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STUDIES OF PERUVIAN BIRDS. NO. XLIII[1]

NOTES ON THE GENERA *DACNIS*, *XENODACNIS*, *COEREBA*, *CONIROSTRUM*, AND *OREOMANES*

By John T. Zimmer

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

Dacnis cayana glaucogularis
Berlepsch and Stolzmann

Dacnis cayana glaucogularis Berlepsch and Stolzmann, 1896, P. Z. S. London, p. 336—La Merced, Perú; ♂; Warsaw Mus.

La Merced, 3 ♂, 2 ♀; Borgoña, 1 ♀; Pozuzo, 2 ♂, 1 ♀; Tulumayo, 2 ♂, 2 ♀; Perené, 3 ♂, 1 ♀; Idma, 2 ♂, 2 ♀; Río Inambari, 1 ♂; Pomará, 2 ♂, 2 ♀; Río Negro, 1 ♂, 2 ♀; Huarandosa, 3 ♂, 3 ♀; Sarayacu, 3 ♂; Valle (Río Huallaga), 1 (?); Puerto Indiana, 1 ♂, 1 ♀; Apayacu, 3 ♂, 1 ♀; Río Mazán, 1 ♂, 1 ♀; mouth of Río Curaray, 5 ♂, 5 ♀.

This form ranges widely through the Humid Tropical Zone of Perú without any differentiation. Extralimitally, it reaches northern and eastern Bolivia, eastern Ecuador, and eastern Colombia. Birds from extreme eastern Colombia, on the Brazilian boundary, across the Río Uaupés from Tahuapunto, are typical *cayana*, but specimens from Florencia and La Morelia are rather closer to the present form, although not perfectly typical. Two Bogotá birds and a male from Villavicencio are similar, although the Villavicencio bird approaches *cayana* closer than any of the others both in the blueness of its general color and in the dark tone of the throat. Nevertheless, the throat is not so blackish as in true *cayana*, and most males of that form are not so blue as the Villavicencio bird. Consequently, I believe it best to keep all the birds from the eastern face of the Andes, from Colombia to Bolivia, in *glaucogularis*.

Peruvian records are from Perico, Pebas, Río Javarri, Huambo, Yurimaguas, Tarapoto, Nuevo Loreto, Jeberos, Chamicuros, lower Ucayali, Vista Alegre, Río Colorado (Chanchamayo), San Ramón, Río Cadena, Chaquimayo, and Huaynapata.

Dacnis lineata lineata
(Gmelin)

Motacilla lineata Gmelin, 1789, Syst. Nat., I (2), p. 990—based on "La Pitpit à coiffe bleue" of Buffon; Cayenne.

C[assicus] d[acnis] tricolor Merrem, 1826, *in* Ersch and Gruber, Allg., Encycl. Wiss., XV, p. 282—based on "pitpit à coiffe bleue" of Mauduyt; Cayenne.

Dacnis angelica (Filippi MS.) Bonaparte, 1845, Atti Sesta Riun. Sci. Ital. Milano, p. 404, note—Brazil; ♂; Milan Mus.

Dacnis melanotis Strickland, 1851, Contrib. Orn., Part 1, p. 16—Cayenne; Cambridge (England) Mus.

Dacnis arcangelica Bonaparte, 1857, Bull. Soc. Linn. Normandie, II, p. 31—new name for *D. angelica* auct.—Bogotá.

Dacnis modesta Cabanis, 1873, Jour. für Orn., XXI, p. 64—Monterico, Perú; ♀; Warsaw Mus.

Sylvia cayana (not *Motacilla cayana* Linnaeus), Vieillot and Oudart, circa 1824, Gal. Ois., I (2), p. 269, Pl. clxv—"en Amérique sous la zône torride."

Mouth of Río Curaray, 11 ♂, 9 ♀; upper Amazon, 1 ♂; Apayacu, 14 ♂;

[1] Earlier papers in this series comprise American Museum Novitates, Nos. 500, 509, 523, 524, 538, 545, 558, 584, 646, 647, 668, 703, 728, 753, 756, 757, 785, 819, 860, 861, 862, 889, 893, 894, 917, 930, 962, 963, 994, 1042, 1043, 1044, 1045, 1066, 1095, 1108, 1109, 1126, 1127, 1159, 1160, and 1168.

Puerto Indiana, 1 ♂, 2 ♀; Río Mazán, 1 ♀; Orosa, 5 ♂, 1 ♀; Sarayacu, 3 ♂; Huarandosa, 2 ♂; San Ignacio, 1 ♀; Pomará, 4 ♂, 1 ♀; Río Seco, 2 ♂, 2 ♀; Río Negro, 1 ♂, 1 ♀; Tayabamba, 1 ♂; Nuevo Loreto, 1 ♂, 1 (?); Tulumayo, 2 ♂, 1 (?); Perené, 3 ♂; La Merced, 2 ♂, 1 ♀; Pozuzo, 5 ♂, 1 ♀; Astillero, 1 ♂.

The variability of the males has been the subject of earlier comment (1930, Field Mus. Nat. Hist. Publ., Zool. Ser., XVII, p. 422) and is substantiated by the larger series now before me. The females also are subject to a great deal of variation for which I can find no adequate explanation other than that of individual nature. Some females are very brown above, others are distinctly greenish olive, and some have a bluish tinge. Likewise, on the under parts, there may be a decided buffy tinge or a more whitish one, sometimes verging on light yellow. Some of the browner birds are obviously immature, but some are not clearly so although they may be in the first winter plumage. In any case, the differences noted appear to have no taxonomic significance.

Peruvian records are from Pebas, Moyobamba, Cumbase, Jeberos, Chamicuros, Huambo, Vista Alegre, Río Colorado, Garita del Sol, Borgoña, Monterico, "Upper and Lower Ucayali," Cosñipata, Huaynapata, and Río Cadena. Count Berlepsch's manuscript notes contain reference to a bird from Rioja, not yet recorded in print.

Dacnis flaviventer
D'Orbigny and Lafresnaye

D[acnis] flaviventer D'Orbigny and Lafresnaye, 1837, Mag. Zool., VII, Cl. 2, 'Syn. Av.,' 1, p. 21—Yuracares, rep. Boliviana; ♂, ♀, cotypes in Paris Mus.

La Pampa, 2 ♂; Lagarto, 2 ♀; Sarayacu, 6 ♂, 3 ♀; Puerto Indiana, 4 ♂, 2 ♀; "Upper Amazon," 1 ♂; mouth of Río Curaray, 1 ♂, 1 ♀; Pomará, 3 ♂, 1 ♀.

No apparent distinctions are evident in a long series of this species from all parts of its range.

Peruvian records, not represented by specimens in the American Museum, are from Pebas, Nauta, Iquitos, Samiria, Río Javarri, Yurimaguas, and Cosñipata.

Dacnis albiventris (Sclater)

Pipraeidea albiventris Sclater, 1852, Rev. Mag. Zool., (2) IV, p. 8—"Nouvelle Grenade" = Bogotá, Colombia; ♂; Paris Mus.

Apayacu, 1 ♂.

This bird has been compared with three Bogotá males, one of which is labeled as from the "Llanos of the Río Meta." The Peruvian bird has a somewhat more slender bill than the others and perhaps a slightly lighter tone of blue on the back and anterior under parts, but it is not fully adult, having an admixture of whitish feathers in the throat and breast. Hellmayr (1935, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, Pt. 8, p. 283, footnote) comments on an adult male from Iquitos which had the bill both shorter and slenderer than Bogotá skins. Perhaps there is a separable form to be recognized when more material is available for study.

With some trepidation I refer a female from Mt. Duida, Venezuela, to this form. It agrees well with the males in the shape of the bill and particularly with the Peruvian male in the slenderness of this member and has the wing and tail of approximately the same dimensions as the birds of the other sex. Without a Duida male, it is impossible to say whether this assignment is correct, but there is no other related species to which this female can be referred nor any to which it shows as much resemblance in structural details as to *albiventris*.

