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# Article XXIX.—ON DYSITHAMNUS MENTALIS AND ITS ALLIES.

## By W. E. CLYDE TODD.

## Introduction.

Among the various genera of the Formicariidæ which have always given trouble to students of this difficult family Dysithamnus admittedly holds a conspicuous place. For not only are the limits of the genus in dispute, but also certain of the species are involved in such confusion that scarcely any two authors agree regarding their treatment. Much of this confusion centers around a group of forms of which Dysithamnus mentalis is the earliest known, and it is the object of the present paper to endeavor to clear up, as nearly as may be, the existing uncertainty surrounding their status, relationships, and nomenclature, so as to reach a clearer understanding of the entire group from the systematic standpoint. Begun originally in an effort to identify certain specimens in the collection of the Carnegie Museum, this study has been made possible only through the courtesy of Dr. Frank M. Chapman, who has very generously placed at the writer's disposal the entire series of this group in the collection of the American Museum of Natural History, and upon which he was expecting to work Important material has also been received for use in this connection from the U.S. National Museum, the Academy of Natural Sciences of Philadelphia, and the Field Museum of Natural History, to the authorities of which institutions the writer takes this opportunity of returning his thanks for favors extended. In all no less than two hundred and seventysix specimens have been available, including several types, and representing more or less adequately all of the recognized forms.

The forms of this particular group, of which *D. mentalis* is the earliest although not the best known, agree in their small size and plain coloration, without any spots on the pileum or breast. The sexes are unlike, the males having the pileum dark gray, the wings externally margined with olivaceous, and their coverts tipped with white, while in the females the pileum is rufescent, the wings are plain, the upper parts are olivaceous, and the under parts washed with dull buffy or yellowish. There is much variation in color in the males of the several forms, and while it is a far cry from the olive and yellow *D. mentalis* to the gray and white *D. extremus*, there is between these two a series of forms so variously intermediate in coloration

that it is a difficult matter to decide just where the lines of specific distinction should be drawn. Females are naturally more alike than are males, and it is not always possible to discriminate them with certainty. One of the interesting results of the present study has been the discovery that the plumage of the immature bird (not the "juvenal," but what Dr. Dwight would call the "first winter" dress), when this differs from that of the adult, affords an unmistakable indication of the derivation of the form under consideration. Apparently the failure to appreciate the significance of age variation in this group has been responsible for a part at least of the confusion, while among other contributing causes may be mentioned paucity and inaccessibility of material, poor condition of specimens, inadequacy of published descriptions, and ignorance of the work of earlier authors.

The distribution of the various forms of this group presents some very interesting problems. As yet there is no indisputable evidence that more than one form occurs in a given locality, although there are indications that such may be the case. The known range of some forms is very restricted indeed, while that of others covers an immense area by comparison. One of the most curious cases is that of D. mentalis, the various South American races of which have a discontinuous distribution. This may. of course, be apparent rather than real, and be due merely to our imperfect knowledge of the intervening areas, but it is difficult to account for the seeming absence of the species in certain regions which have been well Again, the Central American race of this same species. D. mentalis septentrionalis, has been recorded from Guatemala and Costa Rica as not uncommon, but has never been detected in the intermediate countries of Salvador, Honduras, and Nicaragua. D. semicinereus has an extensive distribution in the Andean region from Colombia to Bolivia, but is replaced in the Western Andes and Cauca region of Colombia by a closely allied but perfectly distinct species, D. extremus, which is itself in certain respects very similar to the far-removed D. affinis spodionotus of British Guiana. D. andrei, heretofore known only from Trinidad and Tobago, proves to extend to the mainland of Venezuela, and to approximate (if it does not entirely surround) the British Guiana form aforesaid. In altitudinal distribution the various forms range from sea-level up to about seven thousand feet.

Sclater, in Part I of his 'Synopsis of the American Ant-birds' (Proceedings Zoological Society of London, 1858, 202–254) recognized only two species of this group, *D. mentalis* and his own lately described *D. semicinereus*. A few months later he described a bird from the Derby Museum, and supposed to be from Bolivia, which he referred to Tschudi's *Thamnophilus olivaceus*. No other general review of the genus appeared until 1890, when

Sclater again treated it at length in Volume XV of the 'Catalogue of the Birds in the British Museum,' recognizing four forms of the mentalis group, which he ranked as species. Under the head of D. semicinereus, however, he confused no less than three distinct forms, while his D. olivaceus is clearly the D. affinis of Pelzeln, described in 1869. Dr. J. A. Allen, writing in 1893, "lumped" all the forms of this group which had been described up to that time under the earliest name, stating that he was unable to distinguish more than a single species. Mr. Harry C. Oberholser was apparently the first to point out the distinctness of the Matto Grosso bird from that of Colombia, and to anticipate the correct application of Pelzeln's name affinis. His suspicions were confirmed in 1905 by Messrs. von Berlepsch and Hellmayr, who were able to settle the matter through actual examinations of the types both of D. affinis and of Thamnophilus olivaceus Tschudi, the latter proving to be an earlier name for Dysithamnus semicinereus Sclater. The latest synopsis of the group is by Mr. Robert Ridgway, in Part V of his 'Birds of North and Middle America.' Here all the forms except D. affinis are reduced to subspecies of D. mentalis, obscuring their real relationships and necessitating a highly artificial arrangement. In the key which follows herewith an effort has been made to place the various forms in what is believed to be a more natural sequence, and while the characters relied on for their separation may seem subtle and of little moment in some cases, their value becomes very evident in a series, and ought to suffice for discriminating the forms in question under such circumstances.

The measurements used in the present paper are all in millimeters, and that for the bill is in every case the length of the exposed culmen. Unless otherwise stated, they are based on a series of ten specimens of each sex. The names of colors are those given in Mr. Ridgway's 'Color Standards and Color Nomenclature.'

Key to the Species and Subspecies of the Dysithamnus mentalis Group.

## Based on Adult Males Only.

- A. Pileum and hindneck slate gray, contrasting with the olivaceous of the back; posterior under parts straw yellow, at least medially; throat whitish, in decided contrast.
  - a. Breast straw yellow, like the abdomen..... Dysithamnus mentalis mentalis.
  - a'. Breast differently colored from the abdomen.
    - b. White of throat purer.
      - c. Breast white medially like the throat; yellow of abdomen more extended over the sides...... Dysithamnus mentalis aquatorialis.

- b'. White of throat grayer.
  - General coloration darker.........Dysithamnus mentalis suffusus.
  - c'. General coloration paler.......Dysithamnus mentalis septentrionalis.
- A'. Pileum and hindneck gray or slate gray, not sharply contrasting with the color of the back; posterior under parts not straw yellow.
  - a. Throat and breast heavily clouded with pale slate gray.
    - b. Lower back and flanks strongly washed with olivaceous.

Dysithamnus semicinereus.

- b'. Lower back and flanks gray, with no olivaceous wash.
  - Dysithamnus extremus.
- a'. Throat and breast white, faintly shaded with neutral gray (or if more strongly shaded with gray, the flanks with no olivaceous wash).
  - b. Posterior upper parts suffused with deep olive gray.
    - c. Abdomen white medially, the flanks washed with deep olive buff.

Dysithamnus affinis affinis.

- b'. Posterior upper parts with no olive gray shade.
  - e. General coloration darker; breast shaded with gray.

Dysithamnus affinis spodionotus.

c'. General coloration paler; breast nearly white, like the throat.

Dusithamnus andrei.

## Dysithamnus mentalis mentalis (Temminck).

Myothera mentalis Temminck, Pl. Col., II, 1823, text to pl. 179, fig. 3 ([Curytiba], Brazil; orig. descr.; type in coll. Vienna Museum).

Myiothera poliocephala Wied, Beiträge Naturg. Bras., III, 1831, 1098 (Brazil; orig. descr.; type in coll. Am. Mus. Nat. Hist.).

