

ORNITHOLOGY.—*Descriptions of new Treronidae and other non-passerine birds from the East Indies.* HARRY C. OBERHOLSER, Biological Survey.

Further evidence of the richness and value of Dr. W. L. Abbott's East Indian bird collections for the United States National Museum is furnished by the following new birds. The names of colors used in these descriptions are from Ridgway's *Color standards and color nomenclature*.

#### ARDEIDAE

##### *Butorides javanicus carcinophonus*, subsp. nov.

*Subspecific characters*.—Similar to *Butorides javanicus javanicus*, from Java, but larger, and somewhat lighter on neck and under surface.

*Description*.—Type, adult female, no. 182229, U. S. Nat. Mus.; Pulo Alanga, eastern Borneo, May 12, 1913; Dr. W. L. Abbott. Forehead greenish slate; pileum and crest deep slate green, the tip of the crest more slaty; the middle of the crown dark ivy green, slightly metallic; cervix mouse gray; upper back brownish neutral gray; remainder of back and its plumes light grayish olive, the edges and tips of the feathers glaucous; rump and upper tail-coverts deep mouse gray; tail deep slate olive, somewhat metallic; wings slate color, the exposed outer parts of the webs of the feathers dark ivy green; anterior lesser coverts more brownish and duller, the edgings buffy white, cinnamon buff, and sayal brown; middle of the chin mostly creamy white; sides of chin and of neck, together with the throat and jugulum, rather brownish mouse gray, the middle of the lower jugulum paler; breast, sides, flanks, and crissum, neutral gray, the breast washed with brownish; abdomen pale grayish buff; lining of wing light neutral gray.

*Measurements of type*.—Wing, 168.5 mm.; tail 63; exposed culmen, 64; height of bill at base, 12; tarsus, 45; middle toe without claw, 40.5.

##### *Butorides javanicus carcinophilus*, subsp. nov.

*Subspecific characters*.—Similar to *Butorides javanicus carcinophonus*, from Borneo, but lower parts paler.

*Type*.—Adult female, no. 201671, U. S. Nat. Mus.; Casiguran, Luzon Island, Philippine Islands, June 1, 1907; Dr. E. A. Mearns; original number, 15262.

*Measurements of type*.—Wing, 161 mm.; tail, 57; exposed culmen, 62; height of bill at base, 12.5; tarsus, 44; middle toe without claw, 41.

#### MEGAPODIIDAE

##### *Megapodius forsteni balukensis*, subsp. nov.

*Subspecific characters*.—Similar to *Megapodius forsteni forsteni*, of the Molucca Islands, but having the upper surface darker and more rufescent, the cervix more or less overlaid with brown; lower parts darker; and size slightly smaller.

*Description*.—Type, adult female, no. 200692, U. S. Nat. Mus., Baluk, Baluk Island, Sulu Sea, Philippine Islands, January 10, 1906; Dr. E. A. Mearns. Pileum dull olive brown; upper cervix deep mouse gray, slightly washed with olive brown; lower cervix, together with the rump, back, and

scapulars, dark prouts brown; upper tail-coverts and tail, clove brown; wings rather rufescent clove brown, the edgings of tertials, of inner greater and middle coverts, like the back, the lesser coverts and remaining portion of the other coverts, chaetura drab; sides of head, together with chin and upper throat, mouse gray; sides of neck, together with remaining lower parts and lining of wing, deep mouse gray, the abdomen washed with olive brown.

*Measurements of type*.—Wing, 211 mm.; tail, 73.5; exposed culmen, 22.5; height of bill at base,; 10; tarsus, 61.5; middle toe without claw, 40.

This island race is apparently still more different from *Megapodius forsteni cumingii* of the island of Palawan, in the Philippine Archipelago, being very much darker both above and below.

## RALLIDAE

### *Hypotaenidia striata paraterma*, subsp. nov.

*Subspecific characters*.—Similar to *Hypotaenidia striata striata*, from the Philippine Islands,<sup>1</sup> but much darker above, the ground color more extensively and deeply blackish, the edgings also more deeply colored, and the white spots on hind neck, back, and rump much fewer and smaller; lower parts somewhat darker; and white bars on flanks and sides much narrower and farther apart.

