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THE MORE NORTHERN SPECIES OF THE GENUS SCYTALOPUS GOULD¹

BY FRANK M. CHAPMAN²

The species of the genus *Scytalopus* are small, black, slaty or brownish wren-like birds of mouse-like habits. Most of them live in dense undergrowth or fallen tree-tops in the forests of the Subtropical and Temperate Zones of the Andes where haunt, habit, color and size make them exceedingly inconspicuous in life and all but invisible in death.

At best they can be seen only when one is within a comparatively few yards of them, and the collector who is not properly equipped with a small gauge gun or auxiliary barrel blows into fragments more specimens than he secures.

Even after a successful shot in the luxuriant, dark, cloud forest of the Subtropical Zone it usually requires the most minute, painstaking search, guided by mark of shot here and a stray feather there, to find the fallen bird; while in the more open Temperate Zone forests I have had a specimen slip from my hand to be hopelessly lost in the mass of fallen limbs and undergrowth which, in places, like mossgrown brush-heaps, accumulate beneath the trees.

The native collector, armed with blow-gun, such as many of them in the Bogotá region of Colombia still use, gets comparatively few specimens of birds as difficult to collect as *Scytalopus*.

For these reasons, rather than because of the rarity of the birds themselves, most of the species of *Scytalopus* have been but poorly represented in our collections. In our work in Colombia and the adjoining countries we have therefore devoted especial attention

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¹ This is the fifth paper based chiefly on collections made in Colombia from 1911 to 1915 by expeditions from the American Museum. The four preceding papers were all published in the 'Bulletin' of the Museum as follows: (1) Diagnoses of Apparently New Colombian Birds, XXXI, 1912, pp. 139–166. (2) Diagnoses of Apparently New Colombian Birds, II, XXXIII, 1914, pp. 167–192. (3) Diagnoses of Apparently New Colombian Birds, III, XXXIII, 1914, pp. 663–637. (4) Descriptions of Proposed New Birds from Central and South America. XXXIV, 1915, pp. 363–388.

to birds like *Scytalopus*, not only because of their rarity in collections, but because such birds, as a rule, show a greater tendency to respond to the influences of their environment than do less sedentary species.

Of Scytalopus alone we have thus taken in Colombia eighty-two specimens, doubtless a greater number than heretofore has been known from that country. Of Scytalopus micropterus micropterus Scl., for example, the British Museum contained but four specimens when Sclater published his monograph of this genus. Prior to our work in Colombia the American Museum contained but one specimen of this species, and at the present time the Museum of Comparative Zoölogy contains but two, making a total of seven specimens for three large Museums.

In view of these facts one might well believe that *Scytalopus micropterus* was a rare species, but without making a greater effort to secure this bird than any other of similar habits, we have nevertheless obtained a series of twenty-four specimens. This includes both juvenal and adult plumages and, for the first time, enables one to determine that the silvery-white crown-patch, which is so striking a feature of some specimens, is purely individual and is not associated with either age or sex.

I give these figures for what I believe to be their significance, as in a general way they indicate how much field-work we still have to do before our collections of South American birds approach anything like completeness, rather than for their restricted application to the case in point.

Without attempting a revision of the entire genus, for which indeed adequate material does not yet exist in Museums, I give below the results reached in preparing a report on our Colombian specimens for inclusion in a paper on the distribution of bird-life in that country now in course of preparation.

In addition to the eighty-two Colombian specimens mentioned, W. B. Richardson has recently collected for us seven specimens in Ecuador, and Anthony and Ball, in April last, collected ten specimens of a most interesting new species in eastern Panama.

Of high importance is a series of thirteen topotypical specimens of *S. magellanicus* (Gmel.) lately received by the Brewster-Sanford Collection from Beck, which in connection with a Chilean specimen of S. niger, sent by the same collector, permits me satisfactorily to determine our large series of the last-named species.

An examination of Lafresnaye's "Bogota" types was of course indispensable in this connection. These Mr. Bangs has kindly loaned me as well as the twenty-one other specimens of the genus contained in the Museum of Comparative Zoölogy.

The results of my studies of all this material, in so far as they affect the status of the species found north of the equator, may be summarized as follows.

Scytalopus senilis (Lafr.) = Myornis (gen. nov.) senilis (Lafr.).

Scytalopus magellanicus Auct. nec Gmel. = Scytalopus niger Swains.

Scytalopus analis Auct. nec Lafr. = Scytalopus micropterus micropterus Scl.

Scytalopus analis (Lafr.) = Triptorhinus paradoxus Kittl.

Scytalopus latebricola Allen nec Bangs = Scytalopus sanctæmartæ Chapm.

Scytalopus sylvestris Bangs nec Tacz. = Scytalopus sanctæ-martæ Chapm.

The following four species are described as new:

Scytalopus panamensis (Subtropical Zone, Tacarcuna, E. Panama).

Scytalopus canus (Temperate Zone, Paramillo, West Andes, Col.).

Scytalopus sanctæ-martæ (Subtropical Zone, Santa Marta Mts., Col.).

Scytalopus infasciatus (Temperate Zone, Eastern Andes, near Bogotá).

Since the status of all but two¹ of the species known from north of the equator is affected by this revision I have for the sake of completeness added notes on them.