Dysithamnus mentalis Cabanis, Arch. f. Naturg., XIII, i, 1847, 223 (references).— Bonaparte, Consp. Av., I, 1850, 199, excl. syn. part (references; range [error]). - Sclater, Proc. Zool. Soc. London, 1858, 221, part (diag.; references; range; excl. Bolivian and Peruvian localities and references).— Cabanis and Heine, Mus. Hein., II, 1859, 14 (Brazil; references).—Sclater, Cat. Am. Birds, 1862, 177 (Brazil and Bolivia; syn.). — EULER, Journ. f. Orn., XV, 1867, 402 (Cantagallo, Brazil; nesting).— von Pelzeln, Orn. Bras., ii, 1869, 79 (Rio Janeiro, Registo do Sai, Curytiba, and Rio Paraná [i. e., Rio Grande], Brazil).—GRAY, Hand-List Birds, I, 1869, 311, excl. syn. part (ref. orig. descr.; syn.; range).— SCLATER and SALVIN, Nom. Av. Neotrop., 1873, 71 (range).—GIEBEL, Thes. Orn., II, 1875, 73, part (syn.) — Cabanis, Journ. f. Orn., XXII, 1874, 86 (Cantagallo, Brazil).— Heine and Reichenow, Nom. Mus. Hein. Orn., 1883, 127 (Brazil).— von Berlepsch and von Ihering, Zeitsch. Ges. Orn., II, 1885, 150 (Taquara do Mundo Novo, Rio Grande do Sul, and Laguna, Santa Catharina, Brazil; plum.).— ALLEN, Bull. Am. Mus. Nat. Hist., II, 1889, 250, 276 (crit. on type of Myiothera poliocephala Wied).—Sclater, Cat. Birds Brit. Mus., XV, 1890, 221 (São Paulo and Pelotas, Rio Grande do Sul, Brazil; descr.; syn.).—Salvin and Godman, Biol. Centr.-Am., Aves, II, 1892, 207, in text (southeast Brazil; crit.).— Kœnigswald, Journ. f. Orn., XLIV, 1896, 365 (Estado de São Paulo, Brazil: references; range).— von Ihering, Rev. Mus. Paulista, III, 1898, 239 (Tieté and Iguapé, São Paulo, Brazil; references); IV, 1900, 158 (Cantagallo, Brazil).— von Ihering, Ann. Est. Rio Grande do Sul, XVI, 1900, 130 ([Taquara do] Mundo Novo, Brazil).— EULER, Rev. Mus. Paulista, IV, 1900, 68 (Brazil; descr. nest and eggs).—von Ihering, Rev. Mus. Paulista, IV, 1900, 250 (Euler's reference). - Dubois, Syn. Av., I, iii, 1900, 180 (range; ref. orig. descr.).—Salvadori, Boll. Mus. Zool. Torino, XV, No. 378, 1900, 18 (Tebicuari, Paraguay; crit.).—Sharpe, Hand-List Birds, III, 1901, 18 (range).— OBERHOLSER, Proc. U. S. Nat. Mus., XXV, 1902, 128 (Sapucay, Paraguay; crit.).—von Ihering, Rev. Mus. Paulista, V, 1902, 316 (São Paulo, Brazil). — HAGMANN, Bol. Mus. Gældi, IV, 1904, 25 (Wied's reference), 52 (Burmeister's reference), 81 (Pelzeln's reference).—von Ihering, Rev. Mus. Paulista, VI, 1904, 330 (Paraguay; syn.).—von Berlepsch and HELLMAYR, Journ. f. Orn., LIII, 1905, 15, in text, part (Brazil and Bolivia, in geog. distr.; crit.).—von Ihering, Aves do Brazil, 1907, 202 (Estado de São Paulo, Ypiranga, Tieté, Itararé, Avanhandava, Barretos, Bebedouro, Itapura, Baurú, Iguapé, and Alto da Serra e Ubatuba, Brazil; range; references).— Hellmayr, Nov. Zool., XV, 1908, 69, in text (crit.).— Chubb, Ibis, 1910, 521 (Sapucay, Paraguay; references; crit.).— Dabbene, An. Mus. Nac. Buenos Aires, (3), XI, 1910, 284 (faunal distribution).—Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).

Formicarius mentalis Gray, Gen. Birds, I, 1849, 209 (ref. orig. descr.; syn.).

Dasythannus mentalis Burmeister, Syst. Ueb. Thiere Bras., III, 1856, 82 (Brazil; references; descr.).

Thamnophilus (Silvestrius) flavescens Bertoni, Aves Nuevas del Paraguay, 1901, 136 ("Alto Paraná, entre 25° y 28° de latitud"; orig. descr.).— Arribalzaga, An. Mus. Nac. Buenos Aires, VII, 1902, 367 (crit.).— RICHMOND, Auk, XIX, 1902, 416 (ref. orig. descr.).

Dysithamnus mentalis mentalis RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, 54 (diag.; syn.; range), 57 (meas.).—Hellmayr and von Seilern, Arch. f. Naturg., 1912, ii, 121, in text (Rio Janeiro, Brazil; crit.).

Description.— Adult male: pileum and hindneck pure dark gray (between slate gray and slate color), in evident contrast with the dull grayish olive green of the rest of the upper parts, including the outer margins of the wings and tail; rectrices dusky (except as aforesaid), with indistinct and very small whitish tips; remiges dusky centrally, with inner margins straw yellow; greater wing-coverts and primary coverts dusky, with slight outer margins of dull grayish olive green; lesser and middle coverts black, narrowly tipped with white, the greater coverts also indistinctly white-tipped; edge of wing white; scapulars tinged with gray, and with narrow outer margins of white; orbital and auricular regions slate black, contrasting with the paler (dark gull gray) color of the lores and sides of the head and neck otherwise; throat dull white; rest of under parts, as well as under wing-coverts, straw yellow, the sides and flanks faintly shaded with olivaceous; "iris brown."

Female not seen, but described by Mr. Hellmayr as having the throat less whitish and the under parts deeper yellow than in D. mentalis lateralis, which see.

Measurements.— Male (two specimens): wing, 57-58; tail, 42-43; bill, 13; tarsus, 19-20.

Range.— Southern Brazil, from São Paulo and Rio de Janeiro to Rio Grande do Sul, and west to Paraguay.

Remarks.— This species was described by Temminck in 1823 from a male specimen collected by Natterer at Curytiba, Brazil, and still preserved in the Museum at Vienna. Eight years later Maximilian, Prince of Wied, redescribed it under the name Myiothera poliocephala, no definite locality being mentioned. Although Wied's types, now before me through the courtesy of the authorities of the American Museum of Natural History, are at present entirely unrecognizable, owing to their long exposure to the light as mounted specimens, his description is so very explicit that it was readily

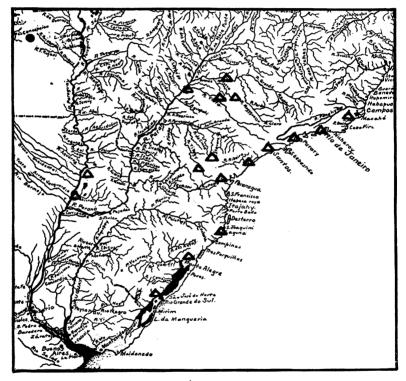


Fig. 1. Distribution of  $\triangle$  Dysithamnus mentalis mentalis.

referred to Temminck's bird. When Cabanis instituted the genus *Dysithamnus* in 1847 he very properly placed this species therein, where by common consent it has since remained, although Gray placed it in *Formicarius*, and Señor Bertoni, unaware of the work of previous authors, redescribed it as the type of a new subgenus, *Thamnophilus* (Silvestrius) flavescens.

Most of the earlier records are for localities on or near the coast of southern Brazil, but Natterer obtained specimens on the Rio Grande, and more recently it has been traced still farther into the interior, to the Rio

Paraná and Rio Paraguay. Sclater, indeed, refers to a specimen from Bolivia, but no definite locality is specified, although it is quite possible that it may reach the southern confines of that country. Most of the confusion in regard to the present form has arisen from the circumstance of its having been mixed up, not only with several closely allied geographical races in other parts of tropical America, but also with certain other forms which are perfectly distinct specifically. As yet we have no positive evidence that its range impinges upon that of *D. affinis*, its nearest neighbor geographically, but it is entirely probable that future research will show this to be the case. According to Euler it is a bird of the low brushy undergrowth, building a deep cup-shaped nest of fine vegetable fibers and rootlets, suspended from the fork of a branch, like a vireo, and laying spotted eggs.

Specimens examined.— "Brazil," 2 (types of Myiothera poliocephala Wied); Alto de Serra [e Ubatuba], 1. Paraguay: Sapucay, 1. Total, 4.

# Dysithamnus mentalis æquatorialis subsp. nov.

Type, No. 129,686. Collection American Museum of Natural History, adult male; Zaruma, Province del Oro, Ecuador, September 25, 1913; William B. Richardson.

Subspecific characters.— Adult male similar to the same sex of Dysithannus mentalis mentalis, but white of the throat extended over the breast, leaving only the abdomen yellow.

Measurements.— Male (two specimens): wing, 61-62; tail, 40-41; bill, 13; tarsus, 19.5-20. Female (two specimens): wing, 58-60; tail, 39-40; bill, 13-13.5; tarsus, 18-19.

Range.— Known only from the type-locality, in extreme southwestern Ecuador.

Remarks.— This subspecies is based on a series of six specimens, all from one locality in Ecuador. Where its range meets that of D. mentalis on the one hand and of D. m. lateralis on the other can only be conjectured. It is quite possible that some of the records referred to D. semicinereus may really belong here, immature specimens of the latter greatly resembling the present form. The series includes two immature males, both with brownish wings, like those of the female, while in the younger one the crown still retains some of the brownish feathers of the juvenal dress, and the plumage in general is like that of the adult female. The latter I am unfortunately unable for want of material to compare with the same sex of typical mentalis. They may readily be separated from females of lateralis, however, by their more olivaceous color above and by the paler brown of the pileum, while the throat is somewhat tinged with yellowish, and the under parts are purer yellow, with less dark suffusion on the sides and flanks.

