanks are due to Mr. William H. Phelps of Caracas, Venezuela, for his generosity in supplying the funds necessary for the publication of the present paper. Acknowledgments are made to Mr. Rudolf de Schauensee and Mr. James M. Bond of the Academy of Natural Sciences of Philadelphia; Mr. Rudyerd Boulton of Field Museum of Natural History, Chicago; Dr. Herbert Friedmann of the U.S. National Museum, Washington; Mr. James L. Peters of the Museum of Comparative Zoölogy, Cambridge; Dr. Erwin Stresemann of the Zoological Museum, Berlin, Germany; and Mr. W. E. C. Todd of the Carnegie Museum, Pittsburgh, for the loan of certain important material used in the following studies and to Mr. de Schauensee and Mr. Bond for permission to describe two new forms discovered in their collections.

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

Scytalopus unicolor group

Among the specimens examined, more than a hundred and forty belong to the section including *unicolor* and *latrans* although some of them bear the names,

¹ Earlier numbers 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, and 1043.

femoralis, micropterus, and acutirostris on their labels, as evidence of their resemblances to those other forms.

Scytalopus unicolor unicolor Salvin

Scytalopus unicolor Salvin, 1895, Novit. Zool., II, p. 15—Cajabamba and Huamachuco, Perú; British Mus.

Typical unicolor is the palest member of its species, characterized by the light tone of gray that pervades the plumage, between Neutral Gray and Deep Neutral Gray above and Pale Neutral Gray or Light Neutral Gray below, usually with a silvery sheen of Pallid Neutral Gray medially, especially on the belly. Fully adult males have no obvious brown in the plumage but most of the specimens of that sex at hand show a certain amount of brownish tinge on the flanks, wings, and tail, with or without traces of barring. One male with remains of bars on the flanks is labelled as having enlarged gonads, indicating the probable breeding of the form in partially immature plumage.

Obviously young birds are quite brown above, with inconspicuous dusky tips on the head, strong blackish and ochraceous lunules on the back, and black and ochraceous bars toward the tip of the tail. Beneath they are dull ochraceous (with a suggestion of grayish tone), very lightly marked with fine dusky tips on the throat, stronger dark tips and pre-subterminal spots or lunules on breast and belly, and alternate dark and ochraceous brown bars on the flanks.

Both old and young have moderately light brown feet and blackish-brown bills of relatively slender, elongate shape, having the culmen nearly straight, a little concave in the middle and slightly decurved terminally. In dorsal aspect the lateral outlines also are nearly straight, tapering slenderly with a slight concavity to a narrow tip. Rarely is there any suggestion of the subterminal swollen portion of the bill that is found in the femoralis group under which heading it is discussed.

The range of true unicolor is relatively limited, being confined to the top of the western Andes of Perú in the neighborhood of Cajabamba and Huamachuco, dropping over on the Pacific side only, so far as

known, at Chugur. Two males from Chugur are quite typical, being no darker than some topotypes. A female from Chugur is very pale and with much brown posteriorly and with a brownish tinge on wings and tail, being not perfectly adult.

Away from the region mentioned there is enough difference to be found to warrant the recognition of additional forms of the species as will be discussed below.

Scytalopus unicolor subcinereus, new subspecies

Type from Taulis, northeast of Pacasmayo, Perú; altitude 8850 feet. No. 235,881, American Museum of Natural History. Adult male collected July 10, 1926, by Harry Watkins; original No. 10,624.

DIAGNOSIS.—Males intermediate between unicolor and latrans, being darker than unicolor and paler than latrans, but females with more decided brown on rump and flanks, often prominently barred.

Range.—Western side of western Andes from Taulis, Perú, through Palambla to southwestern Ecuador.

DESCRIPTION OF TYPE.—Upper parts between Deep Neutral Gray and Dark Neutral Gray. Under parts paler, nearer Deep Neutral Gray. All body-plumage with slight indications of still paler gray tips, more pronounced in some lights than others. Wings and tail a little more sooty gray. Lores inclined to blackish in some lights; gray in others. Bill black, rather slenderly elongate. Feet dark brown. Wing, 56 mm.; tail, 36.5; exposed culmen, 10.5; culmen from base, 14; tarsus, 22.2.

Remarks.—Adult females are paler above than the adult males, having the top of the head and the mantle about Deep Neutral Gray. The lower back and upper tail-coverts are decidedly brownish (dark Olive-Brown or Sepia). The under parts may be little paler than the upper parts except for stronger pale reflections from the tips of the feathers, but some examples are Neutral Gray to Light Neutral Gray, with even paler throats. The flanks and under tail-coverts vary from Saccardo's Umber to Sepia, relatively uniform.

Young birds have the whole upper parts suffused with brown of variable hue. In the youngest birds at hand the general dorsal color is a light cinnamon-brown, with or without strongly marked dark bars on head and mantle but with the long rumpfeathers, the tertials, the greater upper

wing-coverts, and the flanks definitely barred. Beneath, the color is variable, being nearly uniform dull ochraceous in one female, similar but with grayish breast in another female; a mixed mottled gray and ochraceous in another female; ochraceous with dusky bars in two males; molting from pale ochraceous to pale gray in a female; molting from barred ochraceous to pale gray in another female. The wings are largely brown and the tail also, usually with some subterminal bars of blackish and buffy brown on the tail.

A few birds that appear to be older but perhaps not fully adult have the upper parts brownish gray, the under parts similarly intermediate, while the barring of wings, tail, rump, and flanks is variously present or obsolete. Some males that are very nearly fully adult show some traces of brownish coloration, even including vestiges of bars, on the posterior parts. The evidence tends to show that there may be several seasons required for a young bird to reach the full clear coloration of the adults during which interval it may show various stages of intermediacy.

Some of these intermediate plumages are so strongly marked that they have been misidentified by various authors who have examined them. In particular, a bird from Zaruma, western Ecuador, has been considered by both Chapman and Hellmayr as belonging to S. femoralis micropterus but it is exactly matched in size and parts of its coloration with two other Zaruma birds of more fully adult plumage and it differs rather noticeably in these respects from any specimen of micropterus in the series at hand. It unquestionably belongs in subcinereus with other skins somewhat like it.

A male from Bestion, Río Shingata, Ecuador, is unusually large, having a wing of 64 mm. and a tail of 44 mm., but its general characters agree well with those of subcinereus. Although the locality is in the Amazonian drainage, it is near the top of the Andes in the Temperate Zone which extends across the cordillera to the western side where the subspecies finds its more extensive range and where it descends to an elevation of some 4000 feet.

Three adult birds from Chugur are closer to *unicolor* than to *subcinereus* although the locality is a place in the Subtropical Zone which is in more direct connection with Taulis and Palambla than it is with the Cajabamba region.

Owing to the general confusion that has existed in this group of birds, and that is not yet wholly dispelled, it is difficult to assign some records to their proper places without an examination of the pertinent specimens. Aside from certain references to the Palambla skins now before us, which have been placed in unicolor by Chapman and Hellmayr, there is a record of four specimens of "acutirostris" from Nancho which appear to belong to the present form, judging by the detailed description given of the specimens by Taczanowski (1884, Orn. Pér., I, p. 533). Later authors have assigned the record to unicolor but I place it here, at least for the present.

Scytalopus unicolor parvirostris, new subspecies

Type from Río Aceramarca, Bolivia; altitude 10,800 feet. No. 229,194, American Museum of Natural History. Nearly adult male collected May 25, 1926, by George H. H. Tate; original No. 24.

DIAGNOSIS.—Differs from S. u. unicolor of the Cajabamba region of northern Perú by darker general coloration and by shorter, stubbier bill.

Range.—Mountains of northwestern Bolivia through the highlands of southeastern and central Perú to northern Perú near the border between the departments of San Martin and Amazonas.

DESCRIPTION OF TYPE.—Upper parts between Deep Neutral Gray and Dark Neutral Gray, with the subterminal part of the feathers somewhat lustrous, followed by a fine darker border, giving the area a somewhat subdued squamulate appearance. Under parts paler, between Neutral Gray and Deep Neutral Gray, with the tips of the feathers showing a sheen in some lights, rather more prominently on the middle of the belly. Femoral areas and a portion of the under tail-coverts cinnamon-brown with traces of dusky cross-bars. Wings and tail gray, near the color of the back. Bill dark brown, the maxilla more blackish with fine, pale tip; in dorsal aspect the lateral outline distinctly concave. Feet lighter brown. Wing, 58 mm.; tail, 44; exposed culmen, 9.25; culmen from base, 13.5; tarsus, 23.

