
For some years I have been anxious to examine the great collection of Central American birds in the British Museum, by far the finest in existence. An all too brief opportunity came during the past summer, and I spent nearly three weeks in the Bird Department. I am greatly indebted to Dr. Percy R. Lowe, Mr. N. B. Kinnear, and every member of the staff for permission to examine the collections, and for constant assistance in locating specimens.

In so short a time it was, of course, impossible to do much more than examine a long list of species of Central American birds of which material in America was quite insufficient to solve either systematic or geographical problems or both.

I. General.

A Review of Crypturellus cinnamomeus.

Mr. H. B. Conover has recently published an interesting critique on the racial variation of this Tinamou (Proc. Biol. Soc.
Wash. xlvi. 1933, pp. 113–118). He was handicapped, however, by having seen practically no specimens from the northern half of the range of the species. The British Museum series of forty-seven nicely supplements material in America, and the following brief summary is presented:—

1. Crypturellus cinnamomeus cinnamomeus (Lesson).
   Conover's guess that the range of the typical race extends north to the Isthmus of Tehuantepec proves to be correct. The bird increases in size northward. Six specimens from the Pacific coast of Guatemala average slightly larger than Salvador topotypes, 2 ♀♀ from Chiapas are still larger, and a ♂ from Tehuantepec (wing 174 mm.) is in size exactly like sallei but in coloration like cinnamomeus.

2. Crypturellus cinnamomeus sallei (Bonaparte).
   Decidedly larger than the last, the wing averaging 10 mm. longer; in coloration very close indeed to cinnamomeus, but both sexes less heavily barred on the flanks, and females less barred on chest and throat. Eight specimens in the British Museum from Vera Cruz and Puebla show that inornatus Nelson is a pure synonym and that all the specimens listed by Conover under inornatus are really sallei. Conover's suspicion to this effect consequently proves to be entirely correct.

3. Crypturellus cinnamomeus mexicanus (Salvadori).
   Type and eight specimens from Tamaulipas examined. In addition to Conover's remarks, this series shows that it is a duller bird, more olive, less bright brown or rufescent above, more greyish on throat and chest below.

4. Crypturellus cinnamomeus occidentalis (Salvadori).
   The male type and only recorded specimen is the grey extreme of the species. A series is of course required to confirm the constancy of these characters.

5. Crypturellus cinnamomeus goldmani (Nelson).
   A very distinct pale race from Yucatan and Peten. Seven specimens in the British Museum and ten in American collections examined. The species is unrecorded from British Honduras; nevertheless there is a Blancaneaux specimen in
the British Museum (♂ ad., no locality) which is exactly intermediate between goldeni and vicinior Conover of Honduras.

I have always been bothered by the record of this species from Alta Vera Paz, Guatemala (Tinamus sallaei of Salvin, Ibis, 1866, p. 206, from Chisec, a region of heavy rain-forest, in which this species does not occur). This bird was found, and proves to be C. boucardi, the species to be expected!

6. Crypturellus cinnamomeus vicinior Conover.

A large series from Honduras shows that this form is just separable from cinnamomeus. There is only one flat skin in the British Museum, quite worthless for purposes of comparative study.

7. Crypturellus cinnamomeus dellatrili (Bonaparte).

A surprisingly distinct form, of which there are seven specimens in the British Museum. It is by no means confined to "north-western Nicaragua," but is abundant throughout the region west of the continental divide and below 1500 feet.

8. Crypturellus cinnamomeus praepes (Bangs & Peters).

An easily recognizable race from north-western Costa Rica. It is no larger, however, than many specimens of sallaei.

Crypturellus boucardi blancaneauxi, subsp. nov.

Type.—Brit. Mus. 1892.6.9.91; British Honduras; Coll. Blancaneaux; ex Coll. Salvin & Godman, 1881; no sex, but is adult ♀.