Specimens examined.— Ecuador: Zaruma, Province del Oro (6000 feet), 6.

## Dysithamnus mentalis lateralis subsp. nov.

Dysithamnus semicinereus (not of Sclater, 1855) Sclater and Salvin, Proc. Zool. Soc. London, 1868, 168 (Caripé, Venezuela), 628 (San Esteban, Venezuela).—
Sclater and Salvin, Nom. Av. Neotrop., 1873, 71, part (Venezuela, in geog. distr.).— Sclater and Salvin, Proc. Zool. Soc. London, 1875, 235 (Merida, Venezuela).— Taczanowski, Orn. Perou, II, 1884, 29, part (Venezuela; crit.).—
Sclater, Cat. Birds Brit. Mus., XV, 1890, 221, part (San Esteban, Caracas, and Caripé, Venezuela).— Sharpe, Hand-List Birds, III, 1901, 18, part (Venezuela, in geog. distr.).

Dysithamnus mentalis var. semicinereus Dubois, Syn. Av., I, iii, 1900, 180, part (Venezuela, in geog. distr.).

Dysithannus mentalis (not Myothera mentalis Temminck) von Berlepsch and Hellmayr, Journ. f. Orn., LIII, 1905, 15, in text, part (Puerto Cabello, Venezuela).— von Berlepsch, Nov. Zool., XV, 1908, 150, footnote, part (Puerto Cabello, Venezuela).

Dysithamnus mentalis mentalis Hellmayr, Nov. Zool., XIII, 1906, 3, 32 (Tobago; Cumaná, Venezuela; faunal distribution).

Dysithamnus mentalis semicinereus RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, part (Venezuela, in geog. distr.), 57 (meas.).

Dysithamnus mentalis olivaceus (not Thamnophilus olivaceus Tschudi) Hellmayr and von Seilern, Arch. f. Naturg., 1912, i, 121, excl. extralimital localities and references (Las Quiguas, La Cumbre de Valencia, Quebrada Secca, and Caripé, Venezuela; crit.).

Type, No. 36,914, Collection Carnegie Museum, adult male; Guarico, Estado Lara, Venezuela, February 13, 1911; M. A. Carriker, Jr.

Subspecific characters.— Adult male similar to that of D. mentalis mentalis, but colors of lower parts less pure and less sharply contrasted; the white of the throat more extended, and tinged with grayish posteriorly; the yellow of the lower breast and abdomen paler, duller, and more restricted; and the sides and flanks more extensively shaded with yellowish olive buff (this shading scarcely evident in typical mentalis). "Iris brown; feet plumbeous; bill black above, plumbeous below." Adult female: pileum and hindneck deep Brussels brown; back deep olive; tail deep medal bronze or brownish olive, and inner secondaries margined externally with the same color, the outer ones and the wing-coverts buffy olive, all the remiges with internal margins of yellowish white; orbital ring white; lores, faintly indicated superciliaries, and sides of the head and neck dull buffy olive, the auriculars darker, more brownish, with often a whitish lower margin; throat dull white; breast, sides, and particularly the flanks, more or less deeply washed with dark olive buff; abdomen and under wing-coverts straw yellow, with the under tail-coverts paler; "iris brown; feet plumbeous; bill black above, plumbeous below."

Measurements.— Male: wing, 59-65 (average, 61); tail, 38-42 (40); bill, 14-15 (14.7); tarsus, 18-21 (19.5). Female (seven specimens): wing, 57-62 (60); tail, 35-41 (38); bill, 14-16 (15); tarsus, 18-20 (19).

Range.—Northern Venezuela, eastward to the island of Tobago, and westward to the Andes of Merida. One record also for the valley of the upper Magdalena River in Colombia.

Remarks.— The description of the female is drawn up from two specimens from the type-locality, secured in February, and which, being in fine fresh plumage, are somewhat more richly colored than the remainder of the series. They are very close to the same sex of D. semicinereus, but differ in averaging less rufescent, more olivaceous, on the sides of the head, the back, and particularly the wings; the under parts, too, have less buffy shading on the throat and breast. Males are duller and paler below than in D. m. equatorialis; the white of the throat is less extended; and the sides more decidedly washed with yellowish olive buff. Females of these two forms have already been compared under the head of D. m. equatorialis, but owing to want of material I have been unable to compare females of the present form with those of D. m. mentalis. Messrs. Hellmayr and von Seilern remark that their Venezuelan females have a more whitish throat and paler yellow under parts than do specimens from Rio Janeiro.

Venezuelan specimens were originally referred by Sclater to his *D. semicinereus*, nor was the propriety of this reference seriously questioned until 1905, when Messrs. von Berlepsch and Hellmayr incidentally included specimens from Puerto Cabello with those from Brazil and Bolivia. The following year Mr. Hellmayr insisted that specimens from Tobago and Cumaná were clearly referable to the yellow-bellied *D. mentalis*, not to *D. andrei* of Trinidad. In 1912, however, Messrs. Hellmayr and von Seilern, with a series before them from the same localities as are represented in the material handled by the present writer, while carefully distinguishing their birds from typical *D. mentalis*, nevertheless placed them with the Colombian form, *D. "olivaceus*," remarking that certain specimens from the respective regions were indistinguishable from each other. As will be shown beyond, this resemblance is due to differences in age being left out of consideration, although it is by no means impossible that some of the supposed specimens of *D. semicinereus* may really belong to the present form.

Although there can be no question as to the subspecific relationship existing between this form and true *mentalis*, their discontinuous distribution and wide separation are not so easily explained, since it is unlikely that the species has merely been overlooked in the intervening region, however imperfectly worked it still may be. Two females from Honda, on the upper Magdalena River, Colombia, unquestionably belonging to the present form, suggest that its range may invade that of *D. semicinereus*, and join that of *D. m. æquinoctialis* to the southward. It does not seem to be confined to the lower altitudes in any case.

Specimens examined.— Venezuela: Las Quiguas, 3; San Esteban, 1; El Hacha, 4; Aroa, 2; Guarico, 3; Sierra de Carabobo, 1; El Guacharo, 1. Colombia: Honda, 1. Total, 16.

# Dysithamnus mentalis suffusus Nelson.

Dysithamnus mentalis suffusus Nelson, Smithsonian Misc. Coll., LX, No. 3, 1912, 10 (Mount Pirri, eastern Panama; orig. descr.; type in coll. U. S. National Museum).

Subspecific characters.— Adult male similar in general to that of *D. m. lateralis*, but general coloration decidedly darker; throat much darker and grayer; abdominal yellow more restricted anteriorly and laterally; breast and sides heavily washed with dull citrine (sometimes becoming buffy citrine on the flanks); and olivaceous of the back averaging darker. Female also differing in a similar way, the throat being duller white, and the breast and sides strongly shaded with buffy citrine; the upper parts, and especially the wings, averaging more rufescent.

Measurements.— Male: wing, 61-66 (average, 63.5); tail, 38-43 (40); bill, 15-16 (15.4); tarsus, 19-21 (20). Female: wing, 59-65 (61.5); tail, 38-41 (39.5); bill, 14-16 (15); tarsus, 19-20 (19.6).

Range. — Mountains of extreme eastern Panama, on the Colombian frontier.

Remarks.— In describing this form Mr. Nelson failed to compare it precisely with D. m. septentrionalis, with which it is obviously most closely related both genetically and geographically. It is by far the darkest of all the forms of this species, and cannot be confused with any of the South American races for this reason. Comparing males with a series of the same sex of D. m. septentrionalis, we find that while they are about the same above, they are much darker below, being washed with greenish rather than grayish, especially on the breast and sides. Moreover, the upper abdomen, which is usually whitish in septentrionalis, is always yellowish in the present form. Immature males are always brighter yellow below, as is shown by a considerable number of unquestionably immature examples. Females of the respective forms are more nearly alike, but in suffusus, as might be expected, the under parts are more strongly washed with dull citrine, giving a much darker general effect.

Several young birds in postjuvenal moult are available from Tacarcuna and Mount Tacarcuna, March 24 to April 14. These indicate that in juvenal dress the upper and under parts are of a rich bay color, the throat probably paler, while the wings and tail are practically the same as in the adult female.

Specimens examined.— Panama: Mount Pirri, 8; Tacarcuna, 23; east slope Mount Tacarcuna (4600 feet), 10. Total, 41.