Remarks.—Females have the upper parts browner than the males, sometimes entirely dark brown but in certain examples gray or grayish on the mantle. The under parts are paler than in the males and have the middle of the belly more or less pronouncedly marked with silvery tips on the feathers. The flanks are always brown with some indications of dusky bars or lunules, broader, though usually less distinct, than in S. magellanicus acutirostris. The tail and tarsi are shorter than in the males, the wing a little so.

Two young males from Rumicruz, Junín, are dark brown above, with remains of brighter ochraceous and blackish spots and lunules on head, back, and wings and with the terminal part of the tail barred with black and ochraceous brown. Beneath, the throat and breast are largely gray, with remains of more juvenile buff feathers (subterminally banded with blackish in one example), the belly is buffy, the flanks are warmer brown, with dusky lunules, and the under tail-coverts are barred.

A male from Panao, central Perú, is not unlike some of the darker examples of typical unicolor, but not so clear grayish, especially below, and has a rather stubbier bill than most of them, like other examples of the present form. A female from the mountains above Huánuco agrees well with the Atuén females, being perhaps slightly paler above and undoubtedly belongs to the unicolor group and to acutirostris as I have long suspected although its characters are not indicative of intergradation with acutirostris as I once believed (1930, Field Mus. Nat. Hist. Publ., Zool. Ser., XVIII, p. 316). There is considerable resemblance to acutirostris in this skin and in the Atuén birds but the two species actually are quite distinct.

The record of "magellanicus" from Pariayacu, Junín, assigned by Hellmayr to latrans, undoubtedly belongs here.

Of somewhat uncertain assignment to parvirostris are two birds from Tocopoqueu, Occobamba Valley, Urubamba region, Perú. These birds were assigned tentatively to acutirostris by Chapman and to femoralis by Hellmayr, but they belong to neither. In general appearance they suggest femoralis but they are lighter in color, without the auburn hues on the posterior

parts which are replaced by a dark Dresden Brown, less heavily barred with blackish than in femoralis; the tail is lighter gray in the male and lighter brown in the female: the bill is smaller and with the culmen not so convex and is brown, not black: the plumage is, perhaps, a little softer in texture. The nearest approach to the various characters is found in one specimen or another of parvirostris, including the shape of the bill although the bill of the Tocopoqueu specimens may be a little wider than the average of parvirostris. possible that, as in the case of acutirostris (q. v.), there is a separable form of unicolor to be found in the Urubamba region but I prefer to see more material before suggesting its recognition. For the present, therefore, I record the specimens in question under parvirostris.

The birds from the highlands above the Utcubamba Valley are not clearly referable to parvirostris, subcinereus, or latrans, although they share some characters with each of these. It is impossible to refer them definitely to any one of the other forms. Consequently, in spite of the limited range involved, it seems necessary to recognize a distinct form for the birds in question as follows.

Scytalopus unicolor intermedius, new subspecies

Type from La Lejia, north of Chachapoyas, Perú; altitude 9000 feet. No. 234,580, American Museum of Natural History. Adult male collected March 3, 1925, by Harry Watkins; original No. 8868.

Diagnosis.—Similar to S. u. parvirostris of central and southwestern Perú and northwestern Bolivia, but darker in color and with a heavier bill. Similar to S. u. latrans of Colombia, northern and eastern Ecuador, and parts of northern Perú, but males averaging a little paler gray, with more tendency toward a silvery sheen on the belly, and with paler brown feet. Females with brown rump and flanks and with under parts showing stronger silvery tips, but general color a shade of neutral gray like the males, not suffused with drab as are the females of latrans. Males of the two forms not always certainly distinguishable. Differs from S. u. subcinereus of the western side of the Andes of northern Perú and southern Ecuador by average darker color and by heavier and usually shorter

RANGE.—Central Andes of northern Perú in the drainage basin of the Utcubamba Valley.

Description of Type.—Above Dusky Neutral Gray with a slight sheen due to narrow and relatively inconspicuous margins of slightly paler gray. Under parts paler, near Dark Neutral Gray, also with somewhat paler margins on the feathers, visible in certain lights. Maxilla blackish; mandible very little lighter, brownish; feet brown. Wing, 60 mm.; tail, 37; exposed culmen, 11.25; culmen from base, 13.75; tarsus, 23

Remarks.—Females distinctly than the males and with the lower flanks, crissum, and uropygium Olive-Brown, brightest on the lowermost areas where it is varied by dusky cross-bars, not always prominently developed. Middle line of belly with slightly silvery tips. Wings and tail sometimes (not perfectly adult plumage?) suffused with brown or with suggestions of brown and dusky markings. Young birds appear to be the most boldly marked of all the forms of this species. with the same pattern as in parvirostris, unicolor, and subcinereus but with the contrast between the light and dark areas at the greatest emphasis.

One quite young female from the type locality is referred here with misgivings, but I do not know where else to place it. It is very dark, with the dark parts of the feathers unusually sooty and with all of the feathers, above and below, tipped with blackish. I can find nothing quite like it anywhere in the genus but the bird is so immature that its apparent peculiarities may be misleading.

As in other related forms, the plumages between the obvious juvenal and the fully adult are variously intermediate. A male from Leymebamba still has the boldly patterned top of the head and anterior part of the mantle but the rest of the back is less strongly marked and the center of the mantle is almost uniform dark brown. Beneath, the chin and throat are rather obviously barred with blackish subterminal bars and ashy tips on the feathers, changing into clearer grayish buff. male apparently is farther advanced and has the sharp dorsal markings largely obsolete and the most of the under parts pale ochraceous buff, darker and barred with dusky on the flanks. The general color is paler than in the first-mentioned Presumably, in intermedius, also,

there are frequent advanced juvenal and retarded adult plumages and the transition from juvenal to adult may be by way of one of these, with the full development of adult plumage requiring several seasons. It is possible that the bird seen by Stolzmann at Cocochó belonged to this form but in the absence of specimens it is best to leave the record in abevance. Stolzmann noted his bird as being smaller and lighter gray than the ones he saw at Tambillo. The size is of problematical value; the character of supposedly pale coloration might apply to any one of several forms unless exact comparison is made with each of them.

Scytalopus unicolor latrans Hellmayr

Scytalopus latrans Hellmayr, 1924 (Nov. 20), Field Mus. Nat. Hist. Publ., Zool. Ser., XIII (3), p. 11—Cerro Munchique, Colombia; adult; Field Mus. Nat. Hist.

This is the darkest form of the species and, in comparison with the other subspecies, the males appear quite sooty although they are, in reality, dark gray and not black. Sometimes there are faintly paler terminal margins on the feathers of the upper and lower parts but they are not outstanding and the median line of the belly is never strongly silvery. The adult females differ from those of the related subspecies by having no obvious brown color on flanks, uropygium, or crissum but there is a slight general suffusion of drab throughout the plumage which is lighter in tone than that of the males. In both sexes, the bill usually is relatively heavy, being most like the bill of intermedius though rather larger on average. It is, however, somewhat more variable in latrans than in the other members of the species. Three skins from the Antioquia region of Colombia have this member rather smaller than usual and may deserve further study when more adequate material is available. Some north-Ecuadorian birds also show this feature. Venezuelan skins have the bill of maximum size.

Young birds usually are readily distinguishable from those of the other subspecies by their relatively uniform pattern. Some young are dark brown (Clove

Brown or Bone Brown) above and lighter brown (dark Wood Brown) below without any suggestion of barring; others have quite apparent dusky lunules on the mantle and dusky bars on the flanks and uropygium, but the whole pattern is obscure and unlike that of the related forms.

This widely ranging form occupies all three ranges of Colombia and the whole northern part of Ecuador, descending the eastern side of the Ecuadorian Andes somehow to enter Perú in the restricted areas of the Chinchipe and Huancabamba valleys, between the Río Marañón and the main ridge of the western Andes.

Eastward from Colombia, the form apparently ranges as far as the Mérida region of Venezuela. Three specimens before me from that region (one from El Escorial, one from Nevados, and one labeled, simply, "Mérida") are not clearly distinct from Colombian examples although all three have the bill of maximum size.

The Peruvian specimens that I place here are quite like typical Colombian and north-Ecuadorian skins and are unlike the other Peruvian forms. The occurrence of this subspecies in Perú is rather difficult to understand since the area is cut off from the nearest locality in northern Ecuador (Ambato) where the form is found by the interposition of subcinereus. Possibly future collections in southern Ecuador along the eastern slope of the Andes will show some positive continuity of range instead of apparent interruption.