I am unable to recognize a separate genus "*Hemidacnis*" for this species. As pointed out by Sclater himself, the originator of the genus, it "scarcely differs [from *Dacnis*] except in its shorter bill" (1886, Cat. Birds Brit. Mus., XI, p. 17).

Xenodacnis parina Cabanis

Xenodacnis parina Cabanis, 1873 (May), Jour. für Orn., XXI, p. 312—Maraynioc, Perú; type or cotypes in Berlin Mus.; cotype or paratype formerly in Warsaw Mus., now lost.

Pariayacu, 1 ♂; Anta, Cuzco, 1 ♂, 1 ♀; Machu Picchu, 1 ♂; Idma, 1 ♂.

There is some confusion in regard to

the type locality and the repository of the type specimen or specimens of this species. Cabanis states clearly that the specimens he was describing were collected by Jelski and he gives the locality as "Maraynioc." Later, Taczanowski (1874, P. Z. S. London, p. 510) cites only Monterico in a paper that purported to give a complete list of Jelski's material. Still later, Taczanowski (1884, Orn. Pérou, I, p. 434) notes only Maraynioc as the source of his material of the species, accredited to Jelski. This would strongly suggest a *lapsus calami* on the part of Taczanowski in writing "Monterico" in place of Maraynioc, but Hellmayr (1935, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, Pt. 8, p. 283) gives Monterico as type locality. In view of the other evidence, I suspect a *lapsus* on the part of Hellmayr also, especially since he does not include any Monterico specimens in his list of specimens examined.

Dr. Stresemann advised me some years ago that No. 21,342 of the Berlin Museum was marked by Cabanis as the type of this species. Hellmayr (*loc. cit.*) noted the "types" as in the Berlin Museum. Sztolcman and Domaniewski (1927, Ann. Zool. Mus. Pol. Hist. Nat., VI, 2, p. 178) list as type a male from Maraynioc, formerly in the Warsaw Museum but now lost. Sclater also claims "one of the typical specimens" for the British Museum. Since Cabanis described the species from specimens received by the Berlin Museum, the type or types presumably remained in that institution.

The male specimens at hand are not uniform in color. The Machu Picchu and Idma birds are virtually alike and agree in their dark blue coloration. The Pariayacu specimen is rather lighter and duller on the back (near Deep Orient Blue, instead of Dark Cadet Blue); the top of the head is nearly as dark as in the Machu Picchu bird, being in considerable contrast to the back, and the under parts are a little paler and duller than in the Machu Picchu bird, but not so markedly so as the back. This individual is just completing a molt (August 28) and is in very fresh condition. The rectrices, however, although fresh, are long, slender, rather acute at the tips, and of relatively soft texture, suggesting that the bird is not fully adult, probably in first winter plumage. Taczanowski (1884, Orn. Pérou, I, p. 434) discusses young males as being as extensively blue as the adult males, though with the color duller and less pure, with a greenish trend.

A male from Anta (July 28) is rather certainly not adult, but it differs from the Pariayacu bird in several particulars. The top of the head is lighter, but the back is darker, showing less contrast between the two areas. The belly is centrally soiled whitish, and there are pale tips on most of the blue abdominal feathers. The rectrices are of adult length and shape but are rather softer in texture. The remiges also are a little soft and somewhat duller in color than those of the adult males, while each of the inner feathers has a rather large, pale patch on the outer web near the tip.

The female from Anta is apparently not fully adult, since the blue feathers on the top of the head are still coming in to replace the older, gray ones. The mantle is Light Brownish Olive, agreeing better with Cabanis's original account than with Taczanowski's note of "olive grayish"; the lower back is more grayish, although it has only a suggestion of the strong bluish wash mentioned by Taczanowski. The under parts are rich cinnamomeous, paling to buff on the belly. The wings have little of the blue color on the lesser upper coverts that is described for this area, but the inner remiges have conspicuous, whitish, latero-terminal patches on the outer webs which are not mentioned in any descriptions I have seen of the female plumage. The young male from Anta, as noted above, has the same pale markings on the wings, though they are not so clearly marked. The significance of this feature and of the other characters mentioned is not clear with the limited amount of material available and must await future investigation.

With the record from Monterico in doubt, the only locality not represented by material at hand is Maraynioc.

The systematic position of this genus is a matter for speculation until an investigation can be made of its internal anatomy. It seems a little out of place in the Coerebidae, but there is no other family to which it bears any greater apparent relationship.

Xenodacnis petersi petersi
Bond and de Schauensee

Xenodacnis petersi BOND AND DE SCHAUENSEE, 1939 (Dec. 20), Not. Nat., No. 40, p. 1—Yánac, Dept. Ancash, Perú; ♂; Acad. Nat. Sci. Phila.

Yánac, 1 ♂.

I have a single specimen of this interesting form, received from the Academy of Natural Sciences in exchange. It is a young male, just assuming adult plumage, enough of which is in place to demonstrate the characters of the species. The differences from *X. parina* are not very pronounced, except for the considerably greater size of *petersi*. The bright streaks on a large part of the blue feathering are suggested in *parina* though inconspicuously so. The distinctions between the two forms are such that intergradation could easily exist somewhere in the broad area intervening between the respective ranges, but it has yet to be demonstrated. Until some closer approach in range and taxonomic characters can be demonstrated, the two groups are best left specifically distinct.

Xenodacnis petersi bella
Bond and de Schauensee

Xenodacnis petersi bella BOND AND DE SCHAUENSEE, 1939 (Dec. 20), Not. Nat., No. 40, p. 2—Atuén, Dept. Amazonas, Perú; ♂; Acad. Nat. Sci. Phila.

Not in the collection before me. In a sense this form is intermediate between typical *petersi* and *parina*, being smaller than *petersi* and with somewhat less strongly marked bright streaks. The more greenish tinge of the male plumage ought to be substantiated by more material since it is within the possible bounds of individual (and "ageal") variation, as demonstrated by the specimens of *parina* discussed earlier.

Coereba flaveola dispar,
new subspecies

TYPE from Candamo, southeastern Perú. No. 146,441, American Museum of Natural History. Adult male collected December 10, 1916, by Harry Watkins; original No. 431.

DIAGNOSIS.—Similar to *C. f. chloropyga* of eastern Brazil but with bill averaging distinctly longer. No differences of color or pattern of any taxonomic value, although *chloropyga* reaches a greater extreme of pale throat.

RANGE.—Upper Tropical Zone of central and southeastern Perú from the Ucayali and the upper reaches of the Huallaga rivers to the Río Tavara; and in northern Bolivia.

DESCRIPTION OF TYPE.—Top of head blackish, with only a faint brownish tinge, changing rather abruptly on the nape to the Deep Mouse Gray of the back; rump near Olive Yellow; upper tail-coverts like the back but with indistinctly paler tips. A broad white superciliary reaches posteriorly as far as does the dark cap and is kept from the base of the bill by an extremely narrow line of blackish; lores and a stripe through the eye like the cap; this stripe broken at the center of the upper eyelid (except for some dark bases of the white feathers) but broad beneath the orbit, and changing to the color of the back on the sides of the neck; a fine spot of the same dark color at the base of the mandible; throat Pale Neutral Gray; breast Wax Yellow × Strontian Yellow with indistinct traces of olive on the centers, giving a slightly mottled appearance; sides narrowly and flanks broadly Light Yellowish Olive; belly paler than breast, passing into Marguerite Yellow on the under tail-coverts. Wings blackish; primaries with fine, light grayish outer margins; secondaries with these margins darker and a little broader; tertials with most of outer webs the color of the back; upper wing-coverts with grayish outer margins; primary-coverts and alula clearer blackish; carpal margin Strontian Yellow; under wing-coverts and basal part of inner margins of remiges white. Tail dull blackish; outer two pairs of rectrices with prominent white terminal spots on inner webs; remainder with narrow whitish terminal margins. Bill (in dried skin) dull blackish, tinged with brown at base of mandible; feet brown. Wing, 60 mm.; tail, 36; exposed culmen, 13; culmen from base, 16; tarsus, 17.