In addition to the species herein treated the following species from south of the equator are currently recognized; but in view of our discoveries in Colombia, it seems probable that our knowledge of the forms of *Scytalopus* from south of that country is far from complete:

Scytalopus magellanicus (Gmel.). Falkland Islands, Cape Horn region and northward into Chile.

¹ S. griseicollis (Lafr.); S. argentifrons Ridgw.

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Auk Oct. Scytalopus magellanicus [= niger?] grandis Cory. N. Peru, about thirty miles N. E. of Chachapoyas.

Scytalopus unicolor Salv. Cajabamba, Peru.

Scytalopus obscurus (King). Southern Chile.

Scytalopus acutirostris (Tsch.). Peru.

Scytalopus macropus Berl. & Stolz. Maraynioc, Cen. Peru.

Scytalopus micropterus bolivianus (Allen). Southern Peru; Bolivia.

Scytalopus speluncæ (Menetr.). Southeastern Brazil.

Scytalopus indigoticus (Wied). Southeastern Brazil.

Scytalopus superciliaris Cab. Sierra of Tucuman, western Argentina.

It will be seen that with the exception of *Scytalopus indigoticus* and *S. spelunca*, all the known species are confined to the Andes, or, south of Bolivia, to the country at their base.

Such information as I can gather concerning these two species of eastern Brazil, leads me to believe that they inhabit the mountains at some altitude, possibly above the upper limits of the Tropical Zone. However this may be, it appears that of the species which are found in various parts of western South America from Cape Horn to Costa Rica, not one inhabits the Tropical Zone. In Colombia this implies that *Scytalopus* is not found below an altitude of 4,000 feet, and, as a matter of fact, only three of our specimens were taken below this level.

From the lower limits of the Subtropical Zone we have found *Scytalopus* in Colombia as high as 12,700 feet and consequently in the Paramo or Alpine Zone. Each species has its center of abundance in a certain Zone but where local conditions cause the overlapping or inosculation of zonal boundaries so do the ranges of their characteristic species overlap and inosculate.

Thus, although S. m. micropterus is characteristic of the Subtropical Zone, we have two specimens from an altitude of 10,000 feet in the Temperate Zone. On the other hand, S. niger is a Temperate Zone species but occurs also in the upper part of the Subtropical Zone at an altitude of from 8,000 to 8,500 feet. The Temperate Zone is indeed the center of abundance of the genus and, in Colombia, only S. m. micropterus and its representative S. sanctæmartæ range much below it.

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At what latitude, south of the equator, this zone reaches sea-level and brings with it other forms which, like *Scytalopus*, have evidently extended their range northward as far as the South Temperate Zone itself, is one of the points an American Museum Expedition under the charge of Mr. Leo E. Miller is now trying to determine.

We know, however, that at least from central Chile southward to Cape Horn, *Scytalopus* lives at sea-level; and doubtless not far north of 30° S. latitude, it begins to ascend the mountains with the zone to which it is so largely restricted.

Since we cannot well believe that so ancient a type as *Scytalopus* can have its center of dispersal in the Temperate Zone of mountains so geologically recent as the Andes, we conclude that *Scytalopus* originated at sea-level and, consequently, south of 30° S. latitude.

The presence of species of this genus in southeastern Brazil, which are apparently separated by a wide area from the species found nearest to them in western South America, is a problem, which in the present stage of our knowledge, I confess I am not prepared to attack.

I append now my notes on the species studied, after first removing from *Scytalopus* the species heretofore known as *Scytalopus senilis* (Lafr.) for which I propose the genus

Myornis gen. nov.

Char. gen.— Resembling *Scytalopus* Gould (type *S. magellanicus* (Gm.)), but mesorhinium laterally compressed and elevated into a thin blade-like ridge which is highest above the posterior margin of the nasal operculum whence it descends toward both the tip and the base of the bill; tail longer, instead of decidedly shorter than wing; wing more rounded, the fourth to eighth, instead of third to seventh primaries (from without) subequal, the second about as long as the inner secondary instead of as long as the eighth primary.

Type.— Scytalopus senilis (Lafr.) = Merul [axis] senilis Lafr. Rev. Zool. 1840, p. 103 ("Bogotá"); type examined.

Range.— Temperate and Alpine Zones of the Andes of Ecuador and the Central and Eastern Andes of Colombia.

Remarks. — The species heretofore known as *Scytalopus senilis* (Lafr.) is obviously not congeneric with *Scytalopus magellanicus* (Gmel.), the type of the genus *Scytalopus* Gould, or with any other species of the genus known to me. Its laterally compressed and

elevated, angular mesorhinium is shown in a slight degree by S. sylvestris and more pronouncedly by S. latebricola, but its rounded wings in connection with its lengthened tail is a feature not possessed by any species of Scytalopus and it is this combination of characters of bill, wings, and tail which appears to warrant its generic distinction.

Lafresnaye's description (l. c.) of this species as "fronte et aliquot alæ tectricibus albis" is explained by the fact that this type, loaned me by Mr. Bangs, is albinistic, the forehead, loral region, three greater coverts in one wing and two in the other, being white. The culmen is less elevated basally and less laterally compressed than in a specimen from El Piñon, but this is doubtless an indication of immaturity.