One specimen is at hand labeled as from Samiria, Peruvian Amazon, a locality well into the Humid Tropical Zone where the species certainly does not occur. It bears an original label with J. Hauxwell's initials and may have been brought down to Samiria from some point high up in the Andes or it may simply have had its label transposed with that of a different specimen of unknown identity. In any case, the locality "Samiria" is obviously erroneous.

The only previous Peruvian record which belongs to the restricted form latrans is a sight record from Tambillo. The specimens from Cutervo, recorded by Taczanowski as "magellanicus," are not positively identifiable from the descriptions.

Taczanowski says the male is uniform grayish black, which agrees well with latrans. The female is said to be much paler, with the rump rufous brown barred with black; the flanks deeply fulvous, with dusky spots on the sides of the belly; the back lighter gray than in the male and with some admixture of brown feathers, due to process of molt. It is not likely, with these characters of the two sexes, that the specimens could have belonged to typical unicolor and for the present the record may be left in latrans.

The eastern S. speluncae is of somewhat doubtful affinities. The females show some resemblance to those of Colombian examples of latebricola meridanus but the males are much more like those of the same sex in u. unicolor and u. parvirostris. The relationship to the Andean birds of whatever species must be of considerable antiquity and of difficult correlation but I believe the species may best be placed near unicolor.

Scytalopus macropus Berlepsch and Stolzmann

Scytalopus macropus Berlepsch and Stolzmann, 1896, P. Z. S. London, p. 387, in text—Maraynioc, Perú; &; Warsaw Mus.

Scytalopus magellanicus grandis Cory, 1913 (May 31), Field Mus. Nat. Hist. Publ., Orn. Ser., I (7), p. 285—Tambo Ventija, 10 miles east of Molinopampa, Perú; or; Field Mus. Nat. Hist.

The affinities of this curious species are too obscure to warrant hazarding more than a mere guess concerning them. measurements of wing, tail, bill, and tarsus are in the same proportion to each other as those of various forms of the unicolor group although about one-third larger, but they are quite different from those of S. femoralis micropterus which the large size of macropus might seem to suggest. Furthermore, the texture of plumage and the various tones of gray and brown are most like those of the unicolor group. The shape of the bill is peculiar, being marked by a decided concavity above the nostrils but convexity distally, and also is most nearly approached by some examples of the *unicolor* group, particularly u. intermedius. Again, these various features are far from the corresponding ones of the femoralis group. The magellanicus group is scarcely suggested by any of the features of macropus. Its distribution, as nearly as can be determined from the little known of the bird, seems to coincide with that of S. unicolor parvirostris though perhaps at higher elevations. Consequently, I believe the origin of macropus is to be found somewhere in the ancestry of unicolor and its affines.

Scytalopus femoralis (Tschudi)

Pt(eroptochus) femoralis TSCHUDI, 1844, Arch. Naturg., X (1), p. 281—Perú (= Vitoc Valley; Hellmayr, 1924); Mus. Neuchâtel.

? Scytalopus sylvestris TACZANOWSKI, 1874, P. Z. S. London, p. 138—Paltaypampa (adult) and Maraynioc (juv.), central Perú; cotypes formerly in Warsaw Mus., now lost.

Relatively few specimens of the typical form have been available for study. These specimens show femoralis to be of moderate size, only a little larger than the members of the unicolor group, but with longer and heavier legs and decidedly heavier bill, of a different shape from that of unicolor. The culmen is noticeably convex, at least distally, though it may show a slight concavity near the forward end of the nostrils, and in general appearance the bill suggests a small Dysithamnus bill. The bill is black in color and the hue, as well as the shape, is as obvious in fairly young birds as in adults.

There is a great deal of variation in the exact shade of gray in the adult plumage and some individuals are more sooty than others. Also the amount of whitish or silvery tints present on the tips of the abdominal feathering is variable, being sometimes pronounced, sometimes absent. There is no example at hand which does not show some barring of black and brown on the lower flanks and at least a trace on the uropygium. This brown, furthermore, almost always has a decided mahoganyrufous or Auburn tone, quite different from the lighter and more yellowish (Dresden Brown) hues of the same parts in most of the forms of unicolor. Here. again, the immature birds agree with the adults although they have the barring continuous over the entire head and body and have the wings and tail brown instead of the sooty gray or blackish hue of the same parts in adult plumage.

As in at least some of the forms of unicolor, there appear to be various stages of intermediacy between the juvenal and adult plumages and the transition may be effected by the replacement of gray with brown feathers, by a replacement of gray with brown color on parts of individual feathers (as shown by gray feathers with brown tips), or by successive deepenings of the brown color with loss of the bars. Two birds, both males and both apparently well advanced in age, have the heaviest bills of the series and have a silvery white spot on the anterior crown of very small size, involving, at most, only three or four feathers, only one or two very extensively. In the adjacent forms, micropterus and bolivianus, this spot when present is much larger although it may sometimes be totally absent as also in the present form.

Except possibly for the size of the coronal patch when it is present, there is no positively distinguishing character of coloration for *femoralis* as distinguished from *micropterus* and *bolivianus* although there may be an average of slightly lighter tints of gray or brown in extreme examples, not perfectly reliable. The size is precisely intermediate between the two other forms mentioned. The males are as follows: wing, 59.5-64.5 mm.; tail, 40-47; culmen from base, 13-16; tarsus, 21-23. Female: wing, 59; tail, 46.5; culmen from base, 15; tarsus, 24.

The entire femoralis group appears to live at somewhat lower elevations than the unicolor and magellanicus groups and although there are specimens of some of the unicolor forms labeled with the same locality as certain examples of the unicolor group, I suspect that there actually is ecological distinction even at these places, not shown on the labels. My own experience with femoralis in the field was restricted to a locality at the junction of Humid Tropical with Subtropical, at some 4000 feet elevation. The highest locality from which I have a specimen of this group is 10,340 feet, presumably over the boundary into the lower portion of the Temperate Zone. The general range, however, is the whole of the Subtropical Zone.

Judging by two young birds from Moyobamba and Uchco, northern Perú, typical femoralis ranges northward along the eastern side of the central Andes at least that far. It does not, however, cross the Marañón to the western Andes whose eastern slopes, in northern Perú are occupied by the allied micropterus, discussed on a later page.

A fairly large series of birds from eastern Ecuador, representing micropterus, is noticeably uniform, varying only within certain limits, but three birds, from Tambillo (Río Upano), Tunguragua, and Baeza, respectively, are strikingly different in size though rather similar in color, with the brown of the posterior parts having less of the rufous or mahogany hues of micropterus and femoralis. In particular, the bill is markedly smaller than that of either of the other forms mentioned and may be matched by some specimens of S. unicolor subcinereus. These birds will be found discussed at greater length under S. latebricola spillmanni.

I am not perfectly sure that Taczanowski's name, sylvestris, belongs in the synonymy of femoralis although the insistence on the rufescence of the coloration of the posterior parts, if the designation is exact, is nearly diagnostic. The facts that many specimens of "S. latebricola meridanus" were identified as "sylvestris" at one time or another by early authors, and that the two Occobamba birds appear to be closely allied to unicolor, are suggestive. zanowski considered femoralis and sylvestris as distinct. The question cannot be decided so long as the type of sylvestris is lost but if it should ever be found there is a slight possibility that the name may some day have to be revived.

Earlier records which probably belong with femoralis are from Paltaypampa, Pariayacu, Maraynioc, Garita del Sol, and Ray-Urmana. Taczanowski's citation (1889, Wars. Univ. Izvest., No. 4, p. 9) of Pumamarca is probably an error for Pariayacu which he cites in other papers.

Scytalopus femoralis bolivianus Allen

Scytalopus bolivianus Allen, 1889 (March 22), Bull. Amer. Mus. Nat. Hist., II, p. 98—"Reyes," Bolivia (errore, probably at a higher elevation, nearer La Paz); American Museum Nat. Hist.

The type and two males from southeastern Perú (La Oroya and Inca Mine) are distinguishable from true femoralis of central Perú by reason of somewhat smaller size (wing, 54, 57.25, 55 mm.; tail, 36, 37, 36), rather darker general coloration, and, in two of the specimens, a much larger white spot on the anterior crown (the third specimen has no white). On the basis of these characters, therefore, it appears possible to recognize bolivianus as distinct.