*Description*.—Type, adult female, no. 161078, U. S. Nat. Mus.; Samar Island, Philippine Islands, April 18, 1888; F. S. Bourns. Pileum and upper cervix, bay, somewhat blackish medially; remaining upper parts brownish black barred with white, the edgings of the feathers varying from saccardo umber to sepia; chin creamy white; sides of head and the greater part of the sides of the neck, together with the throat and breast, between neutral gray and mouse gray, the breast washed with olive brown; primaries and secondaries between fuscous black and fuscous; the rest of the wings and the remaining portion of the under surface colored like the back; lining of wing brownish black, barred with white.

*Measurements of type*.—Wing, 114, mm.; tail, 45; exposed culmen; 38; tarsus, 34; middle toe without claw, 37.

This new race is of interest since it differs apparently so much from the typical form of the species, which inhabits the other islands of the Philippine Archipelago,—Luzon, Siquijor, Panay, and others. It is, in fact, as dark as *Hypotaenidia striata obscurior* Hume, of the Andaman Islands, but is distinguishable by smaller size; by rather broader more widely spaced white bars on sides and flanks; and by larger white spots and wider white bars on the upper parts.

The original *Hypotaenidia striata striata*<sup>2</sup> came from the Philippine Islands, but had no more definite locality assigned. Since it is desirable now to have an exact type locality, we will designate this as Manila, on the island of Luzon, from which the original specimen probably came.

<sup>1</sup> Type locality: Manila, Island of Luzon, Philippine Islands.

<sup>2</sup> [*Rallus*] *striatus* Linnaeus, Syst. Nat., ed. 12, 1:262. 1766 (after May 24). "Philippinis".

## TRERONIDAE

**Muscadivores aeneus arhadius**, subsp. nov.

*Subspecific characters*.—Similar to *Muscadivores aeneus aeneus*, from Borneo, but with tail more greenish; cervix, top and sides of head averaging more grayish.

*Description*.—Type, adult female, no. 180106, U. S. Nat. Mus.; Kateman River, eastern Sumatra, September 3, 1903; Dr. W. L. Abbott. Top and sides of head, light grayish vinaceous, the crown overlaid with gull gray; cervix gull gray; chin, extreme anterior part of forehead, and orbital ring, creamy white; remaining upper parts metallic bluish green with a strong bronzy sheen; tail bluish green with a slight metallic gloss, the middle pair of rectrices most decidedly blue; tertials metallic green like the back; primaries and secondaries, fuscous on the basal two-thirds of inner half of inner webs, glaucous greenish slate color on the remaining portion, the outer vanes of the secondaries with more or less metallic green gloss; primary coverts and exterior greater coverts greenish slate, with some metallic green on their outer webs; rest of upper wing-coverts metallic green like the back; throat pale grayish vinaceous; jugulum gull gray; breast and abdomen, light grayish vinaceous; sides of the same shade, but overlaid and tinged with gull gray; flanks gull gray; crissum dark bay; lining of wings between gull gray and deep gull gray.

*Measurements of type*.—Wing, 228 mm.; tail, 140; exposed culmen, 23.5; tarsus, 31; middle toe without claw, 37.

**Haemataena melanocephala enantia**, subsp. nov.

*Subspecific characters*.—Similar to *Haemataena*<sup>3</sup> *melanocephala bangueyensis*, from Mindanao, but with yellow of throat darker; yellow of middle of lower abdomen paler, showing thus more contrast to the crissum.