Characters.—Differing strikingly from typical boucardi in pileum more slaty, less black; slightly paler above, redder, less brown; underparts more nearly resembling the species cinnamomeus, the grey areas reduced to the chest; balance of underparts predominantly rich buff, much warmer and brighter than in typical boucardi, washed with dark greyish-brown rather than slaty grey; sides, flanks, and belly much more heavily barred with black, as in cinnamomeus.

Remarks.—Two adult females which have long remained in the British Museum without critical study in recent years. In my ‘Birds of Guatemala’ (p. 98) I commented on the fact that certain Mexican races of cinnamomeus left a very small gap
between that species and boucardi. The present very distinct new subspecies still further reduces this gap, but I hesitate to do so formally without a thorough monographic study of the entire complex in South as well as Central America. The present form has nothing to do with the paler but very grey costaricensis Dwight & Griscom.

*Notes on New World Skimmers.*

A study of the fine series of Skimmers in the British Museum makes it possible, in connection with the specimens in America which I have examined, to solve the geographic anomalies and taxonomic difficulties which various writers have emphasized for many years.

There are three general observations. In typical nigra and other "white-tailed" races younger and non-breeding specimens have more grey in the inner webs of the rectrices than breeding adults; thus younger winter specimens of nigra cannot be separated from adult breeding intercedens on this character. Secondly, size steadily increases southwards; roughly speaking, all North and Middle American Skimmers are smaller and all South American larger. Thirdly, it is by no means definitely proved that the dark-tailed smoky cinerascens Spix is not really specifically distinct from nigra. Certainly the recently proposed intermedia Rendahl by no means closes the absolute gap between the two series of races. Here the taxonomic treatment is largely a matter of opinion rather than fact. The following synopsis is presented in the hope it may prove helpful.


Coasts of south-eastern United States, breeding very locally southward to lagoons near Tampico and mouth of Rio Lagartos, tip of Yucatan Peninsula. In winter wandering southward, common off Cozumel Island, Yucatan (series in British Museum), and north coast of Venezuela (specimens in British Museum). Reported in winter from Trinidad and north-east Brazil, but the specimens, if any, should be critically re-determined. The record from Los Sabalos, south-eastern Nicaragua, is based on a head and beak, and unquestionably refers to
intermedia Rendahl. This subspecies is characterized by small size, the pure white axillaries and under wing-coverts, the broadly white-tipped secondaries, and the largely white rectrices in breeding adults.

2. Rynchos nigras oblita, subsp. nov.

Type.—Brit. Mus. 91.5.22.59, Acapam lagoon, Pacific coast of Guatemala; 29 Jan., 1863; Coll. Salvin.

Characters.—Resembling nigras in smaller size, but with some pale brownish-grey tinge to axillaries and under wing-coverts, and white tips of secondaries narrower; tail as in nigras. Six winter specimens from Acapam examined.

Range.—No definite breeding locality recorded, but ranging from Tepic along the Pacific coast to Guatemala. Skimmers seen but not collected by Arcé and Griscom off Pacific coast of Veraguas, Panama, may belong here.

3. Rynchos nigras intercedens Saunders.

Coasts and rivers of south-east Brazil, Uruguay, Paraguay, and northern Argentina. Much larger than nigras and oblita; wing of both sexes averaging about 30 mm. longer; colour-characters as in nigras, but inner webs of lateral rectrices always with more brownish-grey. The alleged character of the axillaries and under wing-coverts being tinged with brownish-grey does not hold in adults in full breeding plumage.

The remaining Skimmers of the New World are sharply distinct from the preceding in having the entire under surface of the wing deep sooty-grey, the secondaries very narrowly tipped with white and the tail deep sooty, the lateral rectrices only narrowly if at all edged with whitish. As already mentioned, the ensuing races could be regarded as variations of a distinct species, cinerascens Spix.

4. Rynchos nigras cinerascens Spix.

Characters of the group as above; size large as in intercedens. Coasts and rivers of most of eastern South America.

