ART. 2. CRITICAL REMARKS ON THE WOOD-HEWERS

By W. E. CLYDE TODD

The Wood-hewers or Tree-creepers (Dendrocolaptidae) are represented in the collection of the Carnegie Museum by 2,544 specimens,\(^1\) belonging to 155 species and subspecies. The Wood-hewers are wholly neotropical in their distribution, and their center of abundance is in the equatorial region of South America. Studies made some years ago resulted in the description of eight new forms of this family, and a more recent critical study has revealed the existence of eleven additional subspecies which appear to be new to science. In connection with the descriptions of these new forms there are included herewith some taxonomic discussion of other known forms which seem to be in need of further elucidation. Certain of these studies were made possible only through the loan of specimens from other collections. I am deeply grateful to Mr. John T. Zimmer of the American Museum of Natural History and to Dr. Herbert Friedmann of the U. S. National Museum for the loan of key specimens of Wood-hewers from the collections of their respective institutions.

All measurements are in millimeters, and that of the bill is for the exposed culmen. The names of colors are taken mostly from Ridgway's "Color Standards and Color Nomenclature." Most of the localities appearing in the present paper were listed by the author in an earlier paper, on Hummingbirds (Annals Carnegie Museum, Vol. 29, 1942, pp. 365-370).

**Xiphocolaptes orenocensis paraensis** Pinto

Three specimens: Santarem, Colonia do Mojuy, and Apacy, Brazil.

This form was described by Sr. Oliveira Pinto (Papéis Avulsos Departamento de Zoologia, etc., São Paulo, 5, No. 15, 1945, 135) as a race of *Xiphocolaptes promeropirhynchus*, which according to Hellmayr's views is not conspecific with *X. orenocensis*. With this disposition I agree, after examination of the several forms involved. Pinto's type-series (all but one specimen) came from the right bank of the Rio Madeira, but his description applies well enough to our birds from the Rio Tapajóz. They resemble *Xiphocolaptes orenocensis berlepschi* Snethlage of the Rio Purús and upper Amazon, but the pileum is more blackish, less brownish, with

\(^1\) This number includes 249 specimens alienated from the collection by exchange.

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narrower shaft-streaks, and the bill is much darker-colored. According to the collector's notes, the maxilla in *paraensis* is "blackish," and the mandible is "intensely dark horn gray with blackish tip." In the Rio Purús specimens, however, the maxilla is "dark horn gray," and the mandible is "light horn gray with a faint bluish pearly gloss on the basal half." Hellmayr (1925, 285) also mentions these differences, as well as Griscom and Greenway (1941, 210), but they made no formal separation.

Compared with two specimens of true *orenocensis* (American Museum), our Rio Tapajóz birds have the bill darker-colored, while the striping on the underparts is much heavier, and the pileum is blacker. One of our specimens is more rufescent than the other two.

**Xiphocolaptes orenocensis orenocensis** von Berlepsch and Hartert.

Except for its deeper coloration, a single specimen from Manacapuru agrees well enough with two Orinoco skins, and should doubtless be referred to *orenocensis*, the range of which will have to be extended accordingly.

**Dendrocolaptes certhia ridgwayi** Hellmayr.

Messrs. Griscom and Greenway (1941, 208-9) remark that this series "supports Zimmer's comments [1934b, pp. 2-3] on the variability of this species." They add that "three Santarem birds are the *concolor* type," but I find myself unable to pick them out, and I unhesitatingly refer all our fifteen specimens from the east bank of the Rio Tapajóz to one and the same form, which, as these authors show, must bear the name *ridgwayi*.

**Dendrocolaptes certhia juruanus** von Ihering.

Twenty-three specimens: Hyutanahan, Nova Olinda, Arimã, Sao Paulo de Olivença, and Caviana.

Caviana birds are almost certainly subspecifically separable by reason of their paler coloration and narrower barring, but inasmuch as they are closely approached in these respects by certain of the Rio Purús series I do not care to take this step with only two specimens available. Birds from São Paulo de Olivença, on the other hand, in their heavier barring and their tendency to more rufescent coloration, approach *polyzonus* of Bolivia. If we discard the supposed record from Marabitanas on the Rio Negro, as suggested by Zimmer (1934b, 1), *juruanus* emerges as a race confined to the region south of the middle and upper Amazon.
Dendrocolaptes concolor von Pelzeln.