*Description*.—Type, adult male, no. 191872, U. S. Nat. Mus.; Cagayan Sulu Island, Philippine Islands, February 26, 1904; Dr. E. A. Mearns. Head and throat, pale gull gray, but the forehead, sides of head, sides of throat, and the middle of the lower throat, between light gull gray and pallid neutral gray, with a large black patch on the occiput; chin and upper throat, between light cadmium and lemon chrome; cervix and sides of neck, warbler green, shading a little to citrine on the upper back and scapulars; lower back, rump, and upper tail-coverts, cerro green; tail-feathers basally and, excepting the middle pair, also on marginal portion of inner webs, fuscous, the remaining portion of the feathers somewhat metallic green, between scheele's green and grass green, some of the feathers bronzy, and having on the two middle rectrices numerous narrow, almost invisible, bronzy bars; wings fuscous, the superior coverts and the exposed portion of the quills (except the secondaries) in the closed wing somewhat metallic olive green, cerro green, bronzy green, and dark green, all mingled together, the general effect being nearly olive green; secondaries between scheele's green and grass green; jugulum and breast, between cerro green and spinach green, and shading to between parrot green and grass green on abdomen, sides, and thighs; lower abdomen empire yellow, verging slightly toward apricot yellow; crissum chrome yellow to cadmium yellow, the longest middle lower tail-coverts mostly rose red; lining of wing neutral gray, outwardly mostly cerro green.

<sup>3</sup> For the use of this generic name instead of *Spilotreron* Salvatori, cf. Richmond, Proc. U. S. Nat. Mus. 53: 593. 1917.

*Measurements of type.*—Wing, 119 mm.; tail, 77; exposed culmen; 55.5; tarsus, 22; middle toe without claw, 22.5.

This new race is apparently confined to the island of Cagayan Sulu.<sup>4</sup>

***Treron curvirostra erimacra*, subsp. nov.**

*Subspecific characters.*—Resembling *Treron curvirostra nasica*, from Borneo, but much larger, and, in the male, of lighter coloration.

*Description.*—Type, adult male, no. 201778, U. S. Nat. Mus.; Balabac Island, Philippine Islands, October 16, 1906; Dr. E. A. Mearns. Pileum slate gray, lightening to rather dark gull gray on the forehead; cervix between deep grape green and pois green; cervical collar deep gull gray; middle of back purple drab; remainder of back, together with the scapulars, dull, dark corinthian purple; rump olive green; upper tail-coverts warbler green; middle tail-feathers dark citrine; basal portion of the remaining tail-feathers slate gray, the subterminal portion black, the tip dark gull gray; wings black, slightly brownish; but the tertials olive green, the bend of the wing slate gray, slightly washed with olive, the lower rows of lesser coverts and over green, the edgings of the wings lemon yellow; sides of neck and of face like the cervix; chin and throat, lime green; jugulum yellowish citrine; breast grape green; abdomen grape green shading to asphodel green, darker laterally, and passing into slate gray on the sides of the body; flanks and thighs, calla green mixed with creamy white; lower tail-coverts between sayal brown and ochraceous tawny; lining of wing slate gray.

*Measurements of type.*—Wing, 137 mm.; tail, 88.5; exposed culmen, 17; height of bill at base, 7.5; tarsus, 22; middle toe without claw, 23.

This is the bird that has been commonly recorded from the Philippine Islands as *Treron nipalensis*, but it is readily distinguishable from the bird from Borneo, which is clearly a subspecies of *Treron curvirostra*, as well as from the typical race of the Malay Peninsula.<sup>5</sup> From the latter it differs in both sexes in its darker coloration, particularly on the upper parts.

***Dendrophassa vernans nesophasma*, subsp. nov.**

*Subspecific characters.*—Similar to *Dendrophassa vernans vernans*, from Luzon Island, Philippine Islands, but in both sexes paler throughout and with the green of upper parts averaging more grayish.

*Description.*—Type, adult male, no. 191947, U. S. Nat. Mus.; Cottabata, Mindanao Island, Philippine Islands, March 3, 1904; Dr. E. A. Mearns. Pileum between hathi gray and cinereous; forehead dark pearl gray; cervix between pale and light vinaceous drab, washed with plumbeous medially; interscapulum and rump, deep grape green, the scapulars between course green and light hellebore green; upper tail-coverts isabella color, gradually verging into the grape green of rump; tail slate gray, with a broad subterminal band of black, and tipped narrowly with slate black; wing-quills, except the tertials, slate black, the outer primaries brownish black distally, all the quills

<sup>4</sup> For a list of the other subspecies of *Haemataena melanocephala*, cf. Oberholzer, Proc. U. S. Nat. Mus. 54: 192. 1917.