Specimens examined. — Ecuador; Mt. Piñchincha, 1; Colombia; "Bogota," (type of Merulaxis senilis Lafr.) 1; El Piñon, 1; Laguneta, 2.

Scytalopus niger (Swains.).

Platyurus niger Swains. Anim. in Menag. 1838, p. 323 (Chile).

Scytalopus magellanicus Auct. (Peru, Ecuador and Colombia records only).

Range.—Western South America from Chile, north, chiefly through the Temperate Zone, to Colombia.

Remarks. — In Colombia this is the most common species of the genus. It is found in all three ranges of the Andes where it is restricted in the main, to the Temperate Zone. Local conditions bring it down occasionally to the zone below. There is some variation in size and intensity of color in our series but it appears to be individual, and on the whole our specimens agree with one from Valparaiso, Chile. The juvenal plumage is more or less washed with rusty, paler below, and is never as distinctly barred as in S. cinereicollis and S. micropterus, the bars when present being comparatively obsolete. There is no indication of bars in the tail or of white in the crown.

This widely distributed species has been generally confused with *Scytalopus magellanicus* (Gmel.) which, as shown by thirteen specimens recently secured by Beck in the Cape Horn region for the Brewster-Sanford collection, is a wholly different species,¹ which has the forehead gray, the rest of the upperparts washed with cin-

¹ Cf. Menegaux and Hellmayr (Bull, Mus. d'Hist. Nat. 1905, p. 379) who have already reached a similar conclusion.

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namon-brown, the back with subterminal black bars. The wings, except in very worn plumage, are externally edged with a lighter brown than the back, and at least the inner feathers are barred. The rectrices are more or less barred in all but two of these thirteen specimens. The underparts are grayish, of about the same shade as in *Myornis senilis* and the flanks, ventral region, and under tail-coverts are barred with black and ochraceous-buff or ochraceous-tawny.¹ The feet in life are marked as "brown," "brownish" or "yellowish" and in dried skins resemble those of *S. griseicollis* in similar condition.

All these specimens appear to be adult, but four lack the slight trace of silvery white in the crown, while the remaining nine show this mark in varying degrees. Possibly, as in *S. micropterus*, this character is individual.

Instead, therefore, of being a representative of the black, uniformly colored bird to which the name *magellanicus* has by most authors hitherto been misapplied, it is evident that this southern form is more closely related to *S. sylvestris*.

Specimens examined. — Chile: Valparaiso, 1. Ecuador: Zaruma, 2; Gualea, 1; Mt. Pichincha, 3. Colombia: Andes, W. of Popayan (alt. 10,340 ft.), 8; Cerro Munchique, 9; Cocal, 3; Almaguer, 4; Valle de las Pappas, 3; Laguneta, 3; Santa Isabel, 2; Sta. Elena, 1; Fusagasugá, 1; El Roble, 2; El Piñon, 2.

Scytalopus canus sp. nov.

Char. sp.— With a general resemblance to S. niger (Swains.)² but adult grayer throughout, the underparts paler than the upperparts, the center of the abdomen grayer than surrounding parts; tail shorter, the feathers narrower and softer, their barbs, apically, more or less separated; bill shorter, feet and tarsi more slender; apparently closely resembling, and perhaps representing, S. unicolor Salv. of Peru, but much smaller, the female of the same color as the male.

The juvenal plumage is evidently conspicuously barred above and below with cinnamon-buff and therefore resembles that of S. griseicollis rather than that of S. niger.

Type.— No. 133361, Am. Mus. Nat. Hist. σ ad. Paramillo (alt. 12,500 ft.), W. Andes, Antioquia, Col. Jan. 26, 1915; Miller & Boyle.

Range.— Known only from the type-locality.

¹ The color terms used in this paper will be found figured in Ridgway's 'Color Standards and Nomenclature.' Washington. 1912.

² = S. magellanicus auct. plur. nec. Gmel., excl. more southern references.

Description of Adult Male.— Upperparts, wings, and tail clear, dark neutral gray without trace of white on the head or of brownish wash on the back; underparts slightly paler, deep neutral gray the under wingcoverts and center of the abdomen with a trace of whitish; feet (skin) blackish or brownish black; maxilla black, mandible brownish black.

Adult Female.— Resembles the male.

Juvenal.— A male taken at the type-locality Jan. 26, 1915, has nearly acquired the plumage of the adult but still possesses in the crown, nape, scapulars, throat, abdomen, flanks, wing-coverts, tertials and tail, feathers which are barred with cinnamon-buff and black.

Remarks. — Miller and Boyle secured an excellent series of ten specimens of this species in that elevated region near the northern end of the Western Andes known as the Paramillo. In general coloration it resembles *Myornis senilis* with which, however, it has no close relation. Although approaching in size and superficially resembling *Scytalopus niger* (Swains.), the more loosely constructed remiges and differences in the color of the young indicate that it is not a representative of that species.

I have seen no specimens of the Peruvian S. unicolor, but from Salvin's description of it (Nov. Zoöl. II, 1895, p. 15) I conclude that canus resembles it in color but is smaller. Possibly canus is a representative race of unicolor, though as yet no form of either has been recorded from between northern Peru and northern Colombia. If this assumption of relationships be true the case is paralleled both in characters and distribution by that of Diglossa brunneiventris in which true brunneiventris is known only from Peru, while a smaller race is known only from Colombia. Indeed we have found it only on the Paramillo with Scytalopus canus.