# Dysithamnus mentalis septentrionalis Ridgway.

Dysithamnus semicinereus (not of Sclater, 1855) Sclater and Salvin, Ibis, 1860, 399 (Choctum, Guatemala; crit.).—Salvin, Proc. Zool. Soc. London, 1867,

144 (Santa Fé, Veragua; crit.) — LAWRENCE, Ann. Lyc. Nat. Hist. N. Y., IX, 1868, 107 (Turrialba, Dota, Grecia, and Guiatil, Costa Rica).— Frantzius, Journ. f. Orn., XVII, 1869, 305 (Costa Rica).—von Pelzeln, Orn. Bras., ii, 1869, 149, in text (Vera Paz, Guatemala; crit.).—Salvin, Proc. Zool. Soc. London, 1870, 194 (Calovevora, Chitra, Calobre, and Volcan de Chiriqui, Veragua).— Sclater and Salvin, Nom. Av. Neotrop., 1873, 71, part (Central America to Mexico, in geog. distr.). Boucard, Proc. Zool. Soc. London, 1878, 60 (Naranjo, Costa Rica).— Zeledon, Cat. Aves Costa Rica, 1882, 12 (Costa Rica).—Zeledon, Proc. U. S. Nat. Mus., VIII, 1885, 108 (Costa Rica).— ZELEDON, An. Mus. Nac. Costa Rica, I, 1887, 114 (Cartago, Turrialba, and Dota, Costa Rica). — Sclater, Cat. Birds Brit. Mus., XV, 1890, 221, part (Central American localities and references).—Salvin and Godman, Biol. Centr.-Am., Aves, II, 1892, 206, part (Choctum and Chisec, Vera Paz, Guatemala; Central American localities and references; descr.; habits); I, 1904, xxv (Guatemala, Costa Rica, and Panama, in geog. distr.).— Underwood, Av. Costarriquena, 1899, 9 (Costa Rica.)—Sharpe, Hand-List Birds, III, 1901, 18, part (Central America, in geog. distr.).—Bangs, Proc. New England Zool, Club, III, 1902, 41 (Boquete, Panama, 4000 to 5000 feet).

Dysithamus [sic] semicinereus Boucard, Ann. Soc. Linn. Lyon, new series, XXV, 1878, 48 (Guatemala).

Disithamnus [sic] semicinereus Cherrie, Expl. Zool. Costa Rica, 1890-91, 1893, 41 (Rio Platinar [near Buenos Aires de Terraba], Costa Rica).

Dysithamnus mentalis (not Myothera mentalis Temminck) Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 118, part (Guatemala and Costa Rica; crit.).

Dysithamnus mentalis var. semicinerea Dubois, Syn. Av., I, iii, 1900, 180, part (Guatemala, in geog. distr.).

Dysithamnus mentalis septentrionalis Ridgway, Proc. Biol. Soc. Washington, XXI, 1908, 193 (Choctum, Vera Paz, Guatemala; orig. descr.; type in coll. U. S. National Museum; range).— Ferry, Field Mus. Orn. Series, I, 1910, 271 (Guayabo, Costa Rica).— Carriker, Ann. Carnegie Mus., VI, 1910, 606 (Guayabo, Naranjo de Cartago, Buena Vista, La Lagunaria de Dota, El General, Cariblanco de Sarapiquí, Cachí, Juan Viñas, and Las Mesas, Costa Rica; Costa, Rican references; habits).— Ridgway, Bull. U. S. Nat. Mus., No. 50, V, 1911, 54, 55 (diag.; descr.; meas.; Central American references and localities).— Nelson, Smithsonian Misc. Coll., LV, No. 3, 1912, 10, in text (crit.).

Subspecific characters.— Adult male similar to that of D. m. suffusus, but much paler beneath, the throat averaging whiter, the breast more purely gray; the yellow below paler, and more restricted in front, usually leaving the upper abdomen medially white; and the dark shading on the breast and sides less evident. Females are lighter colored below than in suffusus.

Measurements.— Male: wing, 59-64 (average, 62); tail, 36-40 (38); bill, 14-15 (14.6); tarsus, 18-20.5 (19.5). Female: wing, 58-63 (60); tail, 36-40 (38); bill, 14-16 (15); tarsus, 18-20 (19).

Range.— Vera Paz, Guatemala; Costa Rica and Panama. (No records for Salvador, Honduras, or Nicaragua).

Remarks.— Discovered by Salvin in 1860 at Choctum, Vera Paz, Guatemala, and subsequently found at numerous localities in Costa Rica

and Panama by Salvin and others, this bird was considered to be the same as that from "Bogotá," which had been given the name *Dysithamnus semicinereus* by Sclater a few years previously, until Mr. Ridgway pointed out its distinctive characters in 1908. Indeed, it is a curious fact that it is much closer to *D. semicinereus* in general characters than is the geographically intermediate *D. m. suffusus* of eastern Panama. This is indicated

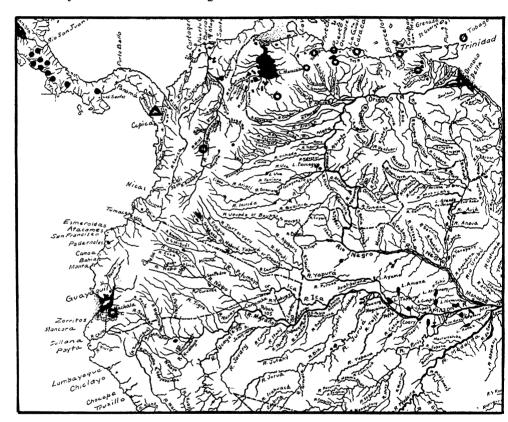


Fig. 2. Distribution of subspecies of Dysithamnus mentalis.

- Dysithamnus mentalis septentrionalis.
- △ Dysithamnus mentalis suffusus.
- O Dysithamnus mentalis lateralis.
- Dysithamnus mentalis æquatorialis.

by the lighter colors below, and in particular by the frequent restriction of the yellow to the middle and lower abdomen, leaving a white area on the upper abdomen, just below the breast. As shown by Mr. Ridgway, immature birds lack this character, having the entire abdomen yellow. Fe-

males of the two forms are very difficult to separate. Compared with  $D.\ m.\ lateralis$ , males have darker, more grayish throats, and the yellow color is more restricted, but females are not so readily distinguished, averaging merely a little yellower below. Its real affinities are clearly with  $D.\ mentalis$  rather than with  $D.\ semicinereus$ , agreeing as it does with the former in distinctly olivaceous back and yellowish abdomen. I am unable to appreciate any constant characters by which the Guatemalan specimens may be distinguished from those from Costa Rica and Panama, as intimated by Mr. Nelson. I think the paler color of the type may be due to the age of the skin; at any rate, it would require a much larger series of specimens from both regions to reach a positive conclusion on this point.

Specimens examined.—Guatemala: (no locality specified) 3. Costa Rica: Juan Viñas, 2; Las Mesas, 1; Turrialba, 1; Dota, 1; Navarro, 1; Naranjo, 1; Buena Vista, 1; Guayabo, 4; Lagunaria, Santa Maria de Dota, 1; El General, 5. Panama: Cerro Azul, 2; Cana, 1. Total, 24.

## Dysithamnus semicinereus Sclater.

Thamnophilus mentalis (not Myothera mentalis Temminck) D'Orbigny and Lafresnaye, Syn. Av., in Guer. Mag. de Zool., 1837, ii, 12, excl. syn. (Yungas, Bolivia).— D'Orbigny, Voy. Am. Mer., Oiseaux, 1844, 177, excl. syn. part (Yungas, Bolivia; descr.; syn.).— Tschudi, Arch. f. Naturg., X, i, 1844, excl. syn. part (Peru; references).— Tschudi, Fauna Peruana, Aves, 1845–6, 173 (Peru; descr.).

Thamnophilus olivaceus (not Tamnophilus olivaceus Vieillot, 1825) TSCHUDI, Arch. f. Naturg., X, i, 1844, 278 (Peru; orig. descr.; type in coll. Museum Neuchâtel).—
TSCHUDI, Fauna Peruana, Aves. 1845-6, 174, pl. 11, fig. 1 (Peru; descr.; crit.).
— Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 119, in text (syn.; crit.).

Dysithamnus olivaceus Cabanis, Arch. f. Naturg., XIII, i, 1847, 224 (ref. orig. descr.; crit.).—Bonaparte, Consp. Av., I, 1850, 199 (ref. orig. descr.; range).—Sclater, Proc. Zool. Soc. London, 1860, 89 (Nanegal, Ecuador).—von Pelzeln, Orn. Bras., ii, 1869, 149, in text (crit.).—Sclater and Salvin, Nom. Av. Neotrop., 1873, 71 (range).—Giebel, Thes. Orn., II, 1875, 73 (ref. orig. descr.).—Taczanowski, Orn. Perou, II, 1884, 28, excl. syn. part (Peru; descr.; references; crit.; ex Tschudi).—Sharpe, Hand-List Birds, III, 1901, 19, part (range).—von Berlepsch and Stolzmann, Ornis, XIII, 1906, 93 (Santa Ana and Idma, Peru; crit.), 116 (Huaynapata, Peru; crit.; plum.).—Menegaux, Mission pour la Mesure d'un Arc de Méridien Equatorial en Amérique du Sud, IX, i, 1911, B 32 (Gualea, Ecuador; Tschudi's reference; range).—Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).

Formicarius olivaceus Gray, Gen. Birds, I, 1849, 209 (Tschudi's reference).