Nine specimens: Villa Braga and Itaituba, Brazil.

To my eye these birds are perfectly distinct from the east-bank birds, for which the name ridgwayi will have to be restored, as already said. The very fact that the two forms behave as they do, as described by Zimmer (1934b, 2-3), indicates that they are really distinct species. I find no specimens in our series which cannot certainly be referred to one or to the other.

Xiphorhynchus eytoni vicinalis, subsp. nov.

Type, No. 78,061, Collection Carnegie Museum, adult male; Apacy, Rio Tapajóz, Brazil, April 30, 1920; Samuel M. Klages.

Subspecific characters.—Similar to Xiphorhynchus eytoni eytoni (Sclater) of the Pará region of Brazil, but underparts with more buffy suffusion, and the abdomen usually tinged with clay-color; streaking of the upper- and underparts averaging heavier.

Range.—Rio Tapajóz region of Brazil, and eastward for an undetermined distance.

Remarks.—Mr. Zimmer (1934c, 1-4) has fully discussed the variations in the series of this and related forms examined by him. In spite of his dictum that eytoni is best left undivided, I agree with Griscom and Greenway (1941, 212) in believing that another form should be recognized. They call attention to the fact that Zimmer had no topotypes of eytoni. Certainly there is a definite line of demarcation between our twelve Benevides birds on the one hand and those from the Rio Tapajóz (twenty-five) on the other, as above indicated. I have examined also ten specimens (from Villa Bella Imperatriz, Borba, and Faro) which Zimmer calls eytoni, but which are not eytoni at all, but the new form I am describing herewith. Some of them come from the same places as undoubted specimens of guttatooides, from which they can at once be distinguished by the differently colored bill. X. guttatus guttatooides, be it noted, has a pale bill, while eytoni and the new form both have dark-colored bills (at least the maxilla is dark). X. g. guttatooides and the present form may be subspecies, separated ecologically, as Zimmer suggests, but would not this be a new kind of subspecies? I am inclined under the circumstances to rank them as species. Two specimens from Faro show that this new form ranges north of the Amazon.
Xiphorhynchus guttatus connectens, subsp. nov.

_Type_, No. 83,523, Collection Carnegie Museum, adult male; Obidos, Brazil, January 29, 1921; Samuel M. Klages.

_Subspecific characters._—Most nearly resembling _Xiphorhynchus guttatus polystictus_ (Salvin and Godman) of the Guianas and eastern Venezuela, but the underparts are more deeply suffused with buff, and the light stripes on the pileum, nape, and upperparts average heavier, and deeper buff. (Thirteen specimens examined.)

_Range._—Known only from the type-locality, but probably ranging westward to the Rio Negro and eastward for an indefinite distance, on the north bank of the Amazon.

_Remarks._—Messrs. Griscom and Greenway, who handled these specimens, referred them without comment to _polystictus_, but more careful comparison shows that they differ appreciably from that form, as it is represented by a series from Venezuela and French Guiana, in the respects pointed out above. They form a connecting link, in fact, between _polystictus_ and _guttatoïdes_, and come from the region between the respective ranges of these forms. As a rule, however, French Guiana forms usually range unchanged to the Amazon at Obidos.

Xiphorhynchus triangularis triangularis (Lafresnaye).

Of our series of twenty-seven specimens, all but four come from Venezuela, and should therefore represent _hylodromus_ Wetmore (1939, 2). Even with his type-series before me, I have great difficulty making out this form. Four specimens from Las Ventanas, Santander, Colombia, which may be considered to represent true _triangularis_, are scarcely separable, in my opinion. The light spotting of the underparts is perhaps a little less dense, but the difference is very slight, and I would question the validity of _hylodromus_. However, in the Western Andes of Colombia there lives a population about whose distinctness there can be no question. Let it be called, therefore,

Xiphorhynchus triangularis distinctus, subsp. nov.