A young female from Idma, above Santa Ana, Urubamba Valley, possibly is referable to this small form. It has a wing of only 54.5 mm. and tail of 32—not conclusive in view of the immaturity of the specimen but highly suggestive. A young female of femoralis from Uchco has a wing of the same measurement but a tail of 38 mm. Other young examples of femoralis from central Perú exceed the Idma skin in both particulars.

Carriker's record of "femoralis" from Santo Domingo (1935, Proc. Acad. Nat. Sci. Phila., LXXXVII, p. 321) was based on a specimen which belongs to S. unicolor parvirostris, discussed on a previous page. Carriker (l. c.) also doubts the authenticity of the type locality of boliviana because of the low elevation of Reyes. This objection is well founded, for although the allied femoralis reaches the upper limit of the Tropical Zone (as at Huachipa, Perú) neither it nor its conspecies are likely to descend much below 4000 feet elevation.

Scytalopus femoralis micropterus (Sclater)

Agathopus micropterus Sclater, 1858 (April), P. Z. S. London, XXVI, p. 69—Río Napo, e. Ecuador; cotypes in British Mus.

The form of femoralis occupying eastern Ecuador (possibly crossing the ridge between Quito and Gualea?) and a small portion of northern Perú between the Río Marañón and the crest of the western Andes, is distinguished from the other

forms of the species by its large size, particularly by the long tail. Whereas in typical femoralis the tail varies between 39.5 and 47 mm., in what I have identified as micropterus it varies between 46 and 51 mm, in adult females and 48 to 61 mm, in the adult males. Other measurements also are larger though not to the same extent. Younger birds are a little smaller and subadult males have the tail from 47 to 53 mm.; females, 44 to 49. Only one Ecuadorian specimen, and none of the Peruvian birds, has a white spot on the crown and in this single example, the spot is larger than that of femoralis but smaller than that of bolivianus. The series of micropterus available for study is much larger than that of any other form and perhaps the comparative rarity of the marking is one of the characters of the subspecies.

The relatively large number of specimens of *micropterus* at hand permits a careful study of the plumages of this form, of the greatest assistance in delimiting the range of individual variation.

As noted in the account of femoralis, a most constant character is the heavy bill with noticeably convex culmen. The rufous coloration of the flanks is dark mahogany or Auburn and is always present, even in the most advanced adult males; the tail is black or a very dark seal brown, almost black, even in young birds

Adult males are sooty gray above, with a faint brownish tinge on wings and tail and with the rump and upper tail-coverts brighter, a dark rufous brown. Beneath, the throat, breast, and upper belly are gray, lighter than the back, and with more or less definite whitish tips on the feathers of the middle belly. Flanks and under tail-coverts are brighter rufous than the rump and marked with black or blackish lunulate bars, sometimes indicated also on the uropygium. Wing, 63–69 mm.; tail, 48–61.

Adult females are duller in color than the males, with a slight tinge of drab in the gray of the back and the anterior under parts, but the flanks may be more contrastingly barred in some cases. Wing, 60–62; tail, 46–51.

Young males have the whole upper parts

warm brown, with comparatively inconspicuous dusky lunules, most obvious on the uropygium. The tail is blackish (with a slight brownish suggestion) but the wings have the exposed surfaces brown like the back and show black and ochraceous markings on the tertials and some of the upper wing-coverts. Beneath, the anterior parts are gray with suggestions of dusky spots and tips, giving a curious mottled effect. The flanks are rufous brown with blackish bars about as in the adults.

Young females are brown above, with quite prominent blackish lunules and bars over all. The under parts are light but warm brown, even more prominently lunulated with blackish than the upper parts, with the breast nearly as heavily marked as the flanks and with the dusky markings of the throat only partially concealed by the paler tips of the feathers.

Between the extremes of juvenal and adult plumages there are various degrees of intermediacy that may, possibly, involve several molts. There are few examples in the full plumage that I have described as adult. Most of the birds have at least a trace of brown on the mantle and of ochraceous and black marking on the tertials and upper wing-coverts, and it may be that the clearer dark gray of the adult plumage is not reached in the post-juvenal molt. More material may help to decide this point.

One specimen, kindly lent by the Academy of Natural Sciences of Philadelphia, is labeled as from Alaspungo, road to Gualea, Ecuador. Presumably the locality, which I am unable to find on a map, is on the western side of the western Andes. If the notation is correct, this is the only record from western Ecuador. However, the specimen, although brought back by the S. N. Rhoads Expedition, appears to have been obtained from a native collector which throws considerable doubt on the situation. For the present, therefore, micropterus cannot be stated positively to occur in western Ecuador.

Birds from parts of Colombia, which have been referred heretofore to *micropterus*, fall noticeably below *micropterus* in measurements and cannot be referred to

it. If they are to be held inseparable from the Ecuadorian form, their measurements will prevent the distinction of *micropterus* from *femoralis*. In spite of the close resemblance of the Colombian birds to typical *femoralis*, therefore, it appears desirable to separate them as still another form which may be known as follows.

Scytalopus femoralis confusus, new subspecies

Type from Miraflores, east of Palmira, Colombia; altitude 6800 feet. No. 108,905, American Museum of Natural History. Adult male collected April 27, 1911, by Frank M. Chapman and W. B. Richardson.

DIAGNOSIS.—Similar to S. f. femoralis from central Perú but with the white spot on the anterior crown more often present and, when present, of much larger extent. Size larger than S. f. bolivianus; smaller than micropterus.

Range.—Subtropical Zone of all three ranges of the Andes in Colombia, extending about as far north as 5 degrees north latitude.

DESCRIPTION OF TYPE.—Mantle Dark Neutral Gray and Slate Color; hind neck similar; top of the head more blackish with a white spot on the fore part of the crown about 7 mm. wide; rump Clove Brown with indistinct traces of dusky barring; upper tail-coverts slightly brighter, with dark bars more distinct. Throat, breast, and abdomen Deep Neutral Gray, with indistinct whitish tips on the abdominal feathers; lower flanks bright Auburn X Argus Brown strongly barred with blackish lunules. Wings and tail gray like the back though with a slight brownish tinge; under wingcoverts somewhat lighter gray than the chest. Bill (in dried skin) black; feet dark brown. Wing, 61 mm.; tail, 43; exposed culmen, 12.5; culmen from base, 16.25; tarsus, 24.

REMARKS.—Adult female like the male in general pattern but with the gray coloration duller and the rufous of the uropygium and flanks brighter. Apparently some females have the white coronal spot like the males, but additional material is needed to establish this as a fact. One young bird, sexed as a female, has the entire upper surface brown with dark hair-streaks on the mantle but no clear barring on that area such as exists on the rump. The throat and the lower breast are largely white but the upper breast is gray with only narrow whitish terminal margins. The belly is warm ochraceous and the flanks and sides darker warm brown with dusky lunules. This bird has a well-developed coronal spot of white. Also, a "Bogotá" skin of undetermined sex has the dull coloration of adult females but also has a white coronal spot.

One bird sexed as a male, from El Eden, has no white on the crown and is rather duller gray than the average male. Another specimen, queried as a male, is still duller and may be a female. An immature "Bogotá" specimen without given sex probably is a female, judging by the immature plumages of the allied *micropterus*. A skin from the coast range west of Popayan has no indicated sex but is dull in color and probably is a female. These birds all lack the white spot on the crown.

A topotype, in badly shot condition, is very dark and has a strong coronal spot as do the type and three other males. Thus, seven out of twelve Colombian specimens show the white area on the crown, including all but one of the birds definitely sexed as males, one bird sexed as a female, and one specimen of doubtful sex, probably a female.

The males from La Candela and Buena Vista are clearer, lighter gray than the other males and have the white terminal margins of the abdominal feathers much clearer and sharper. The peculiar, so-called female from La Palma, mentioned above, is marked by the extensive white on the under parts. Perhaps there is some further revision of the birds of extreme eastern and southeastern Colombia awaiting more material.

Scytalopus femoralis atratus Hellmayr Scytalopus atratus Hellmayr, 1922 (May 1), Orn. Monatsb., XXX (3), p. 54—Río Negro, Estado Boyaca, Colombia; 37; Carnegie Mus.

Through the kindness of Mr. W. E. C. Todd of the Carnegie Museum, I have been enabled to examine the type and two paratypes of atratus. I am convinced from the examination that this form should be considered as a subspecies of femoralis. The most striking characteristic of the form is the pale patch on the throat of the type and the female paratype, the deeper auburn color of uropygium and flanks, and the small size of all three birds. The general obscurity of the gray portions of the

plumage is matched by certain examples of femoralis, micropterus, and confusus, while confusus is intermediate in size between micropterus and atratus as it is placed between them geographically. The feet of atratus appear to be pale brown as are those of sanctae-martae which probably belongs to the same group though its color is the palest of all and its size the smallest, even less than that of bolivianus, the southernmost member of the group.