Dysithamnus semicinereus Sclater, Proc. Zool. Soc. London, 1855, 90, pl. 97 ("Bogotá," Colombia; orig. descr.; types in coll. British Museum), 147 ("Bogotá," Colombia; ref. orig. descr.); 1858, 66 (Rio Napo, Ecuador), 222 (diag.; ref. orig. descr.; range); 1860, 278 (Babahoyo, Ecuador; crit.).— Sclater,

Cat. Am. Birds, 1862, 177 ("Bogotá," Colombia; Pallatanga and Babahoyo, Ecuador; syn.).—Pelzeln, Orn. Bras., ii, 1869, 149, in text, part (range; crit.). Gray, Hand-List Birds, I, 1869, 311 (ref. orig. descr.; range). Sclater and Salvin, Nom. Av. Neotrop., 1873, 71, part (range).—Giebel, Thes. Orn., II, 1875, 73 (syn.; = D. mentalis Cabanis [error!]).— Taczanowski, Proc. Zool. Soc. London, 1874, 530 (Amable-Maria, Monterico, and Paltaypamba, Peru); 1879, 232 (Tambillo, Peru); 1882, 30 (Cococho, Huambo, and Chirimoto, Peru).—von Berlepsch and Taczanowski, Proc. Zool. Soc. London, 1883, 564 (Chimbo, Ecuador; crit.); 1884, 302 (Chimbo, Ecuador).— TACZANOWSKI, Orn. Perou, II, 1884, 29 (Huambo and Santa Rosa, Peru; New Granada; references; crit.; habits; excl. extralimital localities).— Taczanow-SKI and VON BERLEPSCH, Proc. Zool. Soc. London, 1885, 68 (Chimbo, Ecuador). - Sclater, Cat. Birds Brit. Mus., XV, 1890, 221, part (descr.; localities in Colombia, Ecuador, and Peru).—Salvin and Godman, Biol. Centr.-Am., Aves, II, 1892, 206, part (ref. orig. descr.; range; habits, ex Stolzmann); I, 1904, xxv, part (South Am., in geog. distr.).— von Berlepsch and Stolzmann, Proc. Zool. Soc. London, 1896, 381 (La Gloria and Garita del Sol, Peru; crit.). - Sharpe, Hand-List Birds, III, 1901, 18, part (range). Goodfellow, Ibis, 1902, 64 (Mount Pichincha, Ecuador).

Dysithamnus mentalis Sclater, Proc. Zool. Soc. London, 1858, 221, part (Bolivian and Peruvian localities and references); 1860, 67 (Pallatanga, Ecuador).—Sclater and Salvin, Proc. Zool. Soc. London, 1879, 624 (Yungas, Bolivia, ex D'Orbigny).—Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 118, part ("Bogotá," Colombia; crit.).

(?) Dysithamnus tambillanus Taczanowski, Orn. Perou. II, 1884, 30 (Tambillo, Peru; orig. descr.; type in coll. Warsaw Museum; habits; crit.).—Sclater, Cat. Birds Brit. Mus., XV, 1890, 219, footnote (ref. orig. descr.).—Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 120, in text (crit.).—Sharpe, Hand-List Birds, III, 1901, 19 (ref. orig. descr.; range).—Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).

Dysithamnus mentalis var. semicinerea Dubois, Syn. Av., I, iii, 1900, 180, part (ref. orig. descr.; range).

Dysithamnus mentalis var. tambillana Dubois, Syn. Av., I, iii, 1900, 180 (Peru; ref. orig. descr.).

Dysithamnus olivaceus semicinereus Oberholser, Proc. U. S. Nat. Mus., XXV, 1902, 129, in text ("Bogotá," Colombia; range; crit.).

Dysithamnus mentalis olivaceus von Berlepsch and Hellmayr, Journ. f. Orn., LIII, 1905, 14 (syn.; crit.).— Hellmayr, Nov. Zool., XIII, 1906, 32, in text (crit.).— Hellmayr and von Seilern, Arch. f. Naturg., 1912, i, 121, part ("Bogotá." Colombia. Ecuador and Peru: crit.).

Dysithamnus mentalis semicinereus RIDGWAY, Proc. Biol. Soc. Washington, XXI, 1908, 193, in text (crit.).—RIDGWAY, Bull. U. S. Nat. Mus., No. 50, V, 1911, 54, 55 (diag.; references; range), 57 (meas.).—Hellmayr and von Seilern, Arch. f. Naturg., 1912, i, 121, in text (range, ex Ridgway; crit.).

Description. Adult male: pileum, hindneck, and upper back blackish slate, passing into dark olive gray on the middle back, rump, and upper tail-coverts; tail dusky black, with very small whitish tips (sometimes wanting), and externally margined with dark olive gray or iron gray; remiges dusky, externally edged with

dark olive gray, and internally with pale yellowish white or primrose yellow, which is also the color of the under wing-coverts; lesser and middle wing-coverts black, tipped with white; greater coverts dusky, edged with grayish or dark olive gray, and tipped with white (more or less distinctly); sides of head and neck slate gray, the loral region and auriculars darker, blackish slate; anterior under parts indistinctly clouded with pale slate gray, especially the breast and sides, leaving the throat and (often) the upper abdomen (medially) paler, more whitish; lower abdomen, under tail-coverts, and especially the flanks, strongly washed with greenish (vetiver green); "iris deep ashy; bill dark; feet plumbeous" (Taczanowski).

Adult female: pileum Brussels brown, the hindneck paler, passing into deep olive on the back, rump, and upper tail-coverts; tail mummy brown; wings dusky, the upper coverts and remiges margined externally with Dresden brown, the outer primaries with buckthorn brown; middle and greater coverts usually indistinctly tipped with paler brown; inner webs of remiges pale yellowish white, like the under wing-coverts; lores dull whitish; orbital ring white; sides of head suffused with brownish and buffy; under parts dull white, more or less suffused and clouded with deep or dark olive buff, especially on the breast, sides, and under tail-coverts, the abdomen usually more or less strongly tinged with primrose yellow or colonial buff; "iris deep ashy; bill dark [under mandible paler]; feet plumbeous" (Taczanowski).

### Measurements.

	Wing.	Tail.	Bill.	Tarsus. (19-20.5) 19.7	
Ten males from Colombia	(61-69) 65	(38-45) 41	(14-15) 14.7		
Ten males from Ecuador	(57-62) 60	$(34-38)\ 36.5$	$(14-15)\ 14.5$	(18-20)	19
One male from Peru	69	46	16		18.5
One male from Bolivia	58	37	15		19
Ten females from Colombia	(60-65) 63	$(38-43)\ 40.5$	$(14-16)\ 15$	(18-21)	19.5
Eight females from Ecuador	(55-59)57	$(35-37) \ 36$	(14.5-15)14.8	(17-19)	18.3
Two females from Bolivia	58	(35-37)36	13.5	(17-19)	18

Range.— Andean Region of Colombia (except Western Andes), Ecuador, Peru, and Bolivia, from near sea-level up to about seven thousand feet.

Remarks.— In juvenal dress this species is probably rich brown in color, as indicated by No. 121,877, Collection American Museum of Natural History (Buena Vista, Colombia, March 1), which still retains a few feathers of this plumage on the scapulars. In immature dress the male has the whole back decidedly olivaceous, with the pileum dark grayish, usually with brownish feathers intermixed; the throat and breast are white, with little grayish suffusion, and the rest of the lower parts are dull primrose yellow; the wings are like those of the adult female, except that the lesser and middle coverts are often more advanced toward the adult male pattern. At this stage the bird is strikingly similar to D. mentalis, with which it might easily be confused. A study of the present series renders it fairly certain, however, that individuals of both sexes showing a decided amount of yellow color on the under parts are young birds. The amount of white tipping on the lesser coverts in the male also varies greatly, being entirely

absent in some specimens, and very prominent in others, the white extending also to the outer margin of the scapulars.

Specimens from Ecuador and Bolivia average a little smaller and perhaps a trifle paler below than those from Colombia, but the rough condition of the skins forbids satisfactory comparison. At any rate, I cannot see my way clear to recognition of such a southern form, especially as the only available Peruvian skin is at the maximum of size in the entire series, and is otherwise absolutely indistinguishable from Colombian birds. This specimen comes from the same general region as the type of *Dysithamnus tambillanus* Taczanowski — a species which I am unable to make out exactly, but which in view of the variation observable in the series before me I doubt will prove to be anything more than an individual variant of the present form.

The characters of the young bird and of the female would suggest that D. semicinereus had been derived from some form of D. mentalis, and it is certainly very close in certain respects to D. mentalis septentrionalis, as already pointed out. Otherwise, however, it is much nearer D. affinis, and in my judgment should stand as a distinct species, intermediate between these two, the more so as it is altogether probable that its range coincides to some extent at least with D. mentalis lateralis and D. m. equinoctialis on the one hand, while not yet known to touch that of D. affinis on the other. The adult male differs from that of D. affinis in the darker grayish suffusion of the under parts, the different color of the flanks (vetiver green instead of deep olive buff), and the much greater extent of the olivaceous wash on the back. Females, too, are likewise very different, being olivaceous rather than rufescent above, and the under parts more olive yellowish, less purely buffy.