Measurements of S. unicolor and S. canus are given below. Salvin's description of the female of unicolor is probably based on an immature bird. The "S. magellanicus" to which he refers is doubtless Scytalopus niger (Swains.).

Sautalon	us unicolor 1	Sex	Wing 59.6	Tail 40.6	Tarsus 21.5	Bill from rictus 15.2
Scymop	us unicoioi -	•	09.0	40.0	21.0	10.2
"	canus	്	50	35	23	13
"	"	്	55	35	23	13
"'	"	Ŷ	52	35	22	13.5
"	"	Ŷ	52	34	23	13
Speci	mens examine	d.— Cold	ombia: Pa	ramillo,	W. Ande	s, 10.

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Scytalopus griseicollis (Lafr.)

Merul [axis] grisei-collis Lafr., Rev. Zoöl., 1840, p. 103 (Bogotá); type examined.

Merul [axis] squamiger Lafr., Rev. Zoöl., 1840, p. 103 (Bogotá); Juv.; type examined.

Range.— Temperate Zone of the Eastern Andes of Colombia (and northeastward to the Sierra of Merida, Venezuela?).

Remarks. — Found by us only in the Temperate Zone of the Eastern Andes near Bogotá. Examination of the type of Lafresnaye's Merulaxis squamiger shows it to be based on the juvenal plumage of this species. Mr. Bangs sends me, in addition to the types of griseicollis and squamiger a Lafresnaye specimen (No. 4854) labelled "Scytalopus erythropterus Lafr." I cannot find that this name was published. The bird is a not fully adult specimen of Scytalopus griseicollis.

The whitish abdomen, unbarred tawny flanks and rump, and brownish tail, distinguish the adult of this species. The juvenal plumage is conspicuously and evenly barred both below and *above*.

Specimens examined. — Colombia: 'Bogotá' (including the type), 7; El Roble (8,000 ft.), 1; El Piñon, 2; Chipaque, 1; Tocaimito (above Bogotá, 10,500 ft.), 3.

Scytalopus infasciatus sp. nov.

Char. sp.— In general color resembling Scytalopus micropterus micropterus Scl. (= S. analis Auct. nec Lafr.) but somewhat paler, the tail brownish, the rump and flanks tawny, unbarred as in S. griseicollis Lafr., bill black as in micropterus.

"Type.— No. 132328, American Museum of Natural History. Paramo de Beltran (alt. 9750 ft.) near Bogotá, Colombia, Mch. 31, 1915, Hermano Apolinar Maria.

Range.— Known only from the Andes near Bogotá at altitudes of 8,000 and 9,750 ft.

Description of Type.— Upperparts dark neutral gray, the crown anteriorly, in some lights, rather more silvery but with no indication of a white patch, forehead and orbital region more dusky, back very slightly tinged with olive-brown, rump and upper tail-coverts tawny or ochraceous-tawny, unbarred; tail dark Prout's brown; wings fuscous, externally Prout's brown; underparts slightly paler than the back, abdomen without

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trace of white; flanks and under tail-coverts bright ochraceous-tawny or ochraceous-orange, unbarred; feet brownish; bill black; the mandible, except on its rami, as dark as the maxilla; wing, 58; tail, 39; tarsus, 24; culmen, 11.5.

Remarks. — This species, which further illustrates the apparent exhaustlessness of the Bogotá region as well as of the genus *Scytalopus*, is based on a specimen presented to the American Museum by Hermano Apolinar Maria, the eminently efficient Director of the Instituto de la Salle in Bogotá.

Comparison with our large series of all the other known Colombian forms of *Scytalopus* leaves no doubt in my mind of its specific distinctness.

In the species possessing barred flanks in the adult this character is very constant. For example, not one of a series of twenty-five specimens of *S. micropterus*, including juvenal, immature, and adult plumages is without conspicuous bars in this region. On the other hand, not one of four adult specimens of *S. griseicollis* has the flanks barred. The absence of bars on flanks and rump, upper and under tail-coverts is therefore significant. Of the Colombian species which have these parts tawny, *S. griseicollis* has heretofore been the only one known without bars. Although *S. infasciatus* agrees with *griseicollis* in this important respect, the specific distinctness of the two birds is indicated by their differences in color, *griseicollis* being much paler with a whitish abdomen, and by the fact that both are found in the Temperate Zone of the same range.

Scytalopus infasciatus however, evidently ranges downward to the upper parts of the Subtropical Zone since a specimen from El Roble (altitude 8,000 ft.) above Fusugasuga, is apparently to be referred to this species. It differs from the type in having some indication of bars in the flanks, a fact which I take to indicate immaturity. Not dissimilar markings are shown by immature specimens of S. griseicollis, a species to which infasciatus is so nearly related that it is probable that in juvenal plumage infasciatus, as well as griseicollis, is barred. This El Roble specimen has a close superficial resemblance to S. micropterus, but its much more slender bill, agreeing in size with that of griseicollis, distinguishes it.

Specimens examined. — Colombia: Paramo de Beltran, 1; El Roble, 1.

Scytalopus sylvestris Tacz.