Certain specimens from the extreme western side of the western Andes of Colombia have been identified by various authors as S. femoralis micropterus to which they do not belong, and they are equally out of place in femoralis confusus. Their most certain alignment is with panamensis from which they are distinguishable by certain characters that appear to be no more than subspecific in value. Accordingly these western birds may be known as follows.

Scytalopus panamensis vicinior, new subspecies

TYPE from Ricaurte, Narino, western Colombia; altitude 5000-6000 feet. No. 117,792, American Museum of Natural History. Adult female collected September 20, 1912, by W. B. Richardson.

DIAGNOSIS.—Similar to S. p. panamensis of southeastern Panamá, but the gray of the breast a little less whitish and the white superciliary stripe absent.

Compared with S. f. micropterus the size is smaller, particularly that of the tail, and the anterior under parts are much lighter and more ashy gray. Compared with S. f. confusus the color differences are about as with micropterus but the size is closer.

RANGE.—Subtropical Zone of western Colombia, northwestern Ecuador, and southwestern Panamá (Mt. Pirrí).

DESCRIPTION OF TYPE.—Upper parts very dark reddish brown with the uropygium brighter (light Auburn) and banded with blackish; forehead and superciliary region slightly tinged with grayish; lores, auriculars, chin, throat, and breast light Neutral Gray in strong contrast to the dark brown lower parts; flanks, femoral areas, and under tail-coverts deep Argus Brown, barred with blackish; middle of belly paler, near Pinkish Cinnamon. Tail and wings like the back, with a slight, pale spot and dusky bar at the tip of the shortest tertial. Bill (in dried skin) dull blackish; feet dark brown. Wing, 57 mm.; tail, 37; exposed culmen, 11; culmen from base, 15; tarsus, 21.

REMARKS.—Adult male like the female but darker and with the mantle dark gray. A young male in juvenal plumage, collected at Alto Bonito, is darker brown above than the adult female and has the anterior under parts narrowly barred with blackish and Sayal Brown; the lower under parts have these bars stronger and more pronounced than those on the throat and chest and the brown portions are darker, near light Auburn.

Another young bird, sexed as a male, from Salento, is doubtfully referred here. It is patterned much like the Alto Bonito juvenile but is paler rufous above and below and has traces of bars on the upper surface. It has the tail only 34.5 mm. in length and the wing 55, agreeing in size with the series of vicinior but not with S. f. confusus which occurs nearby at El Eden. Owing to the immaturity of the specimen its measurements may be misleading, although young birds of the various forms of the femoralis group, if not in molt, are not pronouncedly smaller (though a little so) than the adults of the same forms.

An adult female from Alto Bonito is a little paler than the type except for the lores which are darker gray. A male from Paramba, Ecuador, is grayer on the mantle and top of the head and has a darker tinge across the chest tending to separate the paler gray of the throat and belly.

A male and a female from Mt. Pirrí, Panamá, kindly lent by Mr. Bond of the Academy of Natural Sciences of Philadelphia, are somewhat darker over all than the rest of the series but diverge from the other birds to about the same extent that extremes of typical panamensis differ from each other. It seems probable, therefore, that they represent only the extremes of vicinior to which I refer them.

Although there are some features that suggest the close relationship of panamensis and vicinior to chiriquensis and argentifrons and of these to each other, more should be known about the distribution of each before the suggestion is made to unite them in a single species. As stated, there is much to suggest the specific relationship of panamensis and vicinior to the

femoralis group where I was at one time prepared to place them. The apparent presence of vicinior at Salento while femoralis confusus occurs at El Eden is particularly disturbing and the existence of vicinior at Ricaurte and Alto Bonito, in the Subtropical Zone of the western Andes of Colombia, with confusus at San Antonio, Las Lomitas, and Pavas, in the same zone of the same cordillera, though at separated localities, leaves something to be learned about the full distribution of both before actual conflict can be either demonstrated or denied.

Scytalopus latebricola spillmanni Stresemann

Scytalopus latebricola spillmanni Strese-Mann, 1937 (May 2), Orn. Monatsb., XLV (3), p. 76—Illiniza, c. Ecuador; Q; Berlin Mus.

The exact limits of variation and distribution of this bird are not yet demonstrable with perfect assurance. It was described from a single specimen that cannot be matched perfectly by any other specimen of Scytalopus that I have examined. Nevertheless, allowing for probably the same degree of variation that is demonstrable in other forms of latebricola, there are several skins from different localities that appear to be referable to spillmanni or that are at least more closely related to that form than to any other.

Particularly to be considered are three examples from eastern Ecuador, a male from Tunguragua, a female from Tambillo, and a second female from Baeza. though the maximum measurements of these birds show the wing and tail to be at about the minimum for S. femoralis micropterus, also an inhabitant of eastern Ecuador, the bills in all three, as well as in the type of spillmanni, are decidedly smaller, more slender in both lateral and vertical aspects. In general appearance, these bills are intermediate between those of latebricola meridanus and l. caracae. The pattern of coloration is the same as in the other forms of latebricola although the colors are darker than the average of the others though not darker than one specimen of caracae now before me. Similarly, the lores show much the same conspicuously

erect feathering. The Tambillo female has quite prominent whitish tips on the abdominal feathers, the Tunguragua and Baeza birds less, and the type of *spillmanni* still less. The tail is black in the type, black with grayish-brown edges in the Tunguragua male, and dusky brown with paler brown edges in the two females. The type has the flanks and uropygium more warmly rufescent than do the other birds, but there is considerable individual variation in *meridanus* in this particular and it is uncertain how diagnostic this feature may be.

Colombian birds are of doubtful allocation. A small series from Páramo de Tamá has been assigned by Hellmayr to meridanus but the birds are not typical of that form. The whole back and the occipital region of the head are much more decidedly brown than in any meridanus and the bill is heavier, being about as in caracae which they resemble in other particulars though the dorsal coloration is lighter. A female from Santa Isabel, central Colombia, is exactly like them. On the other hand, a male from El Roble, near Bogotá, is darker above and below. has the mantle and head gray instead of brown, and has the flanks, uropygium, and even a tinge on the tail clearer rufescent. The El Roble specimen could be referred to spillmanni without much difficulty. except that it is rather lighter in color; the Santa Isabel and Páramo de Tamá skins are much paler. Nevertheless, several Mérida skins in post-juvenal molt or in what appears to be retarded adult plumage are not so different from the Colombian birds as to warrant the separation of the latter at the present moment. Consequently I follow Hellmayr in refering these specimens to meridanus although I include with them the El Roble male which Hellmayr once referred to S. femoralis micropterus. A large series from eastern Colombia and additional fresh birds from the Mérida region will be required to establish the status of the questionable specimens.

Actually, some of the specimens of meridanus are not very different from certain skins of griseicollis which have

dark flanks and tail (not so dark as typical meridanus) and occasional traces of bars on the posterior parts. The type of "S. infasciatus" is unusually dark for griseicollis but appears to belong to that form and not to meridanus. Likewise, fuscicauda is of equivocal position, having a bill more like the Páramo de Tamá specimens of meridanus than true griseicollis and showing some traces of barring on the flanks. although the general coloration is not very different from griseicollis. The situation with regard to these various forms is still so confusing that I prefer not to offer any amendments to the arrangement adopted by Hellmayr except as regards the assignment of the El Roble male, discussed above, and the inclusion of griseicollis in the magellanicus group.

From general characteristics I believe that S. indigoticus of southeastern Brazil may be of common ancestry with the latebricola group and that the two should stand near each other in any systematic list.

Scytalopus magellanicus acutirostris (Tschudi)

Pt(eroptochus) acutirostris Tschudi, 1844, Arch. Naturg., X (1), p. 282—Perú; Maraynioc suggested by Hellmayr, 1924; Mus. Neuchâtel. Scytalopus simonsi Chubb, 1917 (Dec.), Bull. Brit. Orn. Club, XXXVIII, p. 17—Choquecamata, Cochabamba, Bolivia; ϕ ; British Mus.