5. Rynchos nigras Intermedia Rendahl.

Pacific coast of South America, Chile to Ecuador; also eastern Nicaragua and Cozumel Island off Yucatan. Light edges of lateral rectrices purer white and much wider in fresh plumage; tips of secondaries also broader and whiter. It will be noted
that I here accept provisionally Hellmayr's treatment ('Birds of Chile,' 1932, p. 403). The ♀ from Cozumel Island has a wing of only 322 mm., ♀ of Chilean birds averaging nearly 380 mm. I suspect that when more than the two known specimens from Central America are obtained the usual rule will be found to prevail and that the more northern birds will prove to be smaller, in which case the Chilean bird will require a name.

**Notes on Middle American Horned Owls.**

The race *Bubo virginianus mayensis* Nelson was based on one specimen, the type, and described in 1901. Three years later Oberholser published his well-known monograph of the American Horned Owls, and proposed another subspecies, *melancerus*, occupying the whole southern half of Mexico and Guatemala. The type-locality was the Isthmus of Tehuantepec in Oaxaca, and there were apparently only four specimens available. Since then a very few additional specimens have reached American museums, most of which I have examined.

The series in the British Museum is better than all this material combined. There are three specimens from Yucatan representing *mayensis* Nelson. Four specimens from Cacoprieto, Oaxaca, are essentially topotypes of *melancerus*. Both the greyer and tawnier phases are present in both series; with the greater number of specimens there proves to be no size difference, and the two are absolutely indistinguishable. It follows therefore that *melancerus* must become a pure synonym of *mayensis*, and we are dealing with a well-marked subspecies peculiar to the more arid tropical lowlands of extreme southern Mexico.

The supposed distinctness of *melancerus* was largely formulated by including birds from the Mexican tableland and the mountains of Guatemala. No less than fourteen of these are before me, and several facts are apparent. The bird of the mountains is usually larger than that of the tropical lowlands. There are certain very blackish birds recalling *pacificus* or even *icelus*, and this type of coloration is wanting in the lowlands. Also lacking in the lowlands is a dark bird with a
great deal of rich tawny below. The majority of the series are more normally coloured, and cannot be separated in this respect from mayensis. In fact Oberholser's diagnosis of melancerus really applies far better to these extremes from the tableland than to birds from Oaxaca. When it comes, however, to what name these birds shall bear we have an even choice between "splitting" and conservatism. I prefer the latter course, and propose to call all these birds mayensis. In the tableland series four only out of fourteen are darker above than the lowland mayensis, two only are tawnier below, and about a third are no larger than the bigger birds representing mayensis. The only Nicaraguan specimen (♀, Matagalpa, 25 Aug. 1896; W. B. Richardson) is inseparable from another from the Valley of Mexico. Another from Honduras (♂, Tegucigalpa, April 1898; W. B. Richardson) is identical with the Oaxaca series.

In the same monograph Oberholser described mesembrinus from Costa Rica, based on one specimen only. This bird happened to be the only one he had which was not only dark above but richly tawny below. Such a specimen is before me from Chitrá, Veraguas. It is a ♀ and the wing measures no less than 340 mm. As we have already seen, however, this type of coloration is not confined geographically to southern Central America; in fact the Chitrá bird is inseparable from several Mexican examples.

I consequently propose that all middle American Horned Owls be called mayensis Nelson, and that it be remembered that an occasional specimen from the tableland of Mexico approaches in coloration or size one of the races of the western United States.

A Review of Dendroica gracieæ Baird.

The British Museum alone possesses an adequate series of this Warbler from various parts of its breeding range which is undoubtedly continuous. Ridgway, the last monographer of the species, had only a single specimen from British Honduras that with certainty represented decora and only seven males of true gracieæ. I have thirty-five adult males alone before
me at the moment, and have studied most of the material in American museums also. Variation proves to be as follows:

1. *Dendroica gracilis gracilis* Baird.