Ten specimens: Heights of Caldas, Bitaco Valley, and La Cumbre, Colombia.

_Type_, No. 67,543, Collection Carnegie Museum, adult male; Bitaco Valley, Colombia, July 6, 1918; M. A. Carriker, Jr.

_Subspecific characters._—Similar to _Xiphorhynchus triangularis triangul-
laris (Lafresnaye) of the Eastern Andes of Colombia, but general coloration darker; upperparts between orange citrine and medal bronze (instead of citrine); rump and upper tail-coverts heavily shaded with argus brown; wings externally much darker (more rufescent, less olivaceous); tail bay (instead of auburn); underparts darker olive, the throat deeper buffy; and under tail-coverts less rufescent.

Range.—Subtropical Zone, Western (and Central?) Andes of Colombia.

Remarks.—Chapman had some specimens of this species from the Western Andes, but could “detect practically no racial variation,” except that birds from the “Central and Western Andes may average slightly more rufescent above” (1917, 420). But with smoothly and uniformly made-up skins available for comparison, the difference between birds from the Eastern Andes on the one hand and those from the Western Andes on the other is obvious, and it is too great to ignore, as Hellmayr and other authors have done.

The range of this form approximates that of equatorialis of the lower levels (Tropical Zone) in this region, but there is no reason to suppose that they intergrade, and I consider them specifically distinct.

Xiphorhynchus pardalotus caurensis, subsp. nov.


Subspecific characters.—Similar to Xiphorhynchus pardalotus pardalotus (Vieillot) of French Guiana, but general color of upperparts more rufescent, less olivaceous, and buffy streaks of upper- and underparts narrower and less pronounced.

Range.—Southern Venezuela, from the Rio Caura east to the Guiana frontier.

Remarks.—It is not strange that the geographical variation in this species has been overlooked, since satisfactory series for comparison are wanting in most collections. But with the specimens above listed, and a fine series (thirty-two skins) from French Guiana as well, it is at once obvious that they represent two different races. In the nominate form the upperparts (in fresh plumage) may be described as medal bronze of Ridgway, while in the Venezuelan form it is nearer Dresden brown. The underparts differ in a corresponding manner; the streaking on both the
upper- and underparts differs as aforesaid; it is less strongly marked in the Venezuelan race.

**Xiphorhynchus elegans ornatus** Zimmer.

Four specimens: São Paulo de Olivença, Brazil.

These were handled and listed by Zimmer (1934c, 7-10). They belong to a form closely allied to *elegans*, but in my opinion not conspecific with *spixii*, which form occurs, however, on the east bank of the Rio Tapajóz. That *ornatus* is not conspecific with *juruanus*, as it is given by Zimmer, is proved by the fact that they both occur at the same place—São Paulo de Olivença. Zimmer actually lists them thus, but suggests that one of them must have been taken “near?” that place. This is not the case. Specimens of both forms were actually taken on the same date, and Mr. Klages assures me that they came from precisely the same collecting-station. This circumstance definitely disposes of the case of *ornatus* and *juruanus*, and by implication that of *elegans* and *spixii* also. Even Hellmayr, who always tried to unite related forms as conspecies wherever possible, could not see his way clear to do so in these cases, and neither can I.

**Xiphorhynchus obsoletus multiguttatus** (Lafresnaye).

Twenty-three specimens: Hyutana han, Nova Olinda, and Arimã, Brazil.

Rio Purús specimens are referred to typical *obsoletus* by Count Gyldenstolpe (1945, 141), but I do not agree to this disposition. Since our ten specimens from São Paulo de Olivença and Tonantins compare favorably with Ecuadorian specimens of *X. obsoletus palliatus*, I would refer the Rio Purús birds to *multiguttatus*, described from Fonteboa. The two races are easily separable in series from each other, and from *obsoletus*.