This form ranges from the Cochabamba region of northern Bolivia through southeastern Perú to the mountains above Huánuco, on the upper Huallaga. At present there is no record from the region between Junin and Limbani but it is probable that the range passes around the heads of the valleys that flow into the Apurimac; the bird of the highlands between the Urubamba and the Apurimac is distinct and its range is not likely to be interpolated in that of acutirostris. It would be interesting to have complete information on the distribution of the species in this part of Perú and the areas to the southward. So far as I have observed it in the field, it appears to occupy both the tangled woods of the Humid Temperate Zone and the bush-grown banks of the little streams that wander out of the woods across the high savannas. The

latter, as Dr. Chapman has pointed out a number of times, are not easily classified as strictly Arid Temperate or Puna but represent a mixture of the two that is difficult to break up into its components. At any rate, the banks of the streams probably are part of the Humid Temperate Zone to which acutirostris and its conspecies appear to be restricted. There is no certain evidence that they descend to the Subtropical Zone as do some of the other species of the genus.

It is therefore to be noted that the magellanicus group has the most consistently elevated distribution of the various members of the genus, going as far as the upper limit of tree-growth and perhaps casually farther. It also has the most southerly distribution, reaching the Straits of Magellan. It is thus a strictly Temperate Zone species geographically or altitudinally.

A word of explanation may be in order regarding the specific association of magellanicus and acutirostris. It must be conceded that magellanicus fuscus is not known to reach farther north in Chile than the neighborhood of Tofo, Coquimbo, near the borders of Atacama. Farther northward extension no doubt is prevented in Chile by the arid character of the terrain which is not in accord with the habitat of the species. Some interruption in the distribution of the species is, therefore, to be expected.

Disregarding, for the moment, the discontinuous distribution, we find that various details of plumage and proportions are common to both acutirostris and magellanicus (with fuscus). The slender, acute bill, the characteristic sheen of the plumage with its tendency toward decomposition at the tips of the feathers, the blackish spot in front of the eyes that appears in certain positions of the feathers, the fine barring of the posterior parts, and other less tangible features are common to both. When canus of central-western Colombia is added to the specific group, as I believe it must be, the similarity of the various members of the group becomes more apparent, as is the case when the east-Ecuadorian member of the species, described on a later page, is brought into the picture.

The silvery white tips on the feathers of the crown in *magellanicus* are far from constant and may be absent. On the other hand, the whitish superciliary stripe of *acutirostris* is similarly variable.

The existing gap between the ranges of fuscus and acutirostris is, to a certain extent, reduced by the interposition of superciliaris in the mountains of Tucumán. northwestern Argentina. The possible inclusion of *superciliaris* in the species under discussion becomes, therefore, worthy of examination. The probability at first glance seems remote but this is largely due to the dissimilarity of superciliaris and magellanicus or fuscus. The case is quite otherwise when comparison is made with acutirostris and particularly with a northern representative of it. To facilitate discussion, it may be well first to describe and name the northern bird. It may be known as follows.

Scytalopus magellanicus altirostris, new subspecies

TYPE from Atuén, Dept. Amazonas, northern Perú. No. 115,273, Academy of Natural Sciences of Philadelphia. Adult male collected July 19, 1932, by M. A. Carriker, Jr.; original No. 5395.

Diagnosis.—Distinguished from S. m. acutirostris of central and southern Perú and northern Bolivia by more grayish, less cinnamomeous flanks with rather broader blackish cross-bars and by the more elevated base of the culmen; under parts averaging a little paler gray.

RANGE.—Northern Perú on the western side of the central Andes above the Río Marañón.

Description of Type.—Anterior upper parts near Deep Neutral Gray with a slight brownish tinge on nape and mantle; lower back, rump, and upper tail-coverts Mummy Brown with moderately broad, blackish bars, less distinct anteriorly; tips of mantle-feathers paler at tips and slightly decomposed, giving a characteristically coarse texture and gloss. Lores dull gray, appearing blackish in certain lights; a silvery gray auricular stripe moderately strong, not involving the lores; rest of sides of head gray, lighter than the crown, darker than the throat. Throat and breast Pale Neutral Gray; chin a little paler, approaching Pallid Neutral Gray on the belly; lower flanks and crissum near light Saccardo's Umber, sometimes mixed with whitish, and regularly barred with blackish. Wings externally gray; tertials brownish with several blackish lunules near the tips of the feathers. Tail dusky gray with paler gray outer margins which show traces of buffy brown and blackish bars on the external feathers. Bill (in dried skin) blackish; feet dark brown. Wing, 58 mm.; tail, 38; exposed culmen, 9; culmen from base, 13.12; depth of bill at posterior end of nostrils, 4.25; tarsus, 21.

Remarks.—Females like the males but with upper parts dark, warm brown instead of gray and with some traces of blackish lunules on the posterior feathers of the mantle; outer surface of wings brownish; tail brown with several blackish concentric lunules.

Males which may be less fully adult than the type have a tendency to show brownish coloration on the remiges and stronger dark lunules there and on the rump, and they have the tail also brownish, marked as in the females.

The pale superciliary stripe is variable in both sexes as is the exact tone of gray on the upper parts. The same variation is shown by *acutirostris*.

Some examples have the belly nearly uniform gray; others have the central portion marked by silvery white tips, a variability found in all of the species of *Scytalopus*.

The ridge of the culmen also shows some variation but is always higher at the base than it is in birds from southern Perú while at the other extreme, especially marked in a female from Patás, it is produced into a high, thin keel that gives a depth of bill at the posterior end of nostrils equal to 6 mm. or a depth of maxilla alone of 5 mm. In no specimen of altirostris examined is the depth of maxilla quite as low as 4 mm. which is the maximum for acutirostris.

This elevated culmen is closely approached in the bill of superciliaris of Tucumán, Argentina, to which reference was made in the discussion of acutirostris. The maximum development in superciliaris, in the material of that form examined, is about as in the minimum of altirostris. Furthermore, the dull buffy tone of the barred flanks is much the same in both birds and the hue of gray on the belly of dark examples of superciliaris and light specimens of altirostris also is very similar. The silvery gray superciliary

stripe of the Peruvian bird is emphasized in the white one of the Argentine form which, in addition, has the lores definitely blackish, not only so in certain lights. The markings on wing and tail are of the same pattern, though more pronounced in altirostris and the brown of the back is paler in superciliaris and permanent through the adult plumages. The white throat of superciliaris is a striking character but the gular area of altirostris and acutirostris sometimes shows a lighter tone than the breast with slight suggestions of even more whitish edgings. I believe, therefore, that superciliaris definitely belongs in the same specific group as acutirostris and have so treated it.

Scytalopus magellanicus urubambae, new subspecies

Type from Cedrobamba (Machu Picchu), Urubamba Valley, Perú; altitude 12,000 feet. No. 170,765, American Museum of Natural History. Adult female collected June 1, 1915, by E. Heller; original No. 137.

DIAGNOSIS.—Differs from S. m. acutirostris of central and southeastern Perú and northern Bolivia by having the posterior parts clear, bright rufous, not sharply barred. General appearance superficially like that of dark examples of griseicollis of the Bogotá region of Colombia but general hues of gray darker and wings and tail with more decided dusky markings.

RANGE.—At present known only from the type locality.

DESCRIPTION OF TYPE.—Top of head a little darker than Neutral Gray, with very fine, inconspicuous terminal borders of a slightly darker hue; nuchal region occupied by an indistinct brownish patch; mantle Deep Neutral Gray with the tips of the feathers slightly decomposed and lighter in hue; lower back Auburn, passing into dark Sanford's Brown on the upper tailcoverts. Lores dark gray with the space immediately in front of and just above the anterior border of the eye quite blackish in certain lights; a faint indication of a light superciliary stripe above the auriculars. Anterior under parts light Neutral Gray; thighs, femoral tracts, and under tail-coverts concolor with the upper tailcoverts. Exposed surface of the primaries and secondaries a little darker gray than the mantle and with bright cinnamomeous tips on the secondaries, preceded by a small blackish dot; tertials Auburn with brighter tips and small dusky subterminal dots. Tail near Argus Brown with obscure dusky concentric lunules broadening distally to form somewhat better marked blackish bars. Maxilla dark brown (in dried skin); mandible paler brown; feet light brown. Wing, 55 mm.; tail, 34? (tips abraded); exposed culmen, 10; culmen from base, 13.5; tarsus, 20.

Remarks.—A male is very like the type but lacks the brownish nuchal space; the tail is gray with blackish bars near the tip alternating with rufescent bars; the rump is a little darker rufous with obsolete bars; the wings are darker than those of the female and are less brightly and strongly marked; flanks a little darker than in the female and with traces of bars; general tone of gray a little darker than the other sex.