REMARKS.—Females like the males.

It is with some hesitation that I name the Peruvian population in distinction from the east-Brazilian birds, but a long series of the latter now available shows that the difference in the length of bill is constant enough to warrant such a step. One hundred and sixteen examples from Brazil have the culmen from base 13 to 16 mm. in length, averaging 14.4; thirty-

four from central and southeastern Perú and northern Bolivia range from 15.2 to 17.5 mm., averaging 16. Only nine of the Brazilian birds reach 15.5 or over; only two of the Peruvian birds are less than 15.5. Eighty of the Brazilian birds are less than 15; seventeen of the Peruvian-Bolivian birds are 16 or over.

There is less distinction between the two series in the matter of wing-length, and although the series of *dispar* does not appear to go below 56 except in the case of a single female (one of the two with shorter bills), while *chloropyga* sometimes drops to 48, both reach 62 in several cases, and only one *dispar* is 63 and one 65. The bill appears to furnish the only satisfactory guide to distinction.

The separation of *dispar* from *chloropyga* is desirable on distributional grounds because of the interposition of *alleni* in Matto Grosso, which rather effectively blocks a continuity of range between northern Bolivia and Brazil. Over fifty examples from Chapada are so consistent in their coloration that I see no objection to maintaining *alleni* as distinct. None of the Matto Grosso birds reaches so dark an extreme as even the average east-Brazilian bird and none of the latter, in fully adult plumage, is so pale as the average Matto Grosso bird, although some overlap must be admitted. Three birds from Utiarity and Campos Novas that have been assigned by earlier authors to *chloropyga* are so nearly intermediate that I believe they should be assigned to *alleni*, especially in view of the geographical position of the localities.

On the other hand, a single specimen from the "Campos" of the Province of Sara, Bolivia, is very close to *alleni* except that the rump is somewhat brighter yellow than in that form. It is smaller than any *dispar* (culmen from base, 14.1) and has the upper parts pale and the throat relatively light gray, and I believe is best assigned to the Matto Grosso form. A male in Field Museum of Natural History, from Buena Vista, Santa Cruz, in the same general region, is large enough (culmen, 15.5) to belong to *dispar*. More material from this region will be needed to determine the proper assignment of the east-Bolivian population.

It is curious that there is no record of any form of the species from the south bank of the upper Amazon, between the Peruvian boundary and the east bank of the Rio Madeira. Numerous collections have been made in this general region, and it would be supposed that this bird would have been found if it occurred there. As a matter of fact, specimens from the lower Ucayali and the north bank of the upper Amazon, west of the western bank of the lower Rio Negro, are rare. Without material from this region, I am unable to place the few existing records with full assurance. As may be noted from the list of specimens examined, *dispar* is found on the uppermost part of the Ucayali, at Santa Rosa and Lagarto, but there is some uncertainty that it goes any farther to the northward along that stream. Bartlett collected the species on the "Upper and Lower Ucayali," which means from Cashiboya to Sarayacu, both well downstream, and Whitely also obtained it at Sarayacu—a young bird which Taczanowski (1884, Orn. Pérou, I, p. 442) referred to *luteola*, although his description of the specimen makes no mention of any white speculum on the wing, a character unusually strongly developed in both adults and young of the form in question. Perhaps Taczanowski was misled by Sclater and Salvin's earlier reference of Bartlett's specimens to *luteola* (1866, P. Z. S. London, p. 179; 1873, *op. cit.*, p. 260). None of the Ucayali birds could, except by the most striking anomaly, belong to true *luteola* (from northern Venezuela) and in making such assignment, Sclater and Salvin offer no comments of any kind. Concurrently (1873, P. Z. S. London, p. 185) these authors referred a specimen from southeastern Perú (San Antonio) to *chloropyga*, which would seem to indicate that they found the Ucayali birds different from the San Antonio specimen, presumably, judging from the assignment to *luteola*, with a strong white speculum. Nevertheless, Finsch (1871, Verh. K. K. Zool.-Bot. Ges. Wien, XXI, p. 781) had, in the interim, made a careful examination of Bartlett's

Ucayali birds (2 ♂♂) which he could not distinguish from *chloropyga*, defined by him as always lacking the speculum. Later (1886, Cat. Birds Brit. Mus., XI, p. 40) Sclater continues the 1866 reference under *luteola* without including Perú in the range of that form, omits mention of the 1873 reference under any form, but assigns Whitely's young Sarayacu bird to "*mexicana*."

In all this confusion, the only clear picture is drawn by Finsch who comments definitely on the Ucayali specimens. As noted above, Taczanowski, although he describes a young Ucayali bird, says nothing about a speculum in that specimen, thus furnishing negative evidence that there may not have been one. Accordingly, I follow Finsch in his treatment of the Ucayali birds so far as to recognize their lack of a speculum, which makes their assignment to *dispar* the logical one.

Another record from northeastern Perú about which there is doubt is one from Pebas, based on a skin in the Raimondi Collection. Taczanowski (1884, Orn. Pérou, I, p. 442) assigned the specimen to *chloropyga* and if his description of the form in question was drawn up from the Pebas bird, there is no doubt that it could not belong to *intermedia*, although *intermedia* occurs well down on the Río Napo, only a little way to the westward. The question remains, however, as to whether Pebas is in the range of *dispar* or at the extreme western end of the range of *minima* which might extend from the western bank of the Rio Negro (from which I have specimens) along the northern shore of the Amazon to Peruvian territory. Either condition is possible. Until some positive evidence is forthcoming, however, the record must be left without subspecific assignment.

I have a single example from Nuevo Loreto, Río Mixiollo, which shows a very slight amount of white beyond the tips of the upper primary-coverts, not so much as occurs normally in *intermedia* but more than appears in the series of *dispar*. The back is drab rather than grayish but may be matched in either series. The yellow of the under parts is relatively deep in tone, agreeing with many *intermedia* but equaled by only one *dispar*. The uropygium is duller than in most *intermedia* and agrees best with *dispar*. The bill is broken and furnishes no taxonomic clue. Without being able to place the specimen definitely in one form or the other, I am giving it the intermediate assignment that agrees with the intermediate nature of the specimen.

Records that thus appear to belong without question to *dispar* are from San Antonio, Amable Maria, Paltaypampa, Sarayacu, and "Upper and Lower Ucayali" [= Cashiboya and Sarayacu]. The record from "Chimabamya" cited by Lowe (1912, Ibis, p. 502) seems to be an error for "Chanchamayo," based on a specimen in the Rothschild Collection now before me, whose somewhat illegible label might be misread as indicated.

Coereba flaveola magnirostris (Taczanowski)

Certhiola magnirostris TACZANOWSKI, 1880, P. Z. S. London, p. 193—Callacate, Perú; ♂; formerly in Warsaw Mus., now lost.

The culmen (from base) in this form ranges from 17.5 to 19.5 mm., exceeding, with the exception of a single example of *dispar*, the measurements of that member in any of the adjacent subspecies. The wing averages slightly longer, also, but not sufficiently for purposes of identification. The white speculum on the wing distinguishes it from *dispar*, the length of bill and the general color from *intermedia*, and the size from *pacifica*. It is an excellently characterized form in spite of its restricted range. It is confined to the eastern side of the western Andes of Perú, west of the middle Marañón.

Localities of record from which I have not seen material are Callacate, Guajango, Huamachuco, and "Chira River."

Coereba flaveola pacifica Lowe

Coereba pacifica LOWE, 1912 (Febr. 28), Bull. Brit. Orn. Club, XXIX, p. 85—Pacasmayo, Perú; ♂; British Mus.

This form also has a very restricted range in the arid coastal region of Perú from Eten to Chimbote. It is very like

magnirostris in color but has a much smaller bill; culmen from base, 13–14.5.

Additional records are from Pacasmayo, Eten, Minocucho, and Paucal.