<sup>5</sup> For the change of specific name from *Treron nipalensis* to *Treron curvirostra* (Gmelin), cf. Oberholzer, Smithsonian Misc. Coll. 60: no. 7: 3, footnote. 1912. The type locality of *Columba curvirostra* Gmelin is there designated as "Malay Peninsula"; we here further restrict it to the town of Malacca.

shading inwardly into slate gray basally; tertials and superior wing-coverts, between course green and light hellebore green, the bend of wing washed with plumbeous, the greater coverts and tertials conspicuously margined distally on their outer webs with picric yellow; chin, throat, and sides of head, between dawn gray and pearl gray; jugulum like the cervix, but not washed with plumbeous; middle of breast between ochraceous orange and yellow ochre; lower breast and upper abdomen, lime green, darker and duller laterally, sides deep gull gray; lower abdomen pinard yellow; flanks partly lincoln green, partly deep grape green, broadly streaked with pinard yellow; crissum rather light auburn; lining of wing deep gull gray.

*Measurements of type.*—Wing, 148 mm.; tail, 92; exposed culmen, 17; tarsus, 22; middle toe without claw, 23.

In addition to Mindanao, this race occupies at least the islands of Basilan, Jolo, and Sulu.

#### *Dendrophassa vernans abbotti*,<sup>6</sup> subsp. nov.

*Subspecific characters.*—Resembling *Dendrophassa vernans vernans*; from Luzon Island, Philippine Islands, but in the male darker and duller above; in the female darker, duller, less greenish above, duller, less greenish or less yellowish below, the abdomen usually paler, and medially often even whitish.

*Type.*—Adult male, no. 153653, U. S. Nat. Mus.; Tyching; Trang, Lower Siam (Malay Peninsula), June 2, 1896; Dr. W. L. Abbott.

*Measurements of type.*—Wing, 140.5 mm.; tail, 90; exposed culmen, 15.5; tarsus, 22; middle toe without claw, 24.5.

This subspecies ranges apparently over all the Malay region, from Singapore to Siam.

#### *Dendrophassa vernans zalepta*, subsp. nov.

*Subspecific characters.*—Similar to *Dendrophassa vernans vernans* of Luzon Island, Philippine Islands, but decidedly smaller.

*Type.*—Adult male, no. 248190, U. S. Nat. Mus.; Kwala Besar, Celebes, August 24, 1914; H. C. Raven; original number, 1538.

*Measurements of type.*—Wing, 137 mm.; tail, 81; exposed culmen, 16.5; tarsus, 20.5; middle toe without claw, 23.5.

This new form is distinguishable from *Dendrophassa vernans nesophasma*, of the southern Philippine Islands, by reason of much smaller size, and somewhat darker coloration. It appears to be confined to the island of Ceebes.

#### *Dendrophassa olax arismicra*, subsp. nov.

*Subspecific characters.*—Similar to *Dendrophassa olax olax*, from Sumatra, but much smaller; and upper parts darker, particularly the rump and pileum.

*Description.*—Type, adult male, no. 181777, U. S. Nat. Mus.; Segah River, northeastern Borneo, November 23, 1912; H. C. Raven; original number, 429. Pileum, cervix, sides of head and of neck, rather dark slate gray, paling to gull gray on forehead; upper back dark vinaceous brown; rest of back, together with the scapulars, haematite red; rump and upper tail-coverts, blackish slate; tail dull black, the tip rather deep neutral gray; wings dull black, the inner webs of the quills brownish; the outer edges of the secondaries, together with the greater coverts and outer middle coverts, marguerite yellow, the lesser coverts and exposed portion of the inner median coverts, haematite

<sup>6</sup> Named for Dr. W. L. Abbott.

red, middle of chin dull white; sides of chin, together with the throat, slate gray, lighter medially; jugulum raw sienna; breast between oil yellow and pyrite yellow; abdomen vetiver green; sides slate gray, washed inferiorly on the anterior portion with the color of the breast, on the posterior portion with vetiver green; flanks blackish slate, mixed with tawny and washed anteriorly with vetiver green; thighs tawny; crissum between auburn and chestnut; lining of wings blackish slate.