**Xiphorhynchus necopinus** (Zimmer).

Of this species we have thirty-one specimens, from the following localities in Brazil: Santarem, Villa Braga (Rio Tapajóz), Hyutanahan, Nova Olinda, Arimã (Rio Purús), São Paulo de Olivença, Caviana, Islands near Manacapuru, and Rio Manacapuru (Rio Solimoës). In addition I have examined six specimens from the American Museum collection which were listed by the original describer. Our specimens indicate that the range of this form is actually more extensive than he suspected. Moreover, I am convinced that the resemblance, close as it is, between *necopinus* and *Dendroplex picus* is superficial and fortuitous, so to speak, and not indica-
tive of congeneric affinity. Zimmer suggested that it might become neces-
sary to submerge Dendroplex under Xiphorhynchus. I propose instead to
retain Dendroplex for D. picus and its allies, and to transfer necopinus to
Xiphorhynchus, where it undoubtedly belongs. Santarem specimens of
necopinus appear to be slightly smaller and duller than the others; how-
ever, I do not venture to separate them. We have two young birds (April
2), with dark-colored bills.

**Dendroplex picus rufescens**, subsp. nov.

Sixteen specimens: Santarem, Villa Braga, Itaituba, and Apacy, Brazil.

_Type_, No. 75,252, Collection Carnegie Museum, adult male; Villa
Braga, Rio Tapajóz, Brazil, December 1, 1919; Samuel M. Klages.

*Subspecific characters.*—Similar to *Dendroplex picus picus* (Gmelin) of
the Guianas and adjacent parts of Brazil, but underparts more rufescent,
less brownish, and light streaks on upper- and underparts wider and more
extended posteriorly. Similar also to *D. p. kienerii* (Des Murs) of the
middle Amazon, Rio Purús, etc., but averaging less rufescent below and
rather more rufescent above; markings on the underparts finer and less
extensive; size smaller. Wing (type), 101; tail, 86; bill, 30.

*Range.*—Certainly known only from the Rio Tapajóz (both banks),
but probably ranging eastward to the island of Marajó and westward to-
wards the Rio Madeira.

*Remarks.*—With the series before me I have no alternative but to
describe this race, although neither Zimmer nor Griscom and Greenway
considered it tenable. The characters it shows are in part those given by
Zimmer for his race *duidae*, but direct comparison with the latter elimi-
nates the possibility of identity therewith. The general color of the pos-
terior underparts in the present form is tawny olive; in true *picus* they are
considerably duller and more brownish in tone (near Saccardo’s umber).
In the color of the underparts in general this race is intermediate between
*picus* on the one hand and *kienerii* on the other. There is some variation
it is true, but the general difference is too great to overlook. In any event,
the form is as readily recognizable as are the races of *Xiphorhynchus
obsoletus*. The exact limits of its range, however, must be determined from
examination of specimens. In this connection it may be noted that speci-
mens from Caviana (opposite Manacapurú on the middle Amazon) are
clearly referable to *kienerii*. From this we may infer that *rufescens* does
not reach the Rio Madeira on the west; the form occurring on that
stream is probably *kienerii*. 
Dendroplex picus dugandi Wetmore and Phelps.

I had identified all our specimens of Dendroplex from the Santa Marta region of Colombia as D. picirostris, but without seeing the type or topotypes of that form. It was no surprise, therefore, when Messrs. Wetmore and Phelps described the bird of northern Colombia as a new race, dugandi. The surprise came when I discovered that while they considered specimens from the southwestern part of the Santa Marta region to be dugandi, they referred our birds from Bonda, Mamatoco, etc., to picirostris. I have again gone over our series very carefully, and can find no justification for dividing it up in such fashion. As I see it, all birds from the Santa Marta region proper belong to one and the same race, which I would call dugandi. They have been compared directly with eight specimens of picirostris from Riohacha (the type-locality) and vicinity, in the Goajira Peninsula. The difference is striking, and dugandi is an excellent race, but the describers failed to state that their comparisons were made with topotypical material. In all our specimens the white of the underparts is much more restricted than in picirostris; the bill, too, is shorter. Two specimens from Dibulla show intermediate tendencies.

Lepidocolaptes layardi duidæ Zimmer.

One specimen from Tonantins, Rio Solimoës, belongs to this race, which is known to reach the upper Rio Negro. The specimen in question compares favorably with six of duidæ in the American Museum.