Coereba flaveola intermedia

(Salvadori and Festa)

Certhiola intermedia Salvadori and Festa, 1899, Bol. Mus. Zool. Torino, XIV, No. 357, p. 13—Gualaquiza and Zamora, e. Ecuador; Turin Mus.

This form ranges more widely than has been suspected heretofore, certainly farther to the eastward across a portion of northwestern Brazil and possibly a little farther south to northern Perú.

Specimens from Moyobamba have been recorded earlier (Zimmer, 1930, Field Mus. Nat. Hist. Publ., Zool. Ser., XVII, p. 416, in text), and two examples from Paletillas still earlier by Chapman (1926, Bull. Amer. Mus. Nat. Hist., LV, p. 637). Through the kindness of Mr. James Bond, I have examined three more males from Moyobamba and one from La Laja, Dept. Piura, in the collection of the Academy of Natural Sciences of Philadelphia. The La Laja bird agrees with the Paletillas specimens; the Moyobamba birds, with the east-Ecuadorian series (the distinctions will be discussed below). At first glance, two of the Moyobamba skins might be mistaken for examples of *dispar* since they appear to lack the conspicuous white speculum on the wing, but both birds have the wings in molt, and the white area has not yet fully emerged from concealment under the upper primary-coverts. The third specimen, a young male, has the speculum quite evident.

Birds from the western side of the Andes in southwestern Colombia, western Ecuador, and extreme northwestern Perú on the average are somewhat different from the specimens from west of the cordillera. The rump of the western birds is rather lighter and brighter yellow than that of the eastern examples, though not so bright as in *columbiana*. In size, the western birds are somewhat smaller in average wing-length, less pronouncedly in tail-length, as the following figures show; they are based on twenty-one males and eight females from the west and seventeen males and eighteen females from the east.

	Wing	Tail
♂,	W., 51.2–57.8 (av., 55)	27–36 (av., 31.2)
	E., 54–61 (57.6)	30.2–35.1 (32.6)
♀,	W., 49–52.3 (50)	25.1–30 (27.9)
	E., 50–60 (54.3)	25.5–33.5 (30)

As will be noted, the overlap is considerable, making measurement an unsafe criterion. Moyobamba birds are all toward the large end of the series of eastern birds, though not included in the figures given above. One male from this locality has the wing 62.5, exceeding any of the Ecuadorian specimens; the others are within the figures given.

The color of the rump is not perfectly diagnostic, either. Some of the eastern birds have this area more greenish yellow than do any of the western examples, a few of which, especially those from the northern part of the range, come very close to *columbiana;* others are hardly different from some of the eastern birds.

In view of the dubious distinction of the populations on opposite sides of the cordillera, therefore, it seems unwise to propose any taxonomic separation. In color the western birds are exactly intermediate between *intermedia* and *columbiana* (which also occurs on both Amazonian and Pacific slopes), while the smaller size of some of the western birds may have some significance connected with the small west-Peruvian form, *pacifica*. Taczanowski (1884, Orn. Pérou, I, p. 441, in text) quotes Stolzmann to the effect that "*C. peruviana*" occurred at Pacasmayo, Huambo, and Chirimoto, although on the preceding page he does not list Huambo and Chirimoto under that form with the Pacasmayo record, nor does he give these localities in his discussions of "*chloropyga*" or "*luteola*." Stolzmann appears to have distinguished the Huambo, Chirimoto, and Pacasmayo birds from *magnirostris* which he found at Callacate. The Pacasmayo birds belong to *pacifica* (not distinguished at that time), but the Huambo and Chirimoto birds, of which no specimens appear to have been taken, must be either *intermedia* or *dispar*. Since my Nuevo Loreto

bird is intermediate between these two forms, as discussed under *dispar* on a preceding page, and since Huambo and Chirimoto are not far from Moyobamba where *intermedia* occurs, I believe that these sight records by Stolzmann may be included tentatively under *intermedia*. There are no other Peruvian records.

The fact that Stolzmann associated them with the Pacasmayo form, which has a white speculum, indicates but does not prove that they also possessed this feature. If the speculum is present, the records in question should go with *intermedia*, an assignment suggested also by the characters of a Nuevo Loreto specimen discussed under *dispar* on a preceding page. Huambo birds are, however, not necessarily identical with Moyobamba birds (cf. Zimmer, 1929, Proc. Biol. Soc. Wash., XLII, pp. 91–94) and the Huambo and Chirimoto population may be of an intermediate nature like the Nuevo Loreto specimen. I include the records under *intermedia* with a query.

The northeastward extension of the range of *intermedia* is shown by a series of specimens from the Cassiquiare and the Uaupés rivers, in southwestern Venezuela and northwestern Brazil. Twenty-one skins from Buena Vista, two from Solano, and four from Cucuhy, east of the Río Cassiquiare, are referable to *minima;* only two of them show a slight amount of white exposed at the base of the primaries. On the other hand, twenty-two examples from the Río Huaynia, on the west bank of the Cassiquiare, and three from the Rio Uaupés, west of the upper Negro (Tahuapunto and Iauarete) are nearly as perfectly referable to *intermedia*, although three of the Huaynia birds have no speculum, and two others have a very small one. The Cassiquiare (and probably the upper Rio Negro) forms the dividing line between the ranges of the two forms. The record from Cobati by Wallace and that from Marabitanas by Pelzeln should, on the basis of the series at hand, be transferred to *intermedia*. Pelzeln's record from Lamalonga, Rio Negro, may be left with *minima* since a specimen from Yavanari, in the same general region, has no speculum, and birds from both banks of the lower Rio Negro also agree with *minima*.

The occurrence of *intermedia* and *minima* on opposite sides of the Cassiquiare is interesting, since only a little way to the northward four other subspecies occur. On Mt. Duida the population belongs to *roraimae;* on the Caura River, *guianensis* reaches the westernmost limit of its distribution; at Caicara, Ciudad Bolívar and Altagracia, on the Orinoco, the birds are quite definitely assignable to *luteola;* and at Ayacucho, the birds agree best with *columbiana*.

The Ayacucho birds are particularly interesting. Of the seven specimens at hand from that locality, four have just a trifle more white at the base of the primaries than is exhibited by one or two extreme specimens of *guianensis* from British Guiana, about what is shown by three out of ten skins from the Caura Valley. Three Ayacucho birds have a large white speculum, smaller than that of *luteola* which differs furthermore in the darker color of the back. None of the Caura birds has the speculum so well developed. However, both Caura and Ayacucho birds average slightly larger in length of wing and tail than the series from British Guiana. The yellow on the uropygium is bright as in both *guianensis* and *columbiana* and is distinctly brighter and clearer than in *intermedia* from the Cassiquiare and other parts of its range. Nevertheless, the Ayacucho birds may be intermediates between *guianensis* and *intermedia*, but they fit so well into the series of *columbiana* that if they are to be referred to any single subspecies it must be to that one.

Thus in southwestern Venezuela there are six distinguishable forms in a relatively limited area, perhaps not surprising when the multiplicity of forms in the West Indies is taken into consideration.

I am puzzled by Cherrie's statement that there is a specimen of *guianensis* from Ciudad Bolívar in the American Museum, collected by Klages. I can find no such specimen nor any record of it in the museum register. Of seven skins of *Coereba* sent by Klages from Ciudad

Bolívar, all are typical *luteola*. There is, however, a specimen of *guianensis* sent by the same collector from La Unión, Río Caura, and I suspect that an error of transcription occurred somewhere in Cherrie's notes on the species. Other specimens from Ciudad Bolívar and from the Caura are in agreement with the distribution here indicated.

Coereba flaveola minima (Bonaparte)

Certhiola minima Bonaparte, 1854, Compt. Rend. Acad. Sci. Paris, XXXVIII, p. 259—Cayenne; Paris Mus.

Coereba chloropyga cayennensis Lowe, 1912, Ibis, p. 506—Oyapock, Cayenne; British Mus.

As noted in the discussion of *dispar*, there is a possibility that the bird recorded by Taczanowski from Pebas belongs to this form. No positive assertion can be made until material from that locality is available for study. There are no other Peruvian records of possible application here.