This race occupies the south-western United States and the whole tableland of Mexico (western half) south to the Isthmus of Tehuantepec. Adult females in spring and summer always strongly tinged with brown above. Adult males more heavily streaked with black on back. Both sexes with the superciliary stripe always whitish posteriorly and averaging a little less extensively yellow below. Larger; wing of ♂ ad. 62–66 mm. An adult male from Chimalapa, Tehuantepec, differs only in being slightly smaller; wing 60 mm.


Eight specimens from the Pine Ridge of British Honduras are distinctly smaller; wing of ♂ 55–59 mm. The superciliary stripe is yellow throughout in the majority of specimens, and all have the yellow of throat invading the chest. The back is distinctly less heavily streaked with black. Adult females are clear grey above, practically devoid of brownish tinge. Specimens from Chiapac, the Altos, and Sierra de las Minas, Guatemala; Tegucigalpa, Honduras; and the mountains of north central Nicaragua (15 in all) are quite indistinguishable from the British Honduras series, and all must be called *decora*. It is surprising, and contrary to the usual rule in Central America, that these highland birds should not be larger than the lowland pine-forest birds, but such seems to be the case.

3. *Dendroica gracilis remota*, subsp. nov.

*Type.*—Brit. Mus. 92.4.20.900; Volcan Viejo, Chinandega, Nicaragua; 16 April, 1891; W. B. Richardson.

*Characters.*—In colour-characters resembling *decora* in most points, but back more heavily streaked as in typical *gracilis*; intermediate in size, wing of ♂ 58–61; tail-feathers with more white, the third rectrix (from the outermost) with a patch of white on inner web usually twice as wide as in the other two races.
Remarks.—Apparently isolated on the Volcan Viejo, where the pine-forest begins, at about 4000 feet altitude. Eight specimens seen.

II. GUATEMALA.

Dendroptyx leucophrys nicaraguæ Miller & Griscom.

The specimen in the British Museum from Panajachel, Sololá, Pacific Cordillera of Guatemala, proves to be the very distinct nicaraguæ. The series of five from the Alta Vera Paz highlands shows that Miller and I correctly interpreted the characters of the typical form in 1925.

Oreopelea albifacies albifacies (Salvin & Godman).

Five specimens from Vera Paz agree perfectly with ten typical birds from southern Mexico, as I suspected would be the case. A fine series of twelve from the Pacific Cordillera of Guatemala abundantly confirms the validity of anthonyi Griscom. Two birds from the mountains of southern Chiapas are also anthonyi, thus adding this race to the Mexican avifauna.

Otus trichopsis mesamericanus van Rossem.

In the ‘Birds of Guatemala’ (p. 169) I commented on the possibility that the specimen from San Bernardo in the arid Motagua Valley might be another species. This proves not to be the case. This specimen, undoubtedly a male by size, is certainly trichopsis, but differs notably from the series in the British Museum in having the dark shaft-streaks below narrow and paler, with a marked increase in finely pencilled vermiculation across the chest. In so difficult a group nothing can be done with a single specimen.

Otus flammeolus guatemalæ, subsp. nov.

Type.—Brit. Mus. 88.7.20.18; Dueñas, Guatemala; Jan. 1863; Salvin & Godman, no. 2354.

Characters.—Similar to typical flammeolus (Kaup) of Mexico (I designate “Valley of Mexico” as restricted type-locality), but in the intermediate phase more brownish, less purely grey in ground-colour above; ochreous longitudinal wing-bars richer and deeper; broken collar across hind neck tawnier and
brighter, less brownish; most of the occiput bright tawny ochraceous rather than rusty brown; chestnut areas on side of head and auricular region paler, brighter, and more richly coloured; brownish or rusty washing on underparts brighter and tawnier.

Six specimens from Mexico; two from Dueñas, Guatemala; small series from western United States.

**Caprimulgus vociferus setosus** van Rossem.
Specimens from Alta and Baja, Vera Paz, prove to be *setosus* and not *chiapensis* (Nelson) of the western Altos, just as I had suspected.