*Measurements of type.*—Wing, 114.5 mm.; tail, 71.5; exposed culmen, 13.5; height of bill at base, 5; tarsus, 19; middle toe without claw, 20.5.

This new subspecies is evidently not the same as *Dendrophassa olax hageni*<sup>7</sup> from northeastern Sumatra, since that bird is described as paler than *Dendrophassa olax olax*, while the Borneo birds are darker than the typical race.

#### **Butreron capellei messopora**, subsp. nov.

*Subspecific characters.*—Similar to *Butreron capellei passorhina* Oberholzer from Pulo Mata Siri, but pileum more greenish (less grayish); upper parts darker; greenish areas of lower surface, except the flanks, darker; breast and abdomen more yellowish as well as darker.

*Description.*—Type, adult male, no. 181425, U. S. Nat. Mus.; Klumpang Bay, southeastern Borneo, January 22, 1908; Dr. W. L. Abbott. Forehead olive gray, lighter anteriorly, and washed all over with greenish; crown greenish gray, washed with greenish; hind neck vetiver green, slightly tinged with citrine; scapulars the same; back and rump, darker, between vetiver green and andover green; upper tail-coverts dull vetiver green; broad tips of middle pair of rectrices between light yellowish olive and mignonette green, remainder of exposed portion deep grape green, and the basal concealed portion deep gull gray, more or less washed with the same green; the remaining rectrices dusky neutral gray, basally deep gull gray on outer vanes, light neutral gray on the inner, and terminally pale neutral gray, the two pairs next to the middle pair washed with the green of the middle feathers, particularly on the outer webs, the outer rectrices also very slightly and narrowly tinged with the same on the outer margins of their gray tips; wings slate color, but the outer webs of the tertials and most of the lesser wing-coverts (excepting only those along the bend of the wing), together with a few of the inner middle coverts, between andover green and vetiver green like the scapulars; narrow edgings on outer webs of the inner middle coverts and some of the inner greater coverts, lemon yellow; and similar, but much broader, edgings on the two innermost greater coverts and on the outermost tertial and innermost secondary, lemon chrome; lores pale greenish olive gray; superciliary region, a narrow orbital ring, and the anterior malar region, greenish gray; remaining parts of the sides of the head, together with the sides of the neck, vetiver green; anterior part of chin between a dark yellowish glaucous and seafoam yellow, posterior portion of chin and middle uppermost part of throat, between dark citrine green and water green, middle of rest of throat rather dark lime green; a broad band on the jugulum yellow ochre, shading laterally to buckthorn brown; breast and abdomen between mignonette green and lime green; sides of body between tea green and water green; flanks between light slate olive and rather light sage green; shorter lower tail-coverts of the same green color, but mixed with feathers of cartridge buff

<sup>7</sup> *Osmotreron olax hageni* Parrott, Abhandl. K. Bayer. Akad. Wiss. II Kl. 24: abt. 1: 266. Nov. 6, 1907 ("Umgegend von Deli" [Sumatra]).

and pinkish buff, and some of the green feathers broadly tipped with the same buff; rest of lower tail-coverts hays brown; thighs partly dull green like the abdomen, partly cartridge buff; lining of wing partly slate gray, partly dark gull gray.

*Measurements of type.*—Wing, 193 mm.; tail, 128; exposed culmen, 25.5; height of bill at base, 10.5; tarsus, 26; middle toe without claw, 29.

***Butreron capellei panochra*, subsp. nov.**

*Subspecific characters.*—Resembling *Butreron capellei messopora*, from Borneo, but upper and lower parts, excepting the crissum, lighter.

*Type.*—Adult male, no. 181058, U. S. Nat. Mus.; Besitan River, eastern Sumatra, February 8, 1906; Dr. W. L. Abbott.

*Measurements of type.*—Wing, 199.5 mm.; tail, 133; exposed culmen, 25; height of bill at base, 10.5; tarsus, 28; middle toe without claw, 31.

This race may be distinguished from *Butreron capellei magnirostris* of the Malay Peninsula by its lighter, more grayish (less greenish) upper parts, particularly the forehead; and lighter, more grayish (less greenish) lower surface (excepting the orange rufous pectoral band of the male).