[*Certhiola peruviana* Cabanis, 1865, Jour. für Orn., XIII, p. 413—Perú; repository of type unknown.

The proper assignment of this name is quite impossible in the absence of the type or a knowledge of the type locality within reasonable limits. It may have been based on a specimen of one or other of what are now distinguished as *pacifica*, *magnirostris*, or *intermedia*.

Since identification is impossible, the name is best left unassigned to any of the three forms in any of which it would, if certified, have priority over the accepted name.]

Specimens Examined

C. f. chloropyga.—
Brazil:
(States of Rio Grande do Sul, Santa Catharina, Espirito Santo, Bahia, Piauhy, Minas Geraës, São Paulo, Rio de Janeiro, Ceará, and Maranhão), 132 (12 in Field Museum of Natural History, Chicago);
Pará (Prata, Bemfica, Utinga, Capoeira, and Pará), 57 (2 in Field Mus. Nat. Hist.);
Río Majary (Recreio); Rio Tocantins (Mocajuba and Baião); Rio Xingú (Porto de Moz and Tapará); Rio Tapajoz (Tauarý, Limoãl, and Igarapé Amorin), 59.

C. f. alleni.—
Brazil:
Matto Grosso, Chapada, 51;
Utiarity, 2 ♂;
Campos Novas, 1 ♀.

C. f. subsp.?.—
Bolivia:
Prov. Sara, Campos, 1 ♀.

C. f. dispar.—
Bolivia:
Mapiri, 3 (?);
Apolobamba, 1 ♂;
Pitiguaya, 1 (?);
Buena Vista, 1 ♂[1].
Perú:
Río Inambari, 3 ♂;
La Pampa, 2 ♂;
Candamo, 3 ♂ (incl. type);
Tulumayo, 4 ♂, 1 (?);
La Merced, 1 ♂, 1 ♀;
Chanchamayo, 1 ♀;
Lagarto, 3 ♂, 1 ♀;
Santo Rosa, 2 ♂;
Chinchao, 3 ♂[1], 2 ♀[1];
Vista Alegre, 2 ♂[1], 2 ♀[1];
Hac. Buena Vista, 1 ♂[1];
Huachipa, 1 ♂[1], 1 ♀[1].

C. f. dispar × *intermedia.*—
Perú:
Nuevo Loreto, 1 (?).

C. f. intermedia.—
Perú:
Moyobamba, 3 ♂[1], 1 ♀[1], 3 ♂[2];
mouth of Río Curaray, 3 ♀;
Paletillas, 1 ♂, 1 ♀;
La Laja, 1 ♂[2].
Ecuador:
(numerous localities), 83.
Colombia:
(Ricaurte, Buenavista, and Tumaco), 7.
Brazil:
Rio Uaupés (Tahuapunto and Iauarete), 3.
Venezuela:
Río Cassiquiare, junction of Río Huaynia, 22.

C. f. magnirostris.—
Perú:
Cabico, 3 ♂;
Melohago, 1 ♂;
Jaen, 3 ♂;
Huancabamba, 3 ♂, 1 ♀, 1 ♂[3];
Perico, 4 ♂, 1 ♀, 1 (?), 1 ♂[3];
Viña, 2 ♂;
Malca, 1 ♂;
Cajabamba, 1 ♀;
Bellavista, 4 ♂[3];
Cajamarca, 1 ♀[1].

C. f. pacifica.—
Perú:
Virú, 4 ♂, 3 ♀;
Poroto, 1 ♂;

[1] Specimens in Field Museum of Natural History, Chicago.
[2] Specimens in Academy of Natural Sciences, Philadelphia.
[3] Specimens in Museum of Comparative Zoölogy, Cambridge.

Trujillo, 1 ♂, 2 ♀;
Chimbote, 1 ♂;
Cartavia, 1 ♀[1];
Chepen, 1 ♂.

C. f. columbiana.—
COLOMBIA:
(numerous localities), 35.
PANAMÁ:
(Panamá R. R., Capeti, Cituro, Agua Dulce, and Tacarcuna), 11.
VENEZUELA:
Río Orinoco, Ayacucho, 2 ♂, 4 ♀, 1 (?).

C. f. caucae.—
COLOMBIA:
(Cali, San Antonio, Río Frío, and east of Palmira), 8.

C. f. montana.—
VENEZUELA:
(Mérida region), 27.

C. f. luteola.—
COLOMBIA:
(Carthagena, La Playa, and Simu River), 5;
(Santa Marta region), 7.
VENEZUELA:
(north coast from Estado Falcón to the Paria Peninsula), 43;
Río Orinoco (Ciudad Bolívar, Agua Salada, Altagracia, and Caicara), 19.
MARGARITA ISLAND: 3.
TRINIDAD: 32.
TOBAGO: 3.

C. f. roraimae.—
VENEZUELA:
Mt. Duida, 4;
Auyantepui, 1;
Roraima, 5.

C. f. guianensis.—
VENEZUELA:
Río Caura (Suapure, La Prición, and La Unión), 9.
BRITISH GUIANA:
(Mines District, Rockstone, and Wismar), 10.

C. f. minima.—
VENEZUELA:
Río Cassiquiare (Buena Vista and Solano), 21.
DUTCH GUIANA: 10.
FRENCH GUIANA: 7.
BRAZIL:
Rio Negro (Yavanari, Cucuhy, Tauapessasu, Muirapinimá, Igarapé Cacao Pereira, and Manaos), 28;
Faro, 10;
Monte Alegre, 1;
São Antonio de Cachoeira, 1;
Rio Cotinga, 2.

Conirostrum speciosum speciosum (Temminck)

Sylvia speciosa (WIED MS.) TEMMINCK, 1824, Nouv. Rec. Pl. Col., Livr. 49, Pl. CCXCIII, fig. 2—Rio de Janeiro; Amer. Mus. Nat. Hist.

D[acnis] analis D'ORBIGNY AND LAFRESNAYE, 1837, Mag. Zool., VII, Cl. 2, 'Syn. Av.,' p. 21—Chiquitos, Bolivia; ♂; Paris Mus.

Sylvia erythropus DESCOURTILZ, 1856, Orn. Brés., Pt. 4, p. 37, Pl. XLII, fig. 2—Rio de Janeiro; repository of type unknown.

A male from Candamo, southeastern Perú, has been recorded by Chapman (1926, Bull. Amer. Mus. Nat. Hist., LV, p. 645) as intermediate between *speciosum* and *amazonum*, but it is distinctly closer to *speciosum*, being little if at all darker in general coloration than extreme examples from eastern Brazil. The principal difference from typical *speciosum* is found on the sides of the head. In *speciosum* the lores and whole subocular space are ashy, becoming whitish on the lower eyelid, and occasionally there is similar whitish just above the eye. In the Candamo bird, the lores and subocular region are darker and more grayish, without any white on the eyelid, although there are suggestions of pale shaft-streaks on the auriculars. One specimen of *speciosum* from Urucum, Matto Grosso, Brazil, shows an approach toward this condition, although the bird otherwise is lighter in color than the Candamo skin. Unless there exists a population in southeastern Perú with constancy of the character mentioned, a matter needing proof, the Candamo specimen is best referred to *speciosum*.

There are no other records from Perú other than those discussed under *amazonum*.

Conirostrum speciosum amazonum (Hellmayr)

Ateleodacnis speciosa amazonum HELLMAYR, 1917 (Febr. 25), Verh. Orn. Ges. Bay., XIII (1), p. 106—Tarapoto, northeastern Perú; ♂; Frankfort Mus.