**Mitrephanes phaeocercus quercinus** Dickey & van Rossem.
Specimens from Vera Paz show that typical *phaeocercus* does not occur in Guatemala. It should be removed from the list of Guatemalan birds.

**Elainea obscura ultima**, subsp. nov.
*Type.*—Brit. Mus. 88.1.1.795; San Pedro Martyr, Guatemala; Oct. 22, 1873; Coll. Salvin.

*Characters.*—Closely related to *frantzii* Lawrence of Costa Rica, but adults (particularly in fresh fall plumage) easily separable in being a browner, less greenish-olive above and darker below, more olivaceous, less yellowish or whitish.

*Remarks.*—So far as I know the only series of this Fly-catcher from Guatemala is in the British Museum, where there are six adults and one young bird of the year. My suspicions that Guatemalan skins needed careful comparison were aroused by the receipt in recent years of specimens from the higher mountains of Honduras which were appreciably browner above and more olive below. Though they are by no means as extreme as Guatemalan specimens, they are nearer *ultima* than typical *frantzii*. Large series from the Volcan Mombacho in southern Nicaragua, both in the British Museum and New York, are typical *frantzii*. Even larger series from the mountains of north central Nicaragua begin to show a faint approach to the characters of *ultima*, but are nearer *frantzii*.

Needless to say in so difficult a genus the greatest care must be taken to use material of strictly comparable plumage
and age of collection. Young birds of the year of **frantzii** are scarcely separable in colour from adults of **ultima**, and old skins in this species are apt to be browner than more recently collected specimens.

**Turdus plebejus differens** (Nelson).

The indefinite record from "Guatemala" in the 'Biologia Centrali-Americana' proves to be based on four specimens collected by Richardson at El Rincon, San Marcos, in October 1890. These birds, together with four others from the Volcan de Tacana, Chiapas, prove to be the very distinct **differens**, as I had presumed. Of greater geographical interest is the presence of the species in eastern Guatemala in the Sierra de las Minas (1 ♀, 11 July, 1897; W. B. Richardson), which cannot be separated from more western examples.

**Turdus migratorius phillipsi** Bangs.

There prove to be two examples of this common North American Thrush from Guatemala in the British Museum, but neither with specific data. Both are **phillipsi**, and one is apparently an adult male in breeding plumage. The British Museum possesses quite a fine series from various parts of Mexico. Birds from Oaxaca, Vera Cruz, Mexico, and Hidalgo are **phillipsi**. A series from the Volcan de Colima is **permixtus** Griscom, not typical. Birds from Zacatecas are nearer **permixtus**. Proceeding north-westward I should refer every specimen to **propinquus**.

**Vireolanius melitophrys quercinus**, subsp. nov.

*Type.*—Brit. Mus. 85.3.10.290; oak forest, Volcan de Fuego, Guatemala; 18 Sept. 1859; Coll. Salvin.

*Characters.*—Differing from typical *melitophrys* DuBus of southern Mexico in having the wing and tail-feathers greener, less slate-coloured, and pectoral band much darker and more chestnut; in adult males the pileum is a slightly paler grey, more washed with greenish; adult females also radically different in having the pileum browner, less grey; the entire underparts below the pectoral band much more heavily washed with ochraceous-buff.
Mr. L. Griscom on Central American [Ibis,

This remarkable bird has a reputation for great rarity in collections. Nevertheless the British Museum possesses series from every part of its known range. The new form is obvious at a glance, and is based on twelve specimens compared with fifteen from Mexico. I am quite unable to separate a series from Guerrero from Mexico and Vera Cruz. I regret to say that goldmani Nelson is based entirely on the characters of the immature bird of both sexes of typical melitophrys.

Certhia familiaris pernigra, subsp. nov.

Type.—Brit. Mus. 85.3.6.69; Volcan de Fuego, Guatemala; November, 1873; Coll. Salvin.

Characters.—Resembling alticola Miller in large size and darker underparts, but averaging blacker and darker above, as in extima Miller & Griscom; the rectrices also darker; differing from the last in its larger size and much darker underparts.