The geographical position of Cedrobamba might be thought to place this form directly between the Bolivian and central-Peruvian populations of acutirostris, but, actually, the Temperate Zone here lies on a narrow projection from the main course of this zone farther southward and is thus sufficiently apart to support a peculiar form such as the present one. In any case, I have at hand sufficient material of acutirostris to show the different sexes. ages, and plumages and nowhere in the series is there any approach to the characters of urubambae. The resemblance to griseicollis is much more striking and furnishes one of the clues to the affinity of that heretofore segregated form. Although griseicollis has a decided amount of whitish on the belly that is lacking in the present form, the texture of the plumage and even some of the colors (as in the type of "infasciatus") are very similar while the bills of some specimens of griseicollis are a good match for that of the type of urubambae.

Scytalopus magellanicus affinis, new subspecies

Type from Yánac, Department Ancash, northwestern Perú; altitude 13,000 feet. No. 115,283, Academy of Natural Sciences of Philadelphia. Adult (first annual plumage?) male collected March 22, 1932, by M. A. Carriker, Jr.; original No. 4537.

DIAGNOSIS.—Nearest to S. m. acutirostris of central and southern Perú and northern Bolivia but coloration lighter; under parts paler gray and uropygium, flanks, wings, and tail of both sexes and, in addition, the mantle of the female brighter and more rufescent in hue; no whitish superciliary stripe.

Range.—Known only from the western Andes at the type locality.

DESCRIPTION OF TYPE.—General plumage rather coarse with a hard texture, slightly glossy, resembling that usually shown by skins of birds prepared from alcoholic specimens. Top of head and mantle Dark Mouse Gray; area over the eyes a little lighter gray but not silvery whitish; lower back, rump, and upper tail-coverts near Argus Brown, the coverts with indistinct, narrow blackish bars. Sides of head Neutral Gray; chin, throat, breast, and upper belly Pale Neutral Gray; lower belly Ochraceous-Tawny; flanks Amber Brown with strong blackish bars; under tail-coverts similar but with tips of the feathers narrowly paler buff. Remiges externally mostly Prout's Brown but tinged with gray toward the bases of the primaries and secondaries; tertials brighter and marked with several concentric lunules of blackish and with a tiny buffy speck at the tip, suggested on the inner secondaries. Tail Prout's Brown; middle rectrices with about six concentric lunules of blackish formed in slightly vermiculate loops, the last three or four of which broaden at the bight to form distinct bars on the terminal part of the feather; remainder of the rectrices with dusky barring which becomes restricted to the distal part of the feathers in progressive degree toward the outermost feathers. Bill (in dried skin) brown (noted as black in the fresh specimen); feet pale dull brownish (noted as brownish yellow in the fresh specimen). Wing, 54 mm.; tail, 36; exposed culmen, 9.25; culmen from base, 12.5; tarsus, 19.

Remarks.—A second male is very like the type but has the posterior under parts a little brighter. Two females differ by having the entire back and nape bright brown, hardly different from the uropygium which, in turn, is somewhat brighter than in the type. The wings also are bright brown externally and in one of the females the dusky lunulate markings on the tertials are quite pronounced and the greater upper wing-coverts are marked with dark subterminal bars. The flanks in this female are especially strongly marked with blackish bars and lunules and the under parts, from chin to upper belly, are more silvery whitish than in the other three birds.

Only one specimen of acutirostris is as pale beneath as the darkest of the four examples of affinis and none of them has the posterior parts (nor the back in the female plumage) as brightly rufescent as in the present form. The coarse, rough plumage also is particularly well marked in affinis although it is shown in some degree by various examples of the other forms and

provides one of the characteristic features of the group. In fact, Hellmayr, in commenting on the type of acutirostris, suggested the probability that the type had once been an alcoholic specimen, a notation that accurately describes the appearance.

Scytalopus magellanicus obscurus, new subspecies

Type from Tambillo, Río Upano, eastern Ecuador; altitude 8000 feet. No. 180,945, American Museum of Natural History. Adult (first annual?) of unknown sex collected by E. Fever.

DIAGNOSIS.—Nearest to S. m. canus of the central and western Andes of Colombia but with longer wings and tail and apparently with a certain amount of brownish coloration, barred with black, on the posterior under parts.

RANGE.—At present known only from the

type locality.

DESCRIPTION OF TYPE.—Upper surface Deep Neutral Gray \times Dark Neutral Gray with the tips of the mantle-feathers paler and semidecomposed and with fine, dark terminal borders on the feathers of the top of the head, all this giving a characteristic appearance to the surface; a very faint tinge of drab on the uropygium. Lores dark gray; the space immediately in front of and just above the anterior border of the eye quite blackish in certain lights. Anterior under parts near Neutral Gray; belly near Light Neutral Gray: lower flanks like uropygium with the lowermost feathers tipped with buffy brown, indistinctly barred with dusky; under tail-coverts near Hazel, barred with dusky and with the tips of the feathers paler and more buffy. Wings and tail with exposed surfaces Dark Mouse Gray. Maxilla (in dried skin) blackish; mandible brown; feet pale brownish. Wing, 57 mm.; tail, 40; exposed culmen, 10; culmen from base, 13; tarsus, 21.

Remarks.—A second specimen from the same locality is similar to the type but has the uropygium somewhat brownish, marked with quite distinct blackish lunules; the lower flanks also are more extensively and more boldly banded with light brown and blackish; the wings and tail are a little more tinged with brownish and have traces of dusky markings.

In general appearance there is a perceptible resemblance to certain examples of magellanicus and fuscus with the size approximating that of fuscus.

Scytalopus magellanicus griseicollis (Lafresnaye)

Merulaxis griseicollis Lafresnaye, 1840, Rev-Zool., III, p. 103—Santa Fé de Bogotá, Colombia; Mus. Comp. Zoöl.

Merulaxis squamiger Lafresnaye, loc. cit.— Bogotá; juv.; Mus. Comp. Zoöl.

Scytalopus infasciatus Chapman, 1915, Auk, XXXII, p. 414—Páramo de Beltran, Bogotá, Colombia; Amer. Mus. Nat. Hist.

Scytalopus erythropterus Chapman (ex. Lafresnaye MS.), loc. cit. (in text); ? Bogotá; Mus. Comp. Zoöl.

The association of this form with the magellanicus group is prompted by the close resemblance of S. m. urubambae although there are some features of the northern birds which are rather different. I can find no evidence of the lunulate type of marking on the wings or tail of griseicollis but they are lacking in some examples of acutirostris also. The young of griseicollis have more decided barring on both upper and under parts than most of the members of the group in comparable plumage, but a molting example of canus shows traces of a pattern in the remnants of its juvenal plumage that may not be very different, and one specimen of affinis and several examples of altirostris tend to bridge the difference from acutirostris. The evidence, therefore, places griseicollis in the magellanicus group as one extreme in the various lines of variation.

The Venezuelan form, fuscicauda, is not certainly a conspecies of griseicollis but shows many points of resemblance to the latebricola group and is, furthermore, even less suggestive of relationship to magellanicus than is griseicollis, itself. Nevertheless, until further evidence is forthcoming, it may go along with griseicollis.

SPECIMENS EXAMINED

S. u. parvirostris.—Bolivia: Río Aceramarca, 1 of (type). Perú: Santo Domingo, 1 of; Oconeque, 1 Q 1; Auquimarca, 1 \circlearrowleft 1; Rumicruz, 2 σ ; Tocopoqueu, 1 σ 2, 1 φ ; Panao, 1 σ 3; mountains near Huánuco, 1 φ 3; Bagazán, 1 ♀¹; Atuén, 1 ♂¹, 4 ♀¹.

S. u. unicolor.—Perú: Cajabamba, 2 3;

¹ Specimens in Academy of Natural Sciences, Philadelphia.

² Specimens in U. S. National Museum, Washington, D. C.
³ Specimens in Field Museum of Natural History, Chicago.

Huamachuco, 1 ♀; Succha, 1♀; Chugur, 4♂, 1 \circ ; Soquián, 1 \circ ¹, 3 \circ ¹.

S. u. subcinereus.—Perú: Taulis, 1 od (type). ECUADOR: El Chiral, 2 or; Taraguachocha, 5 \varnothing ; Bestion, 1 \varnothing ; Zaruma, 3 \varnothing , 1 \heartsuit ; Celica, 1 ♂,1 ♀.