The recognizable races of *Butreron capellei* are now five, as follows:

1. *Butreron capellei capellei* (Temminck). Java.
2. *Butreron capellei passorhina* Oberholser. Pulo Mata Siri, in the Java Sea.
3. *Butreron capellei messopora* Oberholser. Borneo.
4. *Butreron capellei panochra* Oberholser. Sumatra.
5. *Butreron capellei magnirostris* Strickland. Malay Peninsula.

CUCULIDAE

***Surniculus lugubris massorhinus*, subsp. nov.**

*Subspecific characters.*—Similar to *Surniculus lugubris lugubris* of Java, and to *Surniculus lugubris dicruroides* of Nepal, but larger than either.

*Description.*—Adult female; no. 181212, U. S. Nat. Mus.; Siak River, eastern Sumatra, January 3, 1907, Dr. W. L. Abbott. Pileum metallic greenish slate black; cervix metallic bluish black; mantle metallic deep slate green; lower back, rump, tail, and wings, like the pileum, but the rump a little more greenish, the inner edges of the wing-quills fuscous, the tertials and superior wing-coverts, except the primaries and the outer greater and middle series, metallic deep slate green; lores and sides of head black, the latter with a metallic bluish or greenish sheen; sides of neck metallic bluish black; crissum metallic deep slate green, barred with dull white; remaining lower parts, together with the lining of wing, brownish black with a dull metallic greenish sheen.

*Measurements of type.*—Wing, 143 mm.; tail, 135; exposed culmen, 23; tarsus, 17; middle toe without claw, 15.3.

BUCEROTIDAE

***Hydrocissa convexa barussensis*, subsp. nov.**

*Subspecific characters.*—Like *Hydrocissa convexa convexa*, from Sumatra, but larger, the length of wing much over 300 mm.<sup>8</sup>

<sup>8</sup> Measured *without* straightening the quills.

*Description*.—Type, adult, sex unknown, no. 179786, U. S. Nat. Mus.; Tana Bala Island, Batu Islands, in the Barussan Chain, western Sumatra, February 11, 1903; Dr. W. L. Abbott. Breast, and remainder of posterior lower parts, tail (excepting the two middle feathers), a short narrow patch on edge of wing, a bar across the extreme bases of primaries and secondaries, and broad tips of the same feathers, white; all the rest of the plumage black with a metallic greenish, in places purplish, sheen; bill ivory white, but the base of mandible, the posterior end of the casque, and a broad irregular stripe extending from the anterior point of the casque diagonally backward and downward to the middle of the base of the casque, black; "iris crimson brown; orbital skin and throat bluish white, deepest round eye; ear dull cobalt; feet gray black."

*Measurements of type*.—Wing,<sup>9</sup> 315 mm.; tail, 289; culmen from nostril, 145; height of bill (without casque) at nostril, 46; length of casque, 152; height of casque at nostril, 42; tarsus, 54; middle toe without claw, 43.

Birds of this species from the other islands of the Barussan Chain seem to be the same as those from Sumatra and Borneo. The wing in twelve specimens of *Hydrocissa convexa convexa* from Sumatra, Borneo, and the Barussan Islands measures 275–305 mm., with an average of 288 mm.

## PICIDAE

### *Meiglyptes tukki hydromus*, subsp. nov.

*Subspecific characters*.—Similar to *Meiglyptes tukki tukki*, from Sumatra, but with light bars of upper and lower parts, particularly the former, less uniform and less extensive, therefore less conspicuous.

*Description*.—Type, adult male, no. 180846, U. S. Nat. Mus.; Mojeia River, Nias Island, Barussan Islands, western Sumatra, March 10, 1905; Dr. W. L. Abbott. Pileum between olive brown and chaetura drab; remainder of upper surface, including the scapulars, between olive brown and deep olive, barred with dark olive buff; tail olive brown, with lighter bars between cinnamon buff and isabella color; exposed surface of wings olive brown, the primaries and secondaries with fuscous bars of the same color as those on the tail, but the bars on the innermost webs cartridge buff; sides of head between hair brown and deep grayish olive; a streak on the side of the neck creamy buff; malar strip brazil red; chin dull cream buff, barred with light brownish olive; upper throat dull buffy white, barred with blackish brown; lower throat and jugulum brownish black, posteriorly barred with dull buffy; posterior lower parts between buffy brown and deep olive, barred with pale dull buffy, lining of wing cream buff.