Males of this form as represented in northern Perú, eastern Ecuador, and both banks of the Amazon are pronouncedly darker than the same sex of *speciosum* and lack the pale area below the eye and on the lores that is found in almost all examples of the east-Brazilian form (cf. account of *speciosum*). The females are said to be indistinguishable in the two forms, but I am not sure that the statement does not need revision. I have at

[1] Specimens in Academy of Natural Science Philadelphia.

hand a bird sexed as a female, from Villa Bella Imperatríz, south bank of the lower Amazon, which is quite different from females of *speciosum*. The gray-blue of the head is darker; the back is much darker and slightly bluish; the breast and flanks are pale grayish, although the throat has a tinge of buff; the under tail-coverts are largely light cinnamomeous. As in *speciosum*, the lores, superciliary region, and sides of the head below the eye are soiled whitish.

With only this bird to represent the female sex of *amazonum*, I am not sure that the characters mentioned are constant, and there is the further possibility that the specimen is wrongly sexed and is, in reality, an immature male. It does not, however, look like a young bird, for the plumage, though worn, is relatively firm in texture, and the rectrices, somewhat acute in immature males of *speciosum*, are quite broadly rounded in the Amazonian specimen. I have been unable to find a description of females from the upper Amazonian region, and the plumage of that sex as described appears to have been drawn up from Guianan examples, which I am not certain are properly referable to *amazonum*.

I have three adult males, one young male and one female, from the Rio Surumú, northern Brazil, that differ perceptibly from the Amazonian specimens. The males have the upper parts lighter than those of the Amazonian examples, approaching light Tyrian Blue in the lightest example, and the under parts likewise are paler in color with a greater extension of white on the belly. One specimen from "Bogotá," Colombia, agrees very well with them; another "Bogotá" skin is hardly different from the Amazonian specimens. The female from the Surumú is indistinguishable from females of *speciosum*. The young male, molting into adult plumage, has the new feathers of the upper parts as pale grayish blue as the average adult male of *speciosum*. The sides of the head below the eye in the adult males are dark as in *amazonum;* in the female and the young male, they are whitish as in the corresponding plumages of *speciosum*.

It appears probable that there may be a separable form on the Surumú and in the Guianas (whence I have no material), but Hellmayr (1935, Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, Pt. 8, p. 316) found no distinctions from *amazonum* in four birds from the Rio Branco. I hesitate, therefore, to propose a formal separation until a good series from the critical region is available for study. The allocation of east-Colombian birds will then be open for further examination.

I am unable to find any characters by which to separate *"Ateleodacnis"* from *Conirostrum*, nor have I seen any characters mentioned for such a separate genus. It was originally proposed as a subgeneric division of the genus *Dacnis*, merely by inclusion of several species under that name and without any diagnosis. Later it was elevated to generic rank, also without description. The fact that early authors placed the various species of *"Ateleodacnis"* in the genus *Dacnis* and those of *Conirostrum* almost without exception in *Conirostrum* may have led more recent writers to continue the generic distinction between these two groups. I believe this course cannot be maintained.

Both *Conirostrum* and *"Ateleodacnis"* have the bill relatively acute and conical; general proportions are not different; the tongue is relatively simply and not very deeply bifid at the tip, quite different from the condition in *Dacnis*, judging by samples removed from dried specimens of each of these groups. The shape of the tip of the tongue in *Conirostrum* (including *"Ateleodacnis"*) lends considerable support to the position taken by Ridgway (1902, Bull. U. S. Nat. Mus., L, pp. 375–377, 391, 425, 426) that this genus belongs to the Wood Warblers and not to the Honey Creepers. Comprehensive anatomical studies should be made, however, before the transfer is approved.

Records from Perú belonging to *C. s. amazonum* are from Tarapoto, Huambo, Río Ucayali, Pintobamba, and Maranura. The assignment of a Maranura female to this form in the absence of a male from the same locality was made provisionally by

Hellmayr (*tom. cit.*, p. 317, footnote 1), but a Pintobamba male, from nearby, across the Río Urubamba, was assigned without question to *amazonum*, leaving little doubt that the Maranura specimen belongs to the same form.

SPECIMENS EXAMINED

C. s. speciosum.—
BRAZIL:
"Rio de Janeiro," 1 ♂;
State of Bahia, 6 ♂, 1 ♀, 1 (?);
Pernambuco, 2 ♂;
Piauhy, 1 ♂;
Santa Catharina, 1 (?);
Paraná, 3 ♂, 2 ♀;
Maranhão, 2 ♂;
Matto Grosso, 13 ♂, 4 ♀;
"Brazil," 1 [♂].
ARGENTINA:
Ledesma, Jujuy, 1 ♂.
PARAGUAY: 9 ♂, 7 ♀, 3 (?).
BOLIVIA:
Río Cachimayo, Sucre, 1 ♂;
California, Santa Cruz, 1 ♂.
PERÚ:
Candamo, 1 ♂.

C. s. amazonum.—
PERÚ:
"Upper Ucayali" [? = near Cashiboya], 1 ♂.
ECUADOR:
lower Río Suno, 1 ♂.
COLOMBIA:
"Bogotá," 2 [♂].
BRAZIL:
Rio Madeira, Rosarinho, 1 ♂;
Rio Amazonas, Villa Bella Imperatríz, 1 ♀;
Rio Jamundá, Faro, 3 ♂;
Rio Surumú, Frechal, 4 ♂, 1 ♀.

Conirostrum sitticolor sitticolor Lafresnaye

Conirostrum sitticolor LAFRESNAYE, 1840, Rev. Zool., p. 102—Bogotá; Mus. Comp. Zoöl., Cambridge, Mass.

Chapman (1926, Bull. Amer. Mus. Nat. Hist., LV, p. 641) recorded three specimens from El Tambo, Perú, as being paler below than Ecuadorian and Colombian specimens. Thirteen additional specimens from the Western Andes of northern Perú show the same tendency and reach a paler extreme, in fully adult plumage, than all but one example I have seen from more northern localities. The exception is a female from Peña Blanca, Santander, Colombia, preserved in the Academy of Natural Sciences of Philadelphia, which is as pale as any adult Peruvian specimen. Nearly half of the west-Peruvian birds at hand may, however, be matched by the palest Ecuadorian and Colombian specimens, including about one-third of the northern specimens.

In addition to the average lightening of abdominal coloration, there are other divergencies that are definitely in the direction of *cyaneum* of central and southern Perú. Various examples show a tendency toward the development of the blue superciliary stripe of *cyaneum*, working forward from the bluish sides of the neck, occasionally as far as the posterior line of the orbit. The black of the throat and chest is duller than in the more northern birds, and the lower border of the chest shows a certain amount of gray margining.

On the Eastern Andes, across the Marañón, the specimens available average darker below, more like *cyaneum*, though not so deeply colored as the darker Ecuadorian and Colombian specimens of *sitticolor;* the superciliary stripe reaches a greater development, extending as far forward as the middle of the orbit; but the grayish margins on the lower chest-feathers are developed variably only as much as in the West-Andean examples.

Except for the slightly paler extreme of ventral coloration exhibited by the West-Andean birds in Perú, the characters shown by all the north-Peruvian examples are distinctly intermediate between those of *sitticolor* and those of *cyaneum*, with no sharp break at any point. I am unwilling, therefore, to propose separation of the Peruvian birds which are best referable to *sitticolor*.

Records are from Cutervo and Paucal.

Conirostrum sitticolor cyaneum Taczanowski

Conirostrum cyaneum TACZANOWSKI, 1874, P. Z. S. London, p. 512—Sillapata, Perú; type formerly in Warsaw Mus., now lost.

In this form we have another case of a gradation of characters correlated with geographical distribution but without sharp definition. Specimens from near Panao, preserved in Field Museum of Natural History, have the throat blackish and the chest bluish gray; the superciliary stripe

reaches anteriorly to the posterior border or to the middle of the orbit. Specimens from the Junín region sometimes have the throat blackish, usually blue-gray with little black, and the superciliary stripe always reaches the middle of the orbit (in the series examined) and sometimes to the edge of the lores. A single example from the Occobamba Valley has no black on the throat and has the superciliary as long as any of the Junín specimens. One skin from southeastern Perú and two from northwestern Bolivia are similar to the Occobamba bird in respect to the characters mentioned but have the lower under parts distinctly deeper rufous, although one of the Junín specimens closely approaches them. The lightest Junín specimen has a paler belly than the darkest examples of *sitticolor* from the Western Andes of northern Perú.