S. u. intermedius.—Perú: La Lejia, 4 o

S. u. latrans.—Perú: Chaupe, 1 7, 1 9; Lomo Santo, 1 [? o], 1 9; Chira, 1 o1; "Samiria" (errore), 1 (?). Ecuador: Baeza, 1 ♂, 2 ♀; upper Sumaco, 1 ♂, 1 ♀; Papallacta, 1 ♂; Ambato, 1 (?); Pagma forest, 1 ♂1; Mojanda Mountains, 1 ♂; Mt. Pichincha, 4 ♂, 2 ♀; Crater of Pichincha, 1 Q4; Verdecocha (Pichincha), 4 o, 3 \cop; Yanacocha (Pichincha), 3 o, 1 \cop; Hacienda Garzon (Pichincha), 2 o, 1, 2 ♀¹. Colombia: Cerro Munchique, 2 ♂, 3 ♀, 1 (?); Coast Range west of Popayán, 1 3, 1 9, 1 (?); Cocal, 2 or; El Roble, 1 or; Santa Isabel, 1 σ ; Laguneta, 1 φ ; Almaguer, 1 σ , 2 φ ; Medellin, 1 (?); Santa Elena, 1 ♀; San Pedro, Antioquia, 1 (?); Valle de las Pappas, 2 ♂, 1 ♀; "Bogotá," 3 (?). VENEZUELA: Mérida, 1 (?); Nevados, 1 (?); El Escorial, 1 δ .

S. speluncae.—Brazil: Mt. Itatiaya, 6 o, 6 ♀.

S. macropus.—Perú: Tambo Ventija, 1 👌

(type of "grandis"); Utcubamba, 1 σ^1 .

S. f. bolivianus.—Bolivia: "Reyes" (errore),
1 (σ ?) (type). Perú: Inca Mine, 1 σ ?;

Idma, 1 (?); La Oroya, 1 ♂1. S. f. femoralis.—Perú: Rumicruz, 1 \circlearrowleft ; Chilpes, 1 \circlearrowleft , 1 [\circlearrowleft]; Huachipa, 1 \circlearrowleft ³; Uchco, 1 Q; Moyobamba, 1 O^{1} ; Eneñas, 1 O^{1} ; Hua-

capistana, 1 Q1. S. f. micropterus.—Perú: Chaupe, 4 o, 1 9, 3 ♂1; Lomo Santo, 1 Q. ECUADOR: San José de Sumaco, 1 9; lower Sumaco, 9 8, 11 9, 1 on; "Alaspungo," 1 on; Oyacachi, 1 on;

Guayaba, $1 \circlearrowleft$; Sabanilla, 1 [?]. S. f. confusus.—Colombia: Miraflores. 2 o' (incl. type); Las Lomitas, 1 o'; El Eden, 1 ♂; Buena Vista, 1 ♂; La Candela, 1 ♂; La Palma, 1 \(\varphi \); San Antonio, 1 \(\varphi \); Coast Range west of Popayán, 1 (?); "Bogotá," 2 (?); Huila, 1 ♂3.

S. f. atratus.—Colombia: Río Negro, Boyaca,

2 O^{15} , 1 Q^{5} . S. f. sanctae-martae.—Colombia: Santa Marta, Valparaiso, 1 ♂ (type), 2 (?).

S. argentifrons.—Costa Rica: (various localities), $11 \circlearrowleft$, $7 \circlearrowleft$, 3 (?).

S. chiriquensis.—Panamá: Cerro Flores, 1 & (type); Ĉhitrá, 1 ♂, 3 ♀; Boquete, 1 ♂, 1 (?); Chiriquí, 2 (?).

S. p. panamensis.—Panamá: Tacarcuna, 1 o (type), 1 \circ ; east slope of Tacarcuna, 4 \circ , 3 \circ . S. p. vicinior.—Colombia: Ricaurte, 1 (type); Alto Bonito, $1 \, \circlearrowleft$, $1 \, \circlearrowleft$; Salento $1 \, \circlearrowleft$.

⁴ Specimens in Museum of Comparative Zoölogy, Cambridge.
⁵ Specimens in Carnegie Museum, Pittsburgh.

Ecuador: Paramba, 1 " \circlearrowleft "." Panamá: Mt. Pirrí, 1 \circlearrowleft 1, 1 \circlearrowleft 1.

S. l. latebricola.—Colombia: Santa Marta, Páramo de Chiruqua, 1 9.

S. l. caracae.—Venezuela: Galipan, 1 3, 2 9; Silla de Caracas, 1 3, 1 9.

S. l. meridanus.—Venezuela: Mérida, 2 °; Conejos, 3 °; Tambor, 1 °; Santo Domingo, 1 °; La Culata, 1 °, 1 "°, " (type); El Escorial, 2 °, 2 °; Los Durainos, 1 °, Río Mucujon, 3 °, Páramo de Tamá, 1 °, 1 °, 2 °, 2 °, Colombia: Páramo de Tamá, 1 °, 2 °, 2 °, El Roble, 1 °°, Santa Isabel, 1 °, 1 °, Chipaque, 1 °,

S. l. spillmanni.—ECUADOR: Illiniza, 1 Q (type)³; above Baeza, 1 Q; Mt. Tunguragua, 1 \mathcal{O}^{14} ; Tambillo, 1 (?).

S. indigoticus.—Brazil: (no exact locality), 1 3, 1 9 (cotypes), 3 (?); São Paulo, Victoria, 2 3; Piquete, 1 3; Rio de Janeiro, Monte Serrat, 1 (?).

S. m. magellanicus.—CHILE: Reloncavi, 1 &; Pumalin, 1 &; Quicavi, Chiloë Is., 1 &; Isla de Mocha, 1 &, 1 &; Pouchet Is., 1 &; London Is., 3 &; O'Brien Is., 2 &, 2 &; Smoke Is., 1 &; Cape Horn, 3 &; False Cape Horn, 1 &; Maquehué, Temuco, 2 &; Punta Arenas, 2 &;

² Specimens in Field Museum of Natural History, Chicago.

³ Specimens in Berlin Museum.

S. m. fuscus.—CHILE: Valparaiso, 1 ♂; Tofo, 1 ♂; Río de Castro, 1 (?); Santiago, 1 ♂, 1 ♀; Cordillera de Cauquenes, 1 ♂; "Chile," 1 (?).

S. m. superciliaris.—Argentina: Tucumán, La Cienaga, $1 \circlearrowleft$, $2 \circlearrowleft$; Cumbre de Rao, $1 \circlearrowleft$, $1 \circlearrowleft$; Cienaga de Tafi, $1 \circlearrowleft$; Tafi del Valle, $2 \circlearrowleft$, $6 \circlearrowleft$.

S. m. acutirostris.—Bolivia: Pongo, 3 \circlearrowleft , 2 (?); Alaska Mine, 1 \circlearrowleft . Perú: Limbani, 1 \circlearrowleft , 1 \lozenge ; Chipa, 1 \circlearrowleft ; mountains above Huánuco, 1 \circlearrowleft , 4 \lozenge 2.

S. m. urubambae.—Perú: Cedrobamba, Urubamba Valley, 1 ο¹⁵, 1 ♀ (type).

S. m. affinis.—Perú: Yánac, 2 \circlearrowleft (incl. type)¹, 2 \circlearrowleft 1.

S. m. altirostris.—Perú: Atuén, $1 \circlearrowleft (type)^1$, $1 \circlearrowleft^1$; Patas, $3 \circlearrowleft^1$, $2 \circlearrowleft^1$.

S. m. obscurus.—Ecuador: Tambillo, 2 (?) (incl. type).

S. m. canus.—Colombia: Paramillo, Antioquia, 3 of (incl. type), 3 Q.

S. m. griseicollis.—Colombia: El Piñon, 1 o, 1 o; Tocaimito, 1 o; Chipaque, 1 o; Páramo de Beltran, 1 (?) (type of infasciatus); "Bogotá," 10 (?).

S. m. fuscicauda.—Venezuela: Páramo de Rosas, 1 \mathcal{O}^6 , 1 (?)⁶; Teta de Niquitao, 1 \mathcal{O}^6 , 1 \mathcal{Q}^6 ; Guamito, Trujillo, 1 \mathcal{Q}^6 .

¹ Specimens in Academy of Natural Sciences, Philadelphia.

⁴ Specimen in Museum of Comparative Zoölogy, Cambridge.

<sup>Specimens in U. S. National Museum, Washington, D. C.
Specimens in Carnegie Museum, Pittsburgh.</sup>