D'Orbigny's bird from the Province of Yungas, Bolivia, which he erroneously identified with Temminck's Myothera mentalis, clearly belongs here instead, and is the earliest record I can find for the present bird. A few years later, in 1844, Tschudi described and figured a bird from Peru as Thamnophilus olivaceus—a name which has given much trouble to systematists, since it proved impossible to identify it certainly with any known species. In 1905, however, the type was examined by Messrs. von Berlepsch and Hellmayr, and found to be a young bird of the form described by Sclater in 1855 as Dysithamnus semicinereus, which name they accordingly relegated to synonymy. It appears, however, that Tschudi's name is preoccupied by Tamnophilus olivaceus Vieillot, 'Galerie Oiseaux,' I, 1825, 325, for a species of shrike, so that it will be necessary to revert to Sclater's name for the present species. Considerable uncertainty attaches to some of the references hereby provisionally ranged under this head, since without

actual examination of the specimens upon which they were based it is impossible to be sure that they do not apply to some other form instead. Only one Peruvian specimen has been available, nor have I seen any from eastern Ecuador. Certain authors have called attention to variations obtaining in series from different parts of Peru, Ecuador, and Colombia respectively, and it may be that these were due to confusing one or more forms with each other.

Habits.—"I have encountered this bird at Huambo and have seen it at Santa Rosa (system of Huayabamba), at an altitude of 6000 feet, which appears to be its orographical limit. It is purely a forest bird, traveling in little bands, sometimes alone, sometimes with wandering parties [of other birds]. They generally fly very low, sometimes quite near the ground, like the Pithys, when they accompany the traveling ants. Its voice resembles that of D. tambillanus, and is often heard in the depths of the forests. It appears to be the males that sing and respond to one another. Often I have deceived them, imitating their notes, and they would approach me, replying. They have still another call-note: cirrr, like that of the Myrmotherula menetriesii. In the stomach of one of these birds I found seeds and the remains of insects."—Translation of Stolzmann, in Taczanowski, 'Orn. Perou,' II, 1884, 30.

Specimens examined.— Colombia: La Frijolera, 5000 feet, Antioquia, 2; "Bogotá," 5; east of Palmira, 6800 feet, 7; La Candela, 6500 feet, Huila, 5; near San Agustin, 5000 feet, Huila, 1; Andalucia, Huila, 5000 feet, 1; Buena Vista, above Villavicencio, 4500 feet, 12. Ecuador: Bucay, Guayas, 975 feet, 2; Gualea, 1; Junction Rio Chanchan and Rio Chiguancay, 2000–2500 feet, 7; Esmeraldas, 2; Rio de Oro, Manavi, 6; Chone, Manavi, 1; Santa Rosa, Province del Oro, 2; Naranjo, Province del Guayas, 1. Peru: Moyobamba, 1. Bolivia: Todos Santos, 1300 feet, 5; Rio Surutu, 1; Santa Cruz de la Sierra, 1; Rio Yapacani, 1. Total, 64.

## Dysithamnus extremus sp. nov.

Dysithamnus semicinereus (not of Sclater, 1855) Sclater and Salvin, Proc. Zool. Soc. London, 1879, 525 (Concordia, Antioquia, Colombia).

Type, No. 111,887, Collection American Museum of Natural History, adult male; Salencio, Nóvita trail, altitude 5500 feet, Western Andes, Cauca, Colombia, December 10, 1911; Arthur A. Allen and Leo E. Miller.

Description.— Adult male: above slate color, the pileum darker, more blackish slate; rectrices dusky black, externally slate color, with slight whitish tips; remiges dusky, margined externally with vetiver green, the inner ones (more broadly) with slate color; inner margins of the remiges (except the outermost) pale yellowish white;

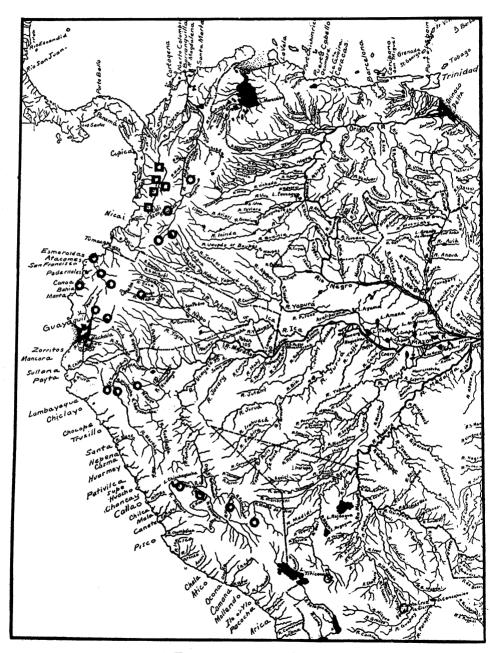


Fig. 3. Distribution of  $\square$  Dysithamnus extremus;  $\bigcirc$  Dysithamnus semicinereus.

lesser and middle wing-coverts black, tipped with white; greater coverts slate color, tipped with white, and the outermost margined externally with white; primary-coverts dull slate color or dull greenish externally, narrowly tipped with white; under wing-coverts white, or white mottled with slate color; outer scapulars frequently margined with white externally; sides of the head and neck slate color, the lores and auriculars darker, more blackish slate; under parts whitish, heavily and irregularly clouded with slate gray, especially on the breast and sides; "iris dark brown; feet bluish gray [i. e., plumbeous]; bill black above, gray below" (Palmer).

Adult female: pileum Brussels brown, passing into Saccardo's olive on the back, rump, and upper tail-coverts; tail mummy brown; wings dusky, margined externally with buffy citrine, the wing-coverts indistinctly tipped with buckthorn brown; under wing-coverts and inner margins of the remiges pale yellowish white; orbital ring white; lores and sides of the head mottled with brownish and buffy; under parts dull whitish, irregularly clouded with pale buffy olive, the abdomen sometimes more yellowish, the buffy olive shading heavier on the breast and sides; under tail-coverts chamois-color.

Immature male: not distinguishable in any way from the adult male of D. semicinereus.

Measurements.— Male: wing, 63-66 (average, 64.7); tail, 39-43 (41); bill, 14-15.5 (14.7); tarsus, 18.5-21 (20). Female: wing, 60-63 (61); tail, 37-42 (39); bill, 14-14.5 (14.9) tarsus, 19-20 (19.5).

Range.—Western Andes and Cauca region of Colombia, from Antioquia south to near the headwaters of the Cauca River.

Remarks.— Fully adult males of this very distinct form differ conspicuously from those of D. semicinereus in the pure dark gray color above, without any olivaceous tinge whatever, and also in the absence of any such color on the abdomen and flanks, these parts being heavily shaded with slate gray, like the breast, while the under tail-coverts also are grayish white, with no trace of olivaceous. Females are readily distinguishable from the same sex of D. semicinereus, showing as they do much less yellowish suffusion below, and being duller and more buffy, as in D. affinis. But immature males are so precisely like adult males of D. semicinereus that I can find no characters by which to distinguish them with any certainty. The clue to the real status of these specimens, which were at first presumed to belong to D. semicinereus, although coming from the same localities as the others. was furnished by a young male (No. 111,883, Collection American Museum of Natural History, Rio Frio, Cauca, Colombia, November 8, 1911), still retaining the brownish-edged wings of the juvenal dress (except the lesser and middle coverts, which have been renewed), and a few brownish feathers on the forehead. In this individual the flanks are colored as in D. semicinereus, but in immature birds of that species the posterior under parts are more or less yellow, as already pointed out.

This species is confined to the Western Andes and Cauca region of

Colombia, ranging from 2500 to 7000 feet. It is clearly an offshoot from D. semicinereus of the Central and Eastern Andes, but the material before me does not certainly indicate intergradation. There are, it is true, two female specimens from the Central Andes, taken at an altitude of 6800 feet east of Palmira, which might possibly be referred to the present form on account of their more buffy, less yellowish color below, but as none of the males from the same locality show any divergence in this direction I feel justified in referring the entire series to D. semicinereus. So far as I am able to discover there is but one published record probably pertaining to this interesting species, which adds another to the list of novelities hailing from western Colombia.

Specimens examined.— Colombia: near Jimenez, 2400 feet, 2; Mount Pavas, 4400 feet, 8; La Maria, Dagua Valley, 4700 feet, 2; San Luis, Bitaco Valley, 4400 feet, 1; San Antonio, 6600 feet, Cauca, 7; Las Lomitas, 5000 feet, Cauca, 7; Cauca, 1; Rio Frio, 3500 feet, Cauca, 5; Salento, 7000 feet, West Quindio Andes, Cauca, 2; Salencio, Nóvita trail, 5500 feet, Cauca, 3. Total, 38.