Scytalopus sylvestris Tacz. P. Z. S., 1874, p. 138 (Pallaypampa, cen. Peru). Range.— Peru northward to the Temperate and Alpine Zones of the Central (and Eastern?) Andes of Colombia and northeastward to the Sierra of Merida, Venezuela.

Remarks. — I refer to this species, of which I have seen no authentic specimens, an adult female from the Paramo of Santa Isabel, in the Central Andes. It has the forehead grayish, the rest of the upperparts somewhat light mummy-brown, the feathers of the back narrowly margined with black; the tail is somewhat browner than the back; the underparts are deep neutral gray; the flanks, ventral region, and under tail-coverts barred with black and ochraceoustawny. A young male from the same locality is passing from juvenal into adult plumage. It resembles the adult but has more barred feathers in wings and on the nape, and the three remaining tail-feathers of the juvenal plumage are distinctly barred with black and ochraceous-tawny.

To this species I also refer four specimens taken in the Temperate Zone of the Andes of Merida, Venezuela. They have the flanks paler, abdomen whiter, tail and upperparts blacker, but these differences are at best racial and probably only individual.

A Venezuelan specimen in molt has enough of the postjuvenal plumage remaining to show that it is distinctly barred with ochraceous-tawny above as well as below.

Possibly our birds may not be true *Scytalopus sylvestris* but they agree too closely with Taczanowski's description of that species to warrant separation from it without comparison with Peruvian specimens.

Although this species more nearly resembles S. magellanicus (Gmel.) than does any of the other species here considered, it is not clear whether it is a representative of that species.

Specimens examined. — Colombia: Parama of Santa Isabel, 2; Venezuela; Paramo de Conejos, Sierra of Merida, 4.

Scytalopus latebricola Bangs.

Scytalopus latebricola Bangs, Proc. Biol. Soc. Wash. XIII, 1899, p. 101 (Paramo da Chiruqua, Col.).

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Range.-- Colombia; Alpine Zone of the Santa Marta Mts.

This a strongly marked species of the Alpine Zone of the Santa Marta group known only from the specimens collected by W. W. Brown for E. A. and O. Bangs. Thanks to Mr. Outram Bangs I have examined six of these, including the type. In general color this species resembles S. griseicollis (Lafr.) but it is darker below and the rump, flanks, upper and under tail-coverts are barred with black, though less distinctly than in any other of the northern species having bars on these parts.

The feet are heavier even than in S. micropterus, and the bill is more laterally compressed, deeper at the base with the culmen more ridged and elevated than in any other species of the genus known to me. The bill thus approaches in form that of Myornis senilis but the tail is short as in Scytalopus.

Possibly S. latebricola represents the species to which I have applied the name of S. sylvestris Tacz; but it is much larger than that species and, aside from the differences in the shape of the bill (sylvestris having a bill like that of griseicollis), sylvestris appears always to have the back dark olive-brown, whereas in the adult of S. latebricola it is deep mouse-gray.

Specimens examined. — Colombia: Paramo de Chiruqua, 4; Paramo de Macotama, 2.

Scytalopus micropterus micropterus Scl.

Scytalopus micropterus Scl., P. Z. S., 1858, p. 69 (Napo, Ecuador). Scytalopus analis Auct. (not of Lafr. = Triptorhinus paradoxus Kittl.; type examined).

Range .-- Subtropical Zone in Ecuador and Colombia.

Not uncommon in the denser low growth of the heavy forests of the Subtropical Zone of all three ranges and occasionally extending upward to the lower border of the Temperate Zone and rarely downward to the Tropical Zone. All our twenty-four specimens have the flanks, lower abdomen, rump and upper tail-coverts barred with rusty and black. The white crown-patch appears to be a purely individual character not dependent upon age, sex, season or locality. It is well developed in some immature specimens and wanting in others, is present or absent in both sexes, and in specimens from the same locality. Nine specimens possess it to a greater or less degree, fifteen are without it.

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On examination of Lafresnaye's type of "Mer [ulaxis] analis" (Rev. Zoöl., 1840, p. 104) loaned me by Mr. Bangs, I find it to be an adult specimen of Triptorhinus paradoxus Kittl., a fact confirming Lafresnaye's belief (l. c.) that his specimen came from "Paraguay ou du Chili." Kittlitz's name has nine years priority and Lafresnaye's consequently becomes a pure synonym of it.

The bird hitherto known as *Scytalopus analis* (Lafr.) will apparently therefore become *Scytalopus micropterus* Scl., as above. I have seen no Napo specimens but our collection contains a Bogotá skin labelled by Sclater "*Agathopus micropterus*." The generic name he subsequently abandoned.

Scytalopus micropterus bolivianus (Allen), of which I have the type and a specimen from Inca Mine, differs from Colombian specimens only in being smaller, the tail, especially, being shorter. Measurements are appended:

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	Locality	Sex	Wing	Tail	Tarsus	Cul
S. m. bolivianus (Type)	Rfeyes, Bol.	?	53	33	22	13
"	Inca Mine, Peru	ੌ	51	33	23	12
S.m.micropterus	Buena Vista, Col	. °	57	44	25	13.5
"	El Eden "	്	63	45	24	13.5
"	Salento "	റ്	62	44	25	13.5
**	Miraflores "	്	59	42	24	13.5

Specimens examined. — Colombia: Alto Bonito, 2; Las Lomitas, 1; San Antonio, 1; Pavas, 1; Andes W. of Popayan (10,340 ft.), 1; Ricaurte, 1; Miraflores, 2; Salento, 3; Laguneta, 1; El Eden, 2; La Palma, 3; La Candela, 2; Andalucia (3,000 ft.), 1; Bogotá, 2; Buena Vista, 1.