The whole Peruvian series, therefore, shows a gradual succession of characters, from the blue-gray throat, long superciliary stripe, and dark rufous belly of the southeastern birds to the black throat, non-existent superciliary stripe, and equally dark belly of the Colombian and Ecuadorian birds, passing through various stages of intermediacy which include a casual lightening of the belly color. The series could be broken at several points and names applied to the resultant fragments, but it seems best to apply names here only to the gray-throated and black-throated extremes. The third form of the species, *intermedium* of the Mérida region of Venezuela, combines the black throat of *sitticolor* with the strong superciliary stripe of *cyaneum* and varies in belly color from the darkest extreme of *sitticolor* to a hue a little deeper than is shown by Bolivian examples of *cyaneum*.

Records of *cyaneum* are from Sillapata and Pariayacu.

SPECIMENS EXAMINED

C. s. intermedium.—
VENEZUELA:
(Mérida, Hechisera, Escorial, Nevados, Culata, and El Valle), 9 ♂, 1 ♀, 1 (?).

C. s. sitticolor.—
COLOMBIA:
(El Piñón, Laguneta, Valle de las Pappas, Almaguer, Chipaque, Santa Isabel, Cundinamarca, and "Bogotá"), 6 ♂, 7 ♀, 4 (?);
La Leonera, Caldas 2 ♂[1], 1 ♀[1];
Peña Blanca, Santander, 1 ♂[1], 1 ♀[1].
ECUADOR:
"Quito," Mojanda, above Baeza, "Napo," w. Corazón, Pichincha, above Otovalo, Gualea, Macas, upper Sumaco, Taraguacocha, Asilan, Zuñac, and Salvias), 10 ♂, 9 ♀, 5 (?);
Papallacta, 4 ♂, 2 ♀, 1 ♀[1];
Oyacachi, 1 ♂, 1 ♀, 1 ♂[1].
PERÚ:
El Tambo, 1 ♂, 2 (?), 3 ♂[1];
Palambla, 1 ♀[1];
Chugur, 2 ♀;
Taulis, 2 ♂, 4 ♀;
Chira, 1 ♀[1];
Llui, 1 ♂[1], 2 ♀[1];
Leimebamba, 1 ♂;
Molinopampa, 1 ♂[2];
east of Balsas, 1 ♂[2].

C. s. cyaneum.—
PERÚ:
above Panao, 1 ♂[2], 2 ♀[2];
Rumicruz, 3 ♂, 1 ♀;
Maraynioc, 3 ♂, 4 ♀;
Tocopoqueu, Occobamba Valley, 1 ♀;
Limbani, 1 ♂.
BOLIVIA:
Cocapata, 1 ♂;
"Yungas," 1 (?).

Conirostrum bicolor minor (Hellmayr)

Ateleodacnis bicolor minor HELLMAYR, 1935 (Sept. 16), Field Mus. Nat. Hist. Publ., Zool. Ser., XIII, Pt. 8, p. 320—Rio Madeira, Brazil (below junction of the Rio Mahisi); ♂; Vienna Mus.

Mouth of the Curaray, 2 ♀. These two females are the only Peruvian examples of this species at hand. They agree with other examples from the south bank of the Amazon, including the lower stretches of the Madeira and Tapajoz rivers. There are no other records from Perú.

Conirostrum margaritae (Holt)

Ateleodacnis margaritae HOLT, 1931, Auk, XLVIII, p. 570—Céo do Arary, above Parintins, north bank of the Amazon, Brazil; ♂; U. S. Nat. Mus.

I have no Peruvian examples of this interesting bird which Hellmayr records from Nauta or Pebas (apparently the same specimen cited in both ways).

[1] Specimens in Academy of Natural Sciences, Philadelphia.
[2] Specimens in Field Museum of Natural History, Chicago.

The resemblance of this species to *bicolor* is very striking, but since both occur in at least one locality, Igarapé Auará, lower Rio Madeira, Brazil, the two cannot well be united.

Conirostrum cinereum cinereum
D'Orbigny and Lafresnaye

Conirostrum cinereum D'ORBIGNY AND LAFRESNAYE, 1838, Mag. Zool., VIII, Cl. 2, 'Syn. Av.,' 2, p. 25—part; Yungas, Bolivia; [= Inquisivi, Prov. Sicasica]; Paris. Mus.

I have no Bolivian material for comparison but follow previous authors who have found at least the southeast-Peruvian birds in agreement with Bolivian. The specimens at hand from the part of Perú adjacent to Bolivia answer well to descriptions and figures of *cinereum*, having the top of the head noticeably darker than the back, tending to blackness and even distinctly black in some cases. The other extreme shows black centers on the feathers of the crown and occiput but with the margins of the plumes distinctly grayish, presenting less contrast to the gray of the mantle but more contrast to the forehead (behind the white frontal band) which is more definitely sooty. In an intermediate condition, the sides of the crown, above the whitish superciliary, are also more blackish than the median area. The specimen with purest black cap has the feathers abraded to such an extent that it probably has lost the gray edges that may have been present, traces of which still remain.

Birds from the Urubamba Valley and the Junín region all have some gray on the margins of the head-feathers, and in one female from Chipa, Junín, there is such a reduction of black that the top of the head is little different from the back. My notes on a young male from above Huánuco and an adult male from La Quinua (specimens in Field Museum and not now at hand) indicate that these specimens are much like the Chipa female, having the gray breast and sides of *cinereum* with the cap slightly, but not pronouncedly, darker than the back. These two birds, therefore, without much question should be assigned to *cinereum* and not to *littorale* where I once placed them (1930, Field Mus. Nat. Hist. Publ., Zool. Ser., XVII, p. 421). The assignment is rendered otherwise plausible since La Quinua and the mountains above Huánuco are on the same Andean ridge as Chipa, though on the opposite side, in zonal continuity.

Records of *cinereum* are from Paucartambo, Ollachea, Occobamba Valley, Urubamba, Huancavelica, Lachocc, Anco, Lircay (sight record), Yauli (sight record), Urcos, Anta, Lucre, Pariayacu, Maraynioc, Tarma, Calca, and Pisac.

Conirostrum cinereum littorale
Berlepsch and Stolzmann

Conirostrum cinereum littorale BERLEPSCH AND STOLZMANN, 1896, P. Z. S. London, p. 336—Lima; ♂; Warsaw Mus.

There appear to be no clear distinctions among the birds of the seacoast, those of the higher elevations of the western slope of the Western Andes, and those of the Marañón Valley. Perhaps the examples from the higher elevations average slightly larger than those from lower elevations, but the difference is not pronounced and furnishes no good line of demarcation. Males from Tarapacá, Chile, have the wing 56–61 mm.; Cocachacra, Lima, Matucana, Moquegua, and Huaral, Perú (sea-level to 1,367 feet), 55–60; Chugur (western slope of Western Andes at 9,000 feet), 63, 63; Huancabamba (Marañón Valley at 6,500 feet), 58–61; Cajabamba (9,500 feet), 64; Cullcui (10,400 feet), 64. Females fail to show a corresponding distinction. There is considerable individual variation in the color of the upper parts which may be clear gray or suffused with light brownish, but it is found in all parts of the range. One male from Huancabamba has a touch of sooty shading on the forehead and sides of the crown, suggesting *cinereum cinereum*, but the under parts are as in other *littorale*.

A single specimen from Grau, near Túmbez, extends the range of this subspecies farther to the northward than has been reported heretofore.

Although *cinereum* and *fraseri* are restricted to the Humid Temperate Zone,

littorale inhabits both Temperate and Tropical zones in their arid subdivisions.

Records of *littorale* are from Pacasmayo, Cutervo, Chusgón, Huamachuco, Leimebamba, Coracora, and Tacna.