## Dysithamnus affinis affinis Pelzeln.

- Dysithamnus olivaceus (not Thamnophilus olivaceus Tschudi) (?)Sclater, Proc. Zool. Soc. London, 1848, 541, excl. syn. (Bolivia, crit.).— Sclater, Cat. Birds Brit. Mus., XV, 1890, 222, excl. syn. (Chapada, Matto Grosso, Brazil; descr.; crit.).
- Dysithamnus affinis von Pelzeln, Orn. Bras., ii, 1869, 80, 149 (Villa Maria, Matto Grosso, Brazil; orig. descr.; type in coll. Vienna Museum; crit.).— Gray, Hand-List Birds, I, 1869, 311 (Brazil).— Giebel, Thes. Orn., II, 1875, 72 (ref. orig. descr.).— Sclater, Cat. Birds Brit. Mus., XV, 1890, 219, footnote (ref. orig. descr.).— Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 120, in text (crit.).— Sharpe, Hand-List Birds, III, 1901, 19 (ref. orig. descr.; range).— Oberholser, Proc. U. S. Nat. Mus., XXV, 1902, 129, in text (crit.).— Hagmann, Bol. Mus. Gceldi, IV, 1904, 81 (Pelzeln's reference).— von Berlepsch and Hellmayr, Journ. f. Orn., LIII, 1905, 15 (syn.; crit.).— von Ihering, Aves do Brazil, 1907, 203 (references; range).— Ridgway, Bull. U. S. Nat. Mus., No. 50, V, 1911, 54, 55 (diag.; syn.; range), 57 (meas.).— Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).
- Dysithamnus mentalis (not Myothera mentalis Temminck) Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 118, excl. extralimital localities and references (Chapada, Matto Grosso, Brazil; crit.).
- Dysithamnus mentalis var. affinis Dubois, Syn. Av., I, iii, 1900, 180 (Villa Maria, Brazil [ex Pelzeln]).
- Dysithamnus mentalis var. olivacea Dubois, Syn. Av., I, iii, 1900, 180, excl. syn. (Bolivia and Matto Grosso, Brazil [ex Sclater]).
- Dysithamnus olivaceus olivaceus Oberholser, Proc. U. S. Nat. Mus., XXV, 1902, 129, in text (Matto Grosso, Brazil; range; crit.).

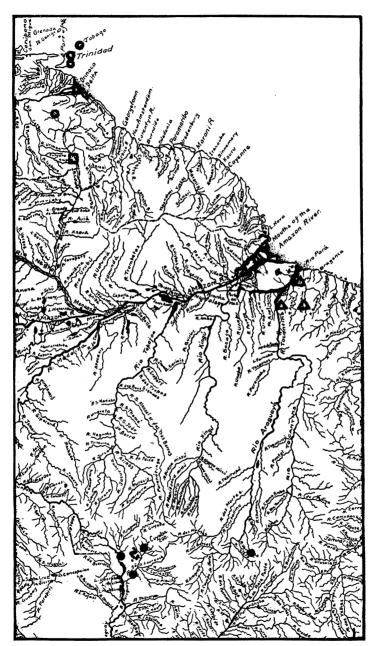


Fig. 4. Distribution of Dysithamnus andrei and the D. affinis group.

O Dysithamnus andrei.

△ Dysithamnus affinis emiliæ.

☐ Dysithamnus affinis spodionotus.

Dysithamnus affinis affinis.

Dysithamnus affinis affinis Hellmayr, Nov. Zool., XIII, 1906, 31, in text (diag.; range); XV, 1908, 14 (faunal distribution), 69 (Fazenda Esperança, Goyaz, Brazil; crit.).

Description.— Male: pileum blackish slate, fading into deep neutral gray on the nape and back, the lower back and rump shaded with deep olive gray; middle rectrices slate gray, the remainder dusky, with the outer webs slate gray, and all with small white tips; remiges dusky, externally margined with deep olive gray, the outermost with light olive gray; lesser and middle wing-coverts black, tipped with white; greater coverts dusky, more or less shaded with neutral gray, and narrowly tipped with white; under wing-coverts and inner margins of remiges white, sometimes very faintly tinged with yellowish; auricular patch blackish slate like the pileum, but contrasting with the paler gray of the postorbital region and sides of the neck generally; lores grayish white; throat, breast, and upper abdomen white, more or less washed with neutral gray, especially on the sides; flanks strongly washed with deep olive buff.

Female: pileum Brussels brown, brightest on the forehead, and fading on the hindneck into buckthorn brown, this passing gradually into the Saccardo's olive or light brownish olive of the back; tail sepia; wings externally Dresden brown, the middle and greater coverts with indistinct paler tips, the under wing-coverts and inner margin of the remiges pale yellowish white; lores and orbital ring pale; under surface dull white, irregularly shaded with dull buffy, especially laterally, passing into deep olive buff on the flanks; under tail-coverts cream buff.

Measurements.— Male (five specimens): wing, 61-64 (average, 63); tail, 40-42 (41); bill, 15-15.5 (15.1); tarsus, 19-20 (19.6). Female (five specimens): wing, 59-61 (60.5); tail, 38-41 (40); bill, 15-16 (15.4); tarsus, 19-20 (20).

Range.—Southwestern Matto Grosso, Brazil, east to central Goyaz, and probably west to Bolivia.

Remarks.— This species was accurately described by von Pelzeln as far back as 1869, but his description remained unrecognized for many years. even after the acquisition of a large series of specimens from a point near the type-locality had made the form well known. Dr. J. A. Allen, into whose hands this series first fell for study, referred them, together with specimens representing other forms of this group, to D. mentalis. (The reader is referred to his paper, above cited, for a very full account of the plumage-variations and characters shown by the series in question.) Meanwhile Sclater had referred a pair of birds from the same locality to the Thamnophilus olivaceus of Tschudi, and to this procedure Mr. Oberholser gave doubtful assent, pointing out the differences between the present form and D. mentalis, and strongly intimating that Tschudi's name would be found to apply to the Dysithamnus semicinereus of Sclater, leaving the name affinis for the species from southwestern Brazil. A few years later Messrs. von Berlepsch and Hellmayr, from actual examination of the types, determined this to be the fact, since which time this species at least has been eliminated from the confusion surrounding so many of the members of this group. Nearly all of the specimens known to science at present were collected at Chapada in southwestern Matto Grosso, Brazil, by Mr. Herbert H. Smith, while the type was taken by Natterer at Villa Maria, a locality not far distant. More recently it has been traced eastward as far as the State of Goyaz, and probably occurs throughout a large area in central Brazil and probably Bolivia also, although Sclater's records for this country are not above suspicion.

Specimens examined.— Brazil: Chapada, Matto Grosso, 47; San Lorenzo River, Matto Grosso, 1.

## Dysithamnus affinis emiliæ Hellmayr.

Dysithamnus mentalis (not Myothera mentalis Temminck) GŒLDI, Ibis, 1903, 499 (Rio Capim, Pará, Brazil).— von Berlepsch, Nov. Zool., XV, 1908, 150, footnote, part (Pará, Brazil).

Dysithamnus mentalis mentalis Hellmayr, Nov. Zool., XIII, 1906, 367 ([San Antonio do] Prata, Igarapé-Assu, Pará, Brazil; crit.).

Dysithamnus mentalis emiliæ Hellmayr, Abhand. K. Bayerischen Akad. Wiss. München, Math.-Phys. Kl., XXVI, 1912, 92 (San Antonio do Prata [typelocality], Rio Capim, and Flor do Prado, Pará, Brazil; orig. descr.; type in coll. Tring Museum).

Subspecific characters.— Adult male similar to that of *D. affinis affinis*, but differing conspicuously in its more purely white throat and breast, the gray shading being mostly confined to the sides, and by the buffy yellow tinge of the abdomen, while the flanks also are more strongly tinged with dark olive buff. The adult female is more yellowish, less buffy, below, especially on the abdomen medially, and more olivaceous, less brownish, above.

Measurements.— Male (one specimen): wing, 58; tail, 37; bill, 14; tarsus, 18.5. Female (one specimen): wing, 55; tail, 37; bill, 13; tarsus, 18.5.

Range.— Pará region, northwestern Brazil.

Remarks.— Mr. Hellmayr, in describing this form, compared it with D. mentalis, no doubt on account of its yellowish posterior under parts. I think, however, that it is better placed near D. affinis, which it resembles in its decidedly white throat and breast (with grayish sides), grayish back, and nearly white under wing-coverts and inner margins of the remiges. The three very indifferent skins at present before me show that it is a well-marked form in any case, and a larger series of well prepared specimens might readily suffice to establish it as a distinct species, intermediate in certain respects between D. mentalis and D. affinis, just as is the far removed D. semicinereus. An immature male has the back more suffused with greenish than the adult, while the throat and breast are less purely white.

Specimens examined.—Brazil: Baião, Rio Tocantins, 3.