Scytalopus sanctæ-martæ sp. nov.

Scytalopus sylvestris Bangs (nec Tacz.) Proc. Biol. Soc. Wash. XIII, 1899, p. 101, (San Francisco, Santa Marta).

Scytalopus latebricola Allen (nec Bangs) Bull. A. M. N. H., XIII, 1900, p. 162, (Valparaiso, Santa Marta).

Char. sp.— Most nearly related to Scytalopus m. micropterus Scl., the center of the crown, in some specimens, with a silvery white spot; but size much smaller, general color grayer, the tail brownish.

Type.- No. 72893. American Museum of Natural History. 7 ad.

Valparaiso (alt. 4,500–5,500 ft.) Santa Marta Mts., Col., June 9, 1899, G. H. Hull.

Range.— Subtropical Zone, Santa Marta Mts., Colombia; Andes of Merida, Venezuela.

Description of Type.— Upperparts deep, neutral gray; forehead and orbital region black; crown with a silvery white patch slightly mixed with gray; rump cinnamon-brown, the feathers terminally barred with black and ochraceous-tawny; upper tail-coverts similar in color but less distinctly barred; tail Prout's brown, more fuscous toward the shaft; wings much like the back, more or less margined externally with the color of the tail; underparts paler than the back, neutral gray, the abdominal region centrally whitish; the flanks and under tail-coverts barred with black and bright cinnamon-brown or ochraceous-tawny; feet (skin) brownish; bill black, gonys brownish. Wing, 51; tail, 33; tarsus, 20; culmen, 13 mm. (A second male is without a tail, but, in other respects, including the white crown-patch, agrees with the type.)

Juvenal Plumage.— With a general resemblance in pattern to the same plumage of S. micropterus, but everywhere paler; upperparts Prout's brown; crown slightly darker; the feathers very narrowly margined with black; loral and ante-orbital region ochraceous-buff; rump not sharply barred with black and ochraceous-tawny; tail, lacking; wings externally much like the back, the coverts terminally barred with black and ochraceous-tawny; underparts rather uniformly barred with ochraceous-buff and black; the bars on the flanks deeper, more transverse, less lunular. (Described from No. 97940 American Museum of Natural History, Valparaiso, Col., taken from the nest, June 30, 1899.)

Postjuvenal Plumage.— Similar to that of the adult but upperparts between Prout's brown and mummy-brown.

Remarks. — In the light of our large series of this group it appears that the three Santa Marta specimens of *Scytalopus* referred by Dr. Allen (l. c.) to *S. latebricola* Bangs, and the one immature specimen provisionally identified by Bangs, as *S. sylvestris* Tacz. are representatives of *S. micropterus micropterus* Scl.

The presence in both our adult specimens of the white crownpatch, which is often, but not always, found in *S. micropterus*, and so far as I am aware, in no other species of the genus, betrays the relationships of *sanctæ-martæ* with the species. Furthermore, the juvenal plumage of *sanctæ-martæ* resembles in pattern that of *micropterus*. It is important to note that both species inhabit the Subtropical Zone.

Scytalopus latebricolor, on the other hand occupies the Alpine Zone, and is a much larger bird than sancta-marta (wing, 63 mm.)

with heavier feet and bill, the latter being much vertically compressed with the culmen sharply ridged and basally elevated, while in *sanctæ-martæ* as in *micropterus*, the bill is more subulate. The fact that in immature plumage both the species just named have the upperparts brown, doubtless misled Mr. Bangs in referring his immature specimen of *sanctæ-martæ* to S. sylvestris.

In the specimens which I identify as *sylvestris* the upperparts are brown in the adult and are of a distinctly different shade, olivebrown rather than mummy-brown or Prout's brown as in *sanctæmartæ* or *micropterus*. An adult from the Subtropical Zone near Merida, Venezuela appears to be conspecific with this form.

Specimens examined.—Colombia: Valparaiso, 3; San Francisco, 1; Venezuela; Andes near Merida, (alt. 6,500 ft.), 1.

Scytalopus panamensis sp. nov.

Char. sp.— Most nearly related to *Scytalopus argentifrons* Ridgw., but forehead black like the crown; supra-ocular stripe whiter, broader, more pronounced; underparts, particularly throat, paler gray; size larger, bill longer and heavier.

Type.— No. 135591, American Museum of Natural History, σ^{3} ad. Tacarcuna (3,600 ft.), eastern Panama, March 6, 1915; H. E. Anthony and D. S. Ball.

Range.-- Subtropical Zone of the Santa Espiritu Mts., eastern Panama.