Remarks.—When Miller and I described two middle American Creepers some years ago (Amer. Mus. Novit. no. 183, 1925, p. 6) we were seriously handicapped by inadequate material. The British Museum collection of these Creepers is surely the finest in the world. I have before me no less than twenty-nine specimens representing alticola. The darker colour above of eighteen Guatemalan specimens is visible at a glance, and it becomes apparent that extima Miller & Griscom of Nicaragua (nine specimens) also averages darker above, a character not mentioned in the original description. On the basis of the material in the British Museum jaliscensis Miller & Griscom is also a tenable race on the characters assigned it originally. A series of eight from the mountains of Guerrero is intermediate between jaliscensis and alticola, but nearer the former.

Hesperiphona abellei pallida Nelson.

The series in the British Museum proves Ridgway's wisdom in not describing the Guatemalan bird on the basis of certain colour characters he noted. I have before me three adult males, four females from Mexico, and five males, three females from Guatemala. Young males are greener, less clear yellow, and young females are browner, less olive. When due allowance for these facts is made I am quite unable to see any colour
difference of any kind whatever. The subspecies *pallida* can, however, be recognized on the longer and wider bill of Guatemala birds.

**Ammodramus savannarum cracens** (Bangs & Peck).

The specimen from Sakluk in Peten and a series of five from the lower slopes of the Sierra de las Minas in eastern Guatemala agree perfectly with totopotypes from British Honduras, and are consequently *cracens*.

**Atlapetes gutturallis grisiceps** Dwight & Griscom.

Specimens from Vera Paz and the Sierra de las Minas, Guatemala, and Chiapas prove inseparable from totopypical series from the Altos.

III. **NICARAGUA.**

1. **Columba fasciata parva**, subsp. nov.

_Type._—Brit. Mus. 1891.10.26.541; ♂ ad.; Matagalpa, Nicaragua; 14 Sept. 1891; Coll. W. B. Richardson.

_Characters._—Resembling _fasciata letonia_ Dickey & van Rossem in having the tenth primary much longer than seventh; differing radically from it in being darker even than _fasciata_ instead of paler; differing from typical _fasciata_ in the more pointed wing, and in being decidedly browner and darker above; much the smallest of Band-tailed Pigeons.

_Remarks._—The geographical variation of _Columba fasciata_ has always caused American ornithologists difficulty owing to lack of material and also because of the considerable size and colour-variation with age and sex. The British Museum series before me enables me for the first time to reach some definite conclusions. Briefly summarized the facts would appear to be as follows:—(1) size steadily decreases southward; (2) from southern Chiapas southward all birds have the longer pointed wing; (3) from the same area southward the great majority of specimens are slightly browner above, with the exception apparently of the Salvador race _letonia_. In Guatemala all birds are separable on the primary formula, most specimens on the browner colour above, and all birds are intermediate in size. If the Guatemalan bird was a geographical extreme these differences could perhaps be named,
but I see no useful purpose in doing so when we have a more marked extreme in Nicaragua.

The three specimens before me from Nicaragua measure: 2 ♂♂, 193 and 195; 1 ♀, 192 mm. Guatemalan specimens run from 205–210 for adult males, Mexican series 205–215, and specimens from the United States 210–220 mm. All smaller males are not fully adult.

The Band-tailed Pigeon must be quite rare in Nicaragua, as the three specimens discussed above are the only ones which have been ever detected in the country. Richardson collected extensively in the same locality in 1907 for the American Museum of Natural History in New York, and the late Waldron de Witt Miller and I revisited this region with Richardson in 1917 without finding this Pigeon. It must be admitted, however, that there are ample stretches of unexplored oak-forests in the jumbled mountains of north central Nicaragua.

2. Cinclus mexicanus anthonyi Griscom.

The three Dippers collected by Richardson at San Rafael del Norte in March 1892 prove to be inseparable from the west Guatemala race recently proposed by me.