## Dysithamnus affinis spodionotus Salvin and Godman.

Dysithamnus spodionotus Salvin and Godman, Ibis, 1883, 211 (Mount Roraima, British Guiana; orig. descr.; type in coll. British Museum). - Salvin, Ibis, 1885, 424 (Mount Roraima, British Guiana, 3500 feet).— Reichenow and Schalow, Journ. f. Orn., XXXIV, 1886, 93 (reprint orig. descr.).—Sclater, Cat. Birds Brit. Mus., XV, 1890, 222 (Mount Roraima, British Guiana; descr.; ref.; crit.).— Sharpe, Hand-List Birds, III, 1901, 19 (range).— Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).

Dysithamnus affinis spodionotus von Berlepsch and Hellmayr, Journ. f. Orn., XXXIV, 1905, 15, in text (crit.).— Hellmayr, Nov. Zool., XIII, 1906, 2 (faunal distribution), 32, in text (diag.; range; crit.).

Dysithamnus mentalis spodionotus Ridgway, Bull. U. S. Nat. Mus., No. 50, V, 1911, 55 (diag.: ref.), 57 (meas.).

Subspecific characters.— Male differing from that of D. affinis affinis in its decidedly darker, deeper coloration throughout, the back being darker gray, with scarcely a trace of olivaceous tinge posteriorly; the under parts are more heavily shaded with gray; the flanks are scarcely different from the sides; and the lores are dark, like the pileum. The female differs, according to Mr. Hellmayr, in being more rufescent olive brown on the lower parts. (No females seen by the writer).

Measurements. - Male (one specimen): wing, 61; tail, 45; bill, 15; tarsus, 20. Female (fide Hellmayr): wing, 62-64; tail, 44-47.

Range. — Mount Roraima, British Guiana, 3500 feet.

Remarks.— Like the last, this also is a very strongly characterized form, perhaps entitled to rank as a species, although its relationship to D. affinis affinis is obvious. Immature males, indeed, resemble the latter very closely, having the lower back, rump, and flanks heavily washed with buffy brown — a different color, however, from that found in these parts in typical affinis. In its deep coloration it somewhat resembles D. extremus, but is not so dark, and the color is different, being neutral gray rather than slate color. It was discovered by Whitely on his expedition to Mount Roraima in 1881-82, and described the following year by Salvin and Godman, who compared it with D. semicinereus. It is not known except from the type-locality, nor from specimens collected by anyone other than Whitely himself.

Specimens examined.—British Guiana: Mount Roraima, 3.

## Dysithamnus andrei Hellmayr.

Dysithamnus semicinereus (not of Sclater) Cory, Auk, X, 1893, 220 (Tobago).— (?) Dalmas, Mem. Soc. Zool. France, XIII, 1900, 141 (Tobago and Paria Peninsula, Venezuela).

Dysithamnus mentalis (not Myothera mentalis Temminck) Allen, Bull. Am. Mus. Nat. Hist., V, 1893, 118, part (Trinidad; crit.).

Dysithamnus mentalis spodionotus (not of Salvin and Godman) Chapman, Bull. Am. Mus. Nat. Hist., VI, 1894, 12, 50 (Trinidad; habits; crit.).

- Dysithamnus affinis andrei Hellmayr, Nov. Zool., XIII, 1906, 2 (faunal distribution), 31 (Caparo, Trinidad; orig. descr.; type in coll. Tring Museum).— Cherrie, Mus. Brooklyn Inst. Sci. Bull., I, 1908, 365 (Carenage and Heights of Aripo, Trinidad; plum.).
- Dysithamnus mentalis oberi Ridgway, Proc. Biol. Soc. Washington, XXI, 1908, 193 (Tobago; orig. descr.; type in coll. U. S. National Museum).—Ridgway, Bull. U. S. Nat. Mus., No. 50, V, 1911, 54 (diag.; ref. orig. descr.; range), 57 (meas.).
- Dysithamnus mentalis andrei Ridgway, Bull. U. S. Nat. Mus., No. 50, V, 1911, 54, 55 (diag.; ref.), 57 (meas.).
- Dysithamnus oberi Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).
- Dysithannus andrei Brabourne and Chubb, Birds S. Am., I, 1912, 194 (ref. orig. descr.; range).

Description.— Male: pileum rather dark neutral gray, and auricular patch the same, contrasting with the paler gray of the sides of the head and neck; back and tail neutral gray; remiges dusky, margined externally with deep olive gray, internally with white (with a faint yellow tinge); lesser and middle wing-coverts black, tipped with white; greater series and primary-coverts gray like the back, externally margined and tipped with white; under wing-coverts pure white; lower parts white, shaded laterally with gray; "iris brown; feet plumbeous; bill black above, plumbeous below."

Female: pileum snuff brown, deepest in front, and passing into neutral gray, washed with grayish olive, on the back; tail sepia; wings externally pale tawny olive, the remiges inclining more to deep olive buff, the wing-coverts indistinctly tipped with paler buffy; under wing-coverts and inner margins of the remiges white or pale buffy white; orbital ring white; lores and slight postorbital streak pale buffy, with auriculars darker, more buffy brownish; under parts dull white, more or less washed with buffy, especially laterally, the flanks and under tail-coverts strongly washed with deep olive buff"; iris brown; feet plumbeous; bill black above, plumbeous below."

The immature male is like the adult, but the lower back, rump, upper tail-coverts, and flanks are more or less strongly washed with olivaceous, as in *D. a. affinis*, while the lower abdomen is pale yellowish white. At a still younger stage the bird more nearly resembles the adult female, as shown by a moulting specimen from Carenage, Trinidad (No. 31,671, Collection Carnegie Museum, August 17).

Measurements.— Male: wing, 61-65 (average, 62); tail, 38-43 (39); bill, 14-16 (14.8); tarsus, 18-20 (19). Female (nine specimens): wing, 57-62 (60); tail, 37-40 (39); bill, 14.5-16 (15.3); tarsus, 18-20 (19).

Range.— Islands of Tobago and Trinidad, and south to the headwaters of the Yuruani River, eastern Venezuela.

Remarks.— Contrary to Mr. Hellmayr's implication, adult males of D. andrei differ very decidedly from those of D. a. affinis in their more purely white under parts, with no olivaceous shading on the flanks; the upper parts, too, are more purely gray, and also without any olivaceous wash. Females, besides being much whiter below, with much less buffy suffusion, have the back decidedly grayish in tone as compared with those of D. a. affinis. From D. a. spodionotus both adult and immature males

differ at a glance in being much whiter below and lighter, purer gray above, especially on the back. While the relationship of andrei with affinis and spodionotus is obvious, as maintained by Mr. Hellmayr, its characters are so strongly marked that I prefer to treat it as a distinct species, and I suspect that eventually it will be necessary to raise all the races of D. affinis here recognized to a similar rank.

The peculiarities of this form appear to have been remarked first by Dr. J. A. Allen, who nevertheless "lumped" all the various forms of this group under one name. Mr. Chapman referred these same specimens. collected by himself in Trinidad, and an addition to its avifauna, to D. spodionotus of British Guiana, but without having seen authentic specimens of the latter. It remained for Mr. Hellmayr to discriminate the form from both affinis and spodionotus, which he did in 1906. Two years later Mr. Ridgway described the Tobago bird under the name Dysithamnus mentalis oberi, and in his 'Birds of North and Middle America' he treated andrei also as a race of D. mentalis. The type of oberi is before me: while in very bad condition, it is unquestionably an immature male bird, in nowise different from Trinidad skins of the same age. A single female from Tobago (No. 30,624, Collection Field Museum of Natural History). which constitutes the sole basis of Mr. Cory's record above quoted, is also quite indistinguishable from Trinidad females, and I have accordingly no alternative but to consider oberi as a pure synonym of andrei. It may be well to call attention at this point, however, to the fact that Mr. Hellmayr refers two female individuals from this island (Tobago) to D. mentalis (i. e., D. mentalis lateralis), which is interesting, going to show that D. andrei is not conspecific with D. mentalis. Count Dalmas refers to specimens from Tobago as being like those from the Paria Peninsula, but without access to his specimens it is impossible to say positively to what species they belong. That D. andrei is not confined to Tobago and Trinidad, as heretofore supposed, but has in reality a much more extensive distribution, is indicated by a pair of birds, typical in every respect, in the collection of the Carnegie Museum, taken by Mr. M. A. Carriker, Jr., at El Callao, Venezuela, not far from Guacipati, on the Yuruani River, on May 24, 1910. Mr. Chapman, writing of its habits as observed in Trinidad, says that it "was found in small companies of not more than six individuals in the lower trees in the forests. They were generally associated with Myrmotherula The call, of three or four low, sweet notes, is given by both sexes. It is Thrush-like in tone, and resembles the soft, querulous alarm notes of a Robin (Merula migratoria)."

Specimens examined.— Tobago, 2. Trinidad: Carenage, 2; Heights of Aripo, 8; Heights of Orepouche, 4; Santa Emilia Estate, Poole, 3; Caparo, 2; Princestown, 6. Venezuela: El Callao, 2. Total, 29.