*Measurements of type*.—Wing, 94 mm.; tail, 61; exposed culmen, 20.5; height of bill at base, 8; tarsus, 20; middle toe without claw, 16.

This new race is so very much smaller than *Meiglyptes tukki calceuticus*, of the neighboring Banjak Islands, that there is no difficulty in distinguishing it from that form.

### *Meiglyptes tukki percnerpes*, subsp. nov.

*Subspecific characters*.—Similar to *Meiglyptes tukki tukki*, from Sumatra, but with lower parts paler and duller, the light bars there usually less sharply

<sup>9</sup> Measured without straightening the quills.



contrasted to the dark areas; black jugular band somewhat narrower; upper surface much paler, more brownish (less grayish), its light bars more ochraceous, and on the back rather broader.

*Type*.—Adult male, no. 181636, U. S. Nat. Mus.; Batu Jurong, south-western Borneo, June 22, 1908; Dr. W. L. Abbott.

*Measurements of type*.—Wing, 99 mm.; tail, 65; exposed culmen, 21; height of bill at base, 8; tarsus, 21; middle toe without claw, 15.

## PHODILIDAE

### *Phodilus badius abbotti*<sup>10</sup>, subsp. nov.

*Subspecific characters*.—Similar to *Phodilus badius badius*, of Java, but somewhat larger, and with upper parts and legs paler.

*Description*.—Type, adult, sex unknown, no. 172948, U. S. Nat. Mus.; Province Wellesley, Federated Malay States, western Malay Peninsula, 1899; Dr. W. L. Abbott. Forehead between light vinaceous fawn and vinaceous buff; crown, occiput, upper cervix, back, rump, and upper tail-coverts, between tawny and russet brown, spotted with dark brown; a collar on the lower cervix, together with the outer scapulars, bright ochraceous tawny, spotted with dark brown; tail russet, barred with black; wings russet, the lesser coverts mixed with ochraceous tawny along their median line and spotted with dark brown; face like the forehead, but the fringe all along the eyes, except on the outside, russet, mixed with rather reddish mars brown; a narrow collar on the throat rather reddish mars brown; below this a collar of creamy white; rest of lower parts like the forehead, but breast, sides, and flanks, mixed with a color between yellow ochre and ochraceous buff; thighs between pinkish cinnamon and clay color, paler on the inside; under wing-coverts dull white, tinged with buffy, the middle of these coverts russet.

*Measurements of type*.—Wing, 192 mm.; tail, 85; exposed culmen, 26; height of bill at base, 17; tarsus, 42; middle toe without claw, 33.

## BUBONIDAE

### *Strix leptogrammica nyctiphasma*, subsp. nov.

*Subspecific characters*.—Like *Strix leptogrammica myrtha* of Sumatra, but with face and forehead lighter, and the posterior lower parts darker, more rufescent, the dark bars therefore less distinct.

*Description*.—Type, adult male, no. 179099, U. S. Nat. Mus.; Pulo Bangkaru, Banjak Islands, Barussan Islands, western Sumatra, January, 1902; Dr. W. L. Abbott. Forehead russet, paler anteriorly; crown, occiput, and upper cervix, dark, rather rufescent bone brown; superciliary stripe and lower cervix between sanford brown and hazel, mixed to some extent with the paler color of the bases of the feathers; upper back between deep mars brown and warm sepia; back, rump, upper tail-coverts, and scapulars, between tawny and cinnamon brown and a lighter shade of the same, barred with the color of the crown, but the outer scapulars pale buff; wings and tail like the crown, barred with brown, varying from the color of the back to pale pinkish buff; lores dull white, the tips of the feathers blackish; ear discs like the superciliary stripe, but paler and mixed with whitish on their posterior