Description of Male.— Entire crown and foreback slate-black, becoming dark mummy-brown on the lower back and brighter, more rusty on the rump and upper tail-coverts, which are barred with black; a broad, sharply defined silvery-white line passes over the eye from above the front of the orbit to the nape and is separated from the auriculars by a slaty-black postocular stripe; auriculars somewhat grayer; lores dusky; orbital ring blackish; tail blackish with a slight tinge of brown; wings slaty-black with a slight trace of mummy-brown in the outer margins of quills and coverts increasing in amount internally; throat and rest of underparts centrally, pale neutral gray; the sides darker; the flanks, ventral region and under tail-coverts distinctly barred with black and bright tawny or ochraceoustawny; feet (skin) brownish black; bill black.

Female.— Similar to the male, the superciliary stripe less bright and not so pronounced; the upperparts washed with mummy-brown.

Remarks. — This is one of the most interesting species secured by our recent expedition to the mountains of eastern Panama. Ten specimens, six males and four females, all apparently adult, were Vol. XXXII 1915 CHAPMAN, The Genus Scytalopus Gould.

taken on Mt. Tacarcuna at altitudes from approximately 3,600 to 4,600 ft.

In the Subtropical Zone of the mountains of western Panama and Costa Rica, *Scytalopus panamensis* is obviously represented by the nearly related *S. argentifrons* and the discovery of this new form, makes less inexplicable the occurrence of a species of this genus in a region so far removed from the nearest point at which other species were known to occur. The bearing of this discovery on the faunal affinity of the Subtropical Zones of Costa Rica and western Panama with those of eastern Panama and Colombia is obvious but the subject is too wide to be discussed in this connection.

Specimens examined.- Mt. Tacarcuna, eastern Panama, 10.

Scytalopus argentifrons Ridgw.

Scytalopus argentifrons Ridgw., Pr. U. S. N. M. xiv., 1891, p. 475 (Volcan de Range-Irazû, Costa Rica).

This, the most northern species of the genus, is clearly a representative form of *S. panamensis* from which it is now specifically distinct. It is confined chiefly to the Subtropical Zone in Costa Rica and western Panama, ranging in the first-named country, according to Carriker, from 4,000 ft. to timber line, and in western Panama Bangs records it from 5,000 to 7,000 ft.

Specimens from Boquete and Mt. Chiriqui, when compared with those from Irazu show, in their larger bill and somewhat less silvery forehead, a slight but unmistakable approach toward *panamensis*. This variation is obvious enough in comparison of specimens but it is too slight to be defined by words or in figures.

The female of *argentifrons* apparently lacks the silvery front and superciliaries which distinguish the male and thus closely resembles the female of *S. micropterus*, a fact which indicates its descent from that species. The female of *panamensis* on the other hand, possesses (though in a somewhat less conspicuous form) the white superciliaries of the male, and thus bears less resemblance to the female of *micropterus* than does the female of *argentifrons*, though geographically nearer to it. Specimens examined.— Costa Rica: Irazu, 6; Panama: Boquete, 4; Mt. Chiriqui, 2.

Key to Adults of the Species of *Scytalopus* Found North of the Equator.

1. Plumage uniform.

b. Grayish, perceptibly paler below than above.....S. canus.

2. Plumage not uniform.

A. Flanks tawny, barred.

- a. A silvery or white superciliary.

 - a.² Superciliary white, forehead blackish like the crown.

S. panamensis.

- b. Without a superciliary.
 - b.¹ Back gray.
 - b.² Size small, wing under 55 mm.....S. sanctæ-martæ. c.² Size larger; wing over 58 mm.
 - c.³ Underparts dark slaty, flanks sharply and distinctly barred; bill not deeper than wide at base.....S. m. micropterus.
 - c.⁴ Underparts mouse-gray, flanks not sharply and distinctly
 - barred; bill much deeper than wide at base. . S. latebricola. c.¹ Back brown.
 - c.² Forehead neutral gray, tail olive-brownish.....S. sylvestris. d.² Forehead and tail blackish.
 - d.³ Wing over 55 mm......S. micropterus, Q.
 - d.⁴ Wing under 55 mm.....S. argentifrons, \mathcal{Q} .

B. Flanks tawny, unbarred.

- a. Paler, underparts light neutral gray.....S. griseicollis.
- b. Darker, underparts deep neutral gray.....S. infasciatus.

Synopsis of the Characters of the Juvenal Plumage in Certain Species.

- A. Upperparts as well as underparts barred with ochraceous-tawny. S. griseicollis, S. sylvestris, S. canus.
- B. Upperparts dark mummy-brown narrowly margined, more rarely inconspicuously barred, with black; underparts widely margined with ochraceous-tawny or cinnamon-buff.
- S. micropterus, S. sanctæ-martæ, S. argentifrons. C. Plumage practically unbarred, or bars inconspicuous and restricted largely to flanks and upper-tail coverts, the underparts broadly margined with cinnamon-buff.....S. niger.

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Measurements.