SPECIMENS EXAMINED

C. c. cinereum.—
PERÚ:
Santo Domingo, 1 ♂;
Limbane, 3 ♂, 1 ♀;
Oconeque, 1 ♂;
Cuzco, 2 ♂, 2 ♀;
Ollantaytambo, 1 ♂, 1 ♀;
Huaracondo Cañon, 1 ♂;
Acobamba, 2 ♀, 1 (?);
Oroya, 2 ♂;
Chipa, 4 ♂, 1 ♀;
La Quinua, 1 ♂[1];
mountains near Huánuco, 1 ♂[1].

C. c. littorale.—
CHILE:
Chacalluta, 1 ♂[1];
Pica, Tarapacá, 7 ♂[1], 2 ♀[1].
PERÚ:
Cocachacra, 4 ♂, 3 ♀;
Moquegua, 1 ♀, 1 (?);
Arequipa, 1 ♀, 2 (?);
Tingo, Arequipa, 1 ♂;
Lima, 2 ♂;
Vitarte, 1 ♂;
Chimbote, 1 ♂[1];
Chugur, 2 ♂, 2 ♀;
Macate, 1 ♂[1], 1 ♀[1];
Grau, 1 (?);
Huancabamba, 3 ♂, 3 (?);
Chachapoyas, 1 (?);
Cajamarca, 1 ♀[1];
Santiago, 2 ♀;
Cajabamba, 1 ♂, 1 ♀;
Cullcui, 1 ♂[1], 2 ♀[1].

C. c. fraseri.—
ECUADOR:
(Papallacta, Quito, Cayambe, Ibarra, Lloa, Loja, Cumbaya, Taraguacocha, Bestion, Pomasqui, Yanacocha, Pichincha, Salvias, Chimborazo, Llanganati, El Paso, and Riobamba), 14 ♂, 15 ♀, 1 (?).
COLOMBIA:
Valle de las Pappas, 3 ♂, 1 ♀.

Conirostrum albifrons atro-cyaneum
Lafresnaye

Conirostrum atro-cyaneum LAFRESNAYE, 1848, Rev. Zool., XI, p. 9—"Colombie, près de Rio Napo" = e. Ecuador; ♂; Mus. Comp. Zoöl., Cambridge.
La Lejia, 4 ♂, 2 ♀.

There is no decided difference between north-Peruvian birds and those from Ecuador although the Peruvian males have the cap slightly brighter blue on average. The difference is not constant and may indicate a trend toward *sordidum* of central and southern Perú.

Records are from Tambillo, Palto, and Tamiapampa.

Conirostrum albifrons sordidum
Berlepsch

C[onirostrum] atro-cyaneum sordidum BERLEPSCH, 1901 (January), Jour. für Orn., XLIX, p. 83, in text—San Antonio, w. Yungas, Bolivia; Frankfort Mus.

Cushi Libertad, 1 ♂; Rumicruz, 2 ♂; Chilpes, 1 ♂; Utcuyacu, 2 ♂, 1 ♀; Idma, 5 ♂, 1 ♀; San Miguel, 2 ♂.

These birds are well-marked intermediates between *atro-cyaneum* and *lugens* of the Cochabamba region of Bolivia. As intimated above, the top of the head is brighter blue in the males than is the case in *atro-cyaneum*, in which respect they agree with *lugens*. The outer margins of the primaries are faintly greenish instead of bluish as in the northern form, and the blue of the back is pronounced only on the uropygium. The females and young males differ from those of *atro-cyaneum* by more intensely blue cap of a less purplish hue (as in the adult males), the back is darker green, and the hind neck is darker gray with more or less blackish admixture, usually carried forward over the eye to the upper part of the lores as a dusky superciliary stripe. I have no females of *lugens* for comparison nor any Bolivian examples of the present form to which I judge these south-Peruvian birds belong.

Additional records are from Culumachay, Garita del Sol, and Pumamarca. Taczanowski's citation (1884, Orn. Pérou, I, p. 426) of "Pacasmayo" (*ex* Jelski) for this species is rather certainly an error for "Pumamarca." Not only is Pacasmayo, a coastal locality, a highly improbable home for this Subtropical and Temperate Zone bird, but Jelski's two localities of earlier record (Taczanowski, 1874, P. Z. S. London, p. 511) are Chilpes and Pumamarca, not Pacasmayo and Chilpes as given in the 1884 reference.

[1] Specimens in Field Museum of Natural History, Chicago.

Conirostrum ferrugineiventre Sclater

Conirostrum ferrugineiventris SCLATER, 1855, P. Z. S. London, XXIII, p. 74, Pl. LXXXV—Bolivia; Liverpool Mus.

Maraynioc, 1 ♂; Pariayacu, 1 (?).

This species appears to be closely related to *C. rufum* of northern Colombia, but is too distant, both geographically and taxonomically, to warrant specific union. There is a trace of warmer color on the white superciliaries of the two Peruvian specimens at hand that suggests the possibility of transition. It is not impossible that intermediates may some day be found in the broad extent of territory lying between the known ranges of the two forms, but it is equally possible that these two species represent the only existing relicts of a more widely distributed ancestral group.

Records are from above Torontoy, mountains above Huánuco, and Cachupata (variously cited on different maps as Chachupata and Ccachupata).

Oreomanes fraseri binghami Chapman

Oreomanes binghami CHAPMAN, 1919 (Sept. 1), Bull. Amer. Mus. Nat. Hist., XLI, p. 331—Cedrobamba, Machu Picchu, Perú; ♀; U. S. Nat. Mus.

There is reason to believe that Chapman's proposed name should be revived for Peruvian examples of the present species. Bond and de Schauensee have described a Bolivian subspecies that is markedly distinct from the Ecuadorian form, and Peruvian birds are exactly intermediate without being strictly referable to either. Through the kindness of Mr. de Schauensee I have examined the type and two additional examples of the Bolivian *sturninus* and four examples from Yánac, Perú.

The Yánac birds differ from *fraseri* by lighter gray backs (darker than in *sturninus*), somewhat more prominent and more whitish margins on the feathers of the crown (less pronounced than in *sturninus*), an obvious white line above the rufous superciliary stripe (less developed than in *sturninus*), lighter gray upper border to the auricular area (distinctly darker than in *sturninus*), but bill not noticeably different (though shorter than in *sturninus*).

Furthermore, Hellmayr (*in* Morrison, 1939, Ibis, p. 486) comments on several birds from Lachocc, Perú, which he found to have more silvery white on the forehead and above the superciliaries than the Ecuadorian form. The original description of *binghami* noted the type as possessing white superciliaries without any rufous in that region, a condition probably due to immaturity and suggested in one of the Yánac birds at hand as well as in one of the Lachocc examples discussed by Hellmayr.

Hellmayr (1920, Arch. Naturg., LXXXV, A, 10, p. 12) found southeast-Peruvian birds to have slightly longer bills than Ecuadorian ones. This is not true of the skins from Yánac, but is evidently a trend in the direction of the longer-billed *sturninus* of Bolivia.

Hellmayr earlier (1912, Verh. Orn. Ges. Bayern, XI, 1, p. 160) remarked on the southeast-Peruvian examples as having slightly darker backs than Ecuadorian birds, but the reverse is true in the Yánac specimens. More material is needed before full details may be known of possible variation within the Peruvian boundaries, but it seems advisable to recognize that there is at least one separable form in this area to which the name *binghami* may be applied.

Peruvian records are from Cedrobamba, Anta, Ollachea, and Lachocc.

SPECIMENS EXAMINED

O. f. fraseri.—
ECUADOR:
Mocha Cañon, Mt. Chimborazo, 1 ♂, 1 ♀;
Cerro Huamani, 1 ♀.
O. f. binghami.—
PERÚ:
Yánac, 1 ♂[1], 3 ♀[1].
O. f. sturninus.—
BOLIVIA:
Finca Salo, Oploca, 1 ♂ (type)[1], 1 ♀[1];
ten miles north of Viloca, La Paz, 1 ♂[1].

[1] Specimens in Academy of Natural Sciences, Philadelphia.