Lepidocolaptes layardi madeiræ (Chapman).

Four specimens: Santarem, Villa Braga, Mirirituba, and Arimã, Brazil. Hellmayr handled these specimens some years ago, and noted his identifications on the labels; they are duly listed by him (1925, 327). Griscom and Greenway, however (1941, 214), set his work aside, and argued that the Rio Tapajóz must be the demarcation line between the respective ranges of layardi and madeiræ. The specimens before me do not at all support this view. They show that madeiræ is found on both banks of the river, and not just on the west bank alone. These specimens agree with each other, and differ from five skins of typical layardi from Benevides (near Pará) in just the way that Chapman claims. Incidentally, I am of the opinion that layardi should be kept specifically separate from both fuscicapillus and albolineatus, from both of which it differs by valid characters.
Lepidocolaptes angustirostris certhiolus (Todd).

In describing this form some years ago I compared it with bivittatus, from which it differs as I said. It is actually a form intermediate between bivittatus and angustirostris—rather nearer the latter, but lighter rufous above, and not so heavily streaked below. The indications are that it has a rather restricted range—a consideration that may account for the difficulty some authors find in recognizing it.

Campylorhamphus procurvoides successor, subsp. nov.

Nineteen specimens: Islands near Obidos, Hyutanahan, Nova Olinda, Arimã, São Paulo de Olivença, and Caviana (opposite Manacapurú), Brazil.

Type, No. 92,371, Collection Carnegie Museum, adult male; Nova Olinda, Rio Purús, Brazil, August 3, 1922; Samuel M. Klages.

Subspecific characters.—Similar to Campylorhamphus procurvoides probatus Zimmer of the Rio Tapajóz region of Brazil, but general coloration more rufescent, less brownish, and pale streaking of the upper- and underparts heavier. Similar also to C. procurvoides multistriatus (Snethlage), but general coloration more rufescent, pale streaking less pronounced, and pileum brownish rather than blackish.

Range.—Brazil, south of the Amazon, and west of the Rio Madeira; reappearing on the islands near Obidos.

Remarks.—This is the undescribed race referred to by Zimmer (1934a, 11) in discussing a single specimen from Teffé. This specimen, courteously sent me for examination, fits right in with the above series. Count Gyldenstolpe (1945, 142) also had but a single specimen from the Rio Juruá, which he was unable to place. With the good series of specimens now available it is obvious that they represent a race which is fully as well differentiated as any of its conspecies. Much to my surprise I find that six specimens from islands in the Amazon near Obidos belong to this same form, although we have one specimen of true procurvoides from Obidos itself.

Glyphorynchus spirurus, subsp.?

Four specimens: Manacapurú and Rio Manacapurú.

These resemble G. spirurus castelnauddii, but are paler above and rather more extensively streaked below. They do not exactly fit in any of the
described races. I sent them to Mr. John T. Zimmer for his opinion, and he writes as follows:

“The Glyphorynchus offer a problem. In the abdominal streaking they are most like spirurus and some of my specimens from Faro are very like them in other respects, although the average Faro bird agrees too well with the Guianan to suggest any real separation there. Your birds undoubtedly are paler-backed than almost all the series of spirurus.

“I have extremes of castelnaudii with about as much streaking on the belly as your 98,522 and the lighest extreme of that form at hand is lighter than your darkest specimen, but again the average is darker than in your birds. Your 105,489 and 98,522 could be lost in the series of castelnaudii, but the other two would stand out by reason of their ventral streaks, not by other characters.

“I would expect my birds from Muirapinima (west bank of the lower Negro) to agree with your Manacapurú birds, but two of them are darker above and one of these darker ones is the only one of the four that has any noticeable belly streaks and not very much at that. On the whole they probably are best kept in rufigularis, where I first placed them.

“It looks possible, therefore, that the Manacapurú population is not to be matched exactly by any of the named forms, unless you have more from there less well marked than these.”

However, I do not venture to describe the Manacapurú bird at this time; it would only complicate the definition of the ranges of the allied forms. In this connection I might call attention to G. spirurus inornatus, described by Zimmer and restricted by him to the west bank of the Rio Tapajóz. We have four skins of this race from the west bank of this stream (Villa Braga, Apacy), but these can be matched by others from the east bank. To my eye the Rio Tapajóz series of Glyphorynchus cannot be divided on this basis at all; it is all one race. It was compared primarily with castelnaudii, from which it differs as was said. As a matter of fact, however, it is much more closely related to cuneatus, from which it differs only in the slightly warmer brown shade of the underparts, apparent in series.

**Glyphorynchus spirurus subrufescens**, subsp. nov.

Twelve specimens: Murindó, El Tambo, Andagoya, Potedó, and Malagita, Colombia.

*Type*, No. 66,470, Collection Carnegie Museum, adult male; Potedó, Chocó, Colombia, May 2, 1918; M. A. Carriker, Jr.
Subspecific characters.—Similar to Glyphorynchus spirurus sublestus Peters, but smaller; general coloration more rufescent, less brownish; and streaked area on breast less extensive.

Range.—Valleys of the Rio Atrato (except lower part) and of the Rio San Juan, western Colombia.

Remarks.—These birds would be referred to sublestus by Peters (1929, 443) and by Zimmer (1934d, 5), but they certainly differ from a specimen from the lower Atrato (Soatata), which in its turn closely resembles a series examined from eastern Panama (American Museum). The peculiarities of the western Colombia bird would scarcely be remarked unless a series was available—a circumstance which probably accounts for the fact that thus far they have gone undetected. The richer general coloration of this population and the restriction of the breast markings are obvious when series are compared. Seven adult males average: wing, 68 mm.; tail, 62.7; bill, 12. Ten males of sublestus from Panama and Costa Rica: wing, 74; tail, 70; bill, 13.4. Costa Rican birds may be regarded as intermediate between sublestus and pectoralis. Birds from the region around the Gulf of Maracaibo in Venezuela may be separable as still another subspecies.

Sittasomus griseicapillus viridior, subsp. nov.

Six specimens: Palmarito and Rio Quiser, Bolivia.

Type, No. 80,141, Collection Carnegie Museum, adult male; Palmarito, Rio San Julian, Chiquitos, Bolivia, May 22, 1918; Jose Steinbach.

Subspecific characters.—Similar to Sittasomus griseicapillus viridis Carriker of the montane region of Bolivia, but general coloration much lighter, more yellowish green, and the remiges more rufescent.

Range.—Chiquitos region of eastern Bolivia.

Remarks.—This remarkable new race adds another to those hailing from this particular region. It is well marked, and is perfectly distinct from viridis, of which we have nine specimens from various localities in the mountains and foothills of Bolivia. The upperparts are buffy citrine, and the underparts are similar but paler; the primaries externally are Sudan brown, and the secondaries are Sanford’s brown. All the characters of viridis are carried a step further in the present race.

Sittasomus amazonus sordidus, subsp. nov.


Type, No. 33,807, Collection Carnegie Museum, adult male; Rio Yuruan, Venezuela, March 25, 1910; M. A. Carriker, Jr.
Subspecific characters.—Similar to *Sittasomus amazonus* amazonus Lafresnaye, but somewhat smaller, and general coloration duller; upperparts with a wash of antique brown; primaries edged externally with Dresden brown (instead of buckthorn brown or dull grayish brown); underparts (near) deep olive gray (instead of deep grayish olive); under tail-coverts amber brown (instead of ochraceous tawny). Wing (type), 82; tail, 69; bill, 16; tarsus, 17.

Range.—Venezuela, from the Rio Caura east to British Guiana.

Remarks.—The characters of this race, although perfectly obvious upon comparison, are not easy to formulate. Hellmayr (1925, 259) referred birds from Venezuela to *amazonus* without hesitation, but our series from that region, although small, is definitely distinct. The underparts almost entirely lack the greenish shade so characteristic of *amazonus*; instead they are dingy grayish brown. Comparison has been made with specimens from the upper Amazon, which are believed to correctly represent *amazonus* (described from Peru).

**Dendrocincla merula obidensis**, subsp. nov.

*Type*, No. 83,250, Collection Carnegie Museum, adult female; Obidos, Brazil, December 31, 1930; Samuel M. Klages.

Subspecific characters.—Similar to *Dendrocincla merula* merula of French Guiana, but larger, and chin-spot paler buffy.

Measurements.—One male: wing, 108; tail, 76; bill, 25; tarsus, 25. Two females: wing, 102, 113; tail, 78, 80; bill, 24.5, 28; tarsus, 25.

Range.—Brazil, north of the Amazon (Obidos; Faro).

Remarks.—With only one specimen at the time, Zimmer (1934a, 15) was unwilling to describe this race, but now that we have two more (both from Obidos), closely matching the first specimen, there can remain no good reason for refusing to recognize it by name. It is very distinct by reason of its larger size. The wings of French Guiana specimens of true *merula* run 92, 99, 100; the tails, 65, 66, 67. Except for the slightly paler chin-spot, there is no difference in coloration.

**Dendrocincla meruloides neglecta**, subsp. nov.

Twenty-one specimens: Nova Olinda, Arimã, São Paulo de Olivença, Tonantins, opposite Tonantins, Manacapuru, and Rio Manacapurú, Brazil.

*Type*, No. 96,388, Collection Carnegie Museum, adult male; São Paulo de Olivença, Brazil, April 10, 1923; Samuel M. Klages.
Subspecific characters. — Similar in general to *Dendrocincla meruloides phaeochroa* von Berlepsch and Hartert of the Orinoco Valley, Venezuela, but decidedly larger; upperparts slightly darker, more olivaceous; and underparts slightly paler (less rufescent) brown.

Measurements. — Ten males: wing, 108-114 (average, 111.6); tail, 86-96 (91.5); bill, 28-31 (30.2); tarsus, 22.5-27 (25). Eight males of *D. m. phaeochroa*: wing, 100-110 (103); tail, 78-95 (84); bill, 27-30 (28); tarsus, 22-25 (23.5).

Range. — Valley of the Amazon (both banks), above the Rio Negro, and south to include the lower Rio Purús. Rio Madeira and upper Amazon records probably belong here.

Remarks. — In working out this form it became necessary to examine and compare the other members of the *fuliginosa-meruloides* group, of all of which we have an ample series. My conclusions differ from those of Zimmer (1934a, 18-20), in that I recognize two species instead of uniting them all under one. With the nominate race *fuliginosa* I would range *rujo-olivacea* and *atirostris* as conspecifics. These agree in having the bill dark-colored (the maxilla at least), the throat with distinct mottling or barring, and the breast with fine buffy streaks. The buffy postocular stripe is usually well marked. These three races are readily distinguishable from each other by their different general coloration. *D. fuliginosa atirostris* was originally described from Bolivia, but its range was extended to the west bank of the Rio Tapajóz by Zimmer (1934a, 19) and by Griscom and Greenway (1941, 219). There are indications that the birds of these two respective regions are not precisely the same, but into this point I do not care to go further at present.

Under the second species, *meruloides*, I would range, besides the nominate race, *phaeochroa, lafresnayei, christiani, ridgwayi*, and the new form I am describing herewith. In these forms the bill tends to be lighter-colored, although in the northern races, *christiani* and *ridgwayi*, it is almost as dark as in *atirostris*. The underparts are almost unicolored, only the throat being paler than the rest. The breast is without pale streaks, and the throat is either plain or else with very faint and narrow indications of cross-barring—not at all like it is in the *fuliginosa* group. The pale postocular stripe is restricted and indistinct, and sometimes wanting. I am satisfied that these two groups represent two specific types, even though at present I have no proof that they occur together at any one place. It is hard to believe that the new race has not been taken by other collectors, but if so it must have been misidentified, or confused with
**phaeochroa.** It is nevertheless perfectly distinct from the latter, as shown by a comparison in series.

Incidentally, I find that *D. meruloides christiani* of western Colombia is an easily recognizable race when smoothly and uniformly made-up specimens are used for comparison; in coloration it is intermediate between *lafresnayei* and *ridgwayi*, but separable from both.

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**ZIMMER, JOHN T.**

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