S. magellanicusCape Horn region $\vec{\sigma}$ 51 32 21 12 """"" $\vec{\sigma}$ 51.5 33 21 12 """"" φ 52.5 40.5 20 13 ""Santa Isabel, Col. $\vec{\sigma}$ 55.5 40.5 20 13 ""El Roble"" $\vec{\sigma}$ 55.5 39 23.5 11 ""El Roble"" $\vec{\sigma}$ 55.5 39 23.5 11 ""El Roble"" $\vec{\sigma}$ 55.5 39 23.5 12 ""El Roble"" $\vec{\sigma}$ 55.5 39 23.5 13 S. canusParamillo, Col. $\vec{\sigma}$ 55 35 22 12 ""<"<""<""<""<""<""<""<""<""<""<""<""<"	Name	Locality	Se	x	Wing	Tail Ta	arsus C	ulmen
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En Roble \bigcirc $>$ \bigcirc $>$		Santa Isabel, Col.	c	37	55	42	23	13
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"Salento" \vec{O}^{7} $\vec{62}$ 44 25 13.5 "San Antonio," φ 57 42 23 13.5 "La Candela" φ 59 45 21 13 "La Candela" φ 59 45 21 13 "Merida, Venezuela? 54 35 22.5 13 "Merida, Venezuela? 54 35 22.5 13 S. panamensisTacarcuna, Panama σ^2 53 41 23.5 14 """ σ^2 53 41 22.5 13 """" σ^2 53 41 22.5 14 """" σ^2 53 41 22.5 14 """" ϕ 57 41 22 13 """" ϕ 54 37 22 13 S. argentifronsIrazu, Costa Rica σ^2 53 43 22 13	"	"	"	Q	63	42	26	15
Salento. \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 23 13.5 "San Antonio," \bigcirc \bigcirc 57 42 23 13.5 "La Candela" \bigcirc \bigcirc 57 42 23 13.5 "La Candela" \bigcirc \bigcirc 59 45 21 13 S. sanctæ-martæValparaiso," \bigcirc \bigcirc 51 33 23 13 "Merida, Venezuela? \bigcirc 54 35 22.5 13 S. panamensisTacarcuna, Panama \bigcirc 55.5 44 23 14 """ \bigcirc 53 41 23.5 14 """ \bigcirc 57 41 22 13 """ \bigcirc 54 37 22 13 S. argentifronsIrazu, Costa Rica \bigcirc 53 44 22 12 "Chiriqui, Panama \bigcirc 53 43 22 13	S.m.micropterus	Buena Vista,	" (37	57	44	25	13.5
"La Candela" φ 59452113S. sanctæ-martæ Valparaiso," σ^3 51332313"Merida, Venezuela?543522.513S. panamensisTacarcuna, Panama σ^3 55.5442314""" σ^3 534123.514""" ϕ 57412213""" ϕ 54372213""" ϕ 54372213S. argentifronsIrazu, Costa Rica σ^3 53442212"Chiriqui, Panama σ^3 53432213	"	Salento.	"	o ⁷	62	44	25	13.5
S. sanctæ-martæ Valparaiso," σ^2 51332313"Merida, Venezuela?543522.513S. panamensisTacarcuna, Panama σ^2 55.5442314""" σ^2 534123.514""" ϕ^2 57412213""" ϕ^2 54372213""" ϕ^2 53442212""" ϕ^2 53442212"Chiriqui, Panama σ^2 53432213	"	San Antonio,	"	ę	57	42	23	13.5
S. sancta-martaeValparatso, \bigcirc \bigcirc 51 53 23 13 "Merida, Venezuela? 54 35 22.5 13 S. panamensisTacarcuna, Panama \bigcirc 55.5 44 23 14 "" \bigcirc 53 41 23.5 14 """ \bigcirc 57 41 22 13 """ \bigcirc 57 41 22 13 """ \bigcirc 54 37 22 13 S. argentifronsIrazu, Costa Rica \bigcirc 53 44 22 12 "Chiriqui, Panama \bigcirc 53 43 22 13	"	La Candela	"	ę	59	45	21	13
S. panamensisTacarcuna, Panama (""""""""""""""""""""""""""""""""""""	S. sanctæ-martæ	Valparaiso,	" (്	51	33	23	13
" $"$	<i>44</i>	Merida, Venezuela		?	54	35	22.5	13
" " \bigcirc 53 41 25.5 14 " " \bigcirc 57 41 22 13 " " \bigcirc 54 37 22 13 S. argentifrons Irazu, Costa Rica \bigcirc 53 44 22 12 " Chiriqui, Panama \bigcirc 53 43 22 13	S. panamensis	Tacarcuna, Panama	(3 ¹	55.5	44	23	14
" " $\begin{array}{c} \varphi & 57 & 41 & 22 & 13 \\ \hline & & & & \\ \end{array}$ " " $\begin{array}{c} \varphi & 54 & 37 & 22 & 13 \\ \hline & & & \\ \end{array}$ S. argentifrons Irazu, Costa Rica $\begin{array}{c} \sigma & 53 & 44 & 22 & 12 \\ \hline & & \\ \end{array}$ " Chiriqui, Panama $\begin{array}{c} \sigma & 53 & 43 & 22 & 13 \\ \end{array}$		"	(∂	53	41	23.5	14
S. argentifronsIrazu, Costa Rica σ^2 53442212"Chiriqui, Panama σ^2 53432213	<i>c c c c c c c c c c c c c c c c c c c </i>			Q	57	41	22	13
"Chiriqui, Panama σ 53 43 22 13	"	"	1	ę	54	37	22	13
" Chiriqui, Panama 7 53 43 22 13	S. argentifrons	Irazu, Costa Rica	c	5 ⁷	53	44	22	12
"Boquete, " ♀ 51 41 20 13	"	Chiriqui, Panama	(♂	53	43	22	13
	"	Boquete, "		ę	51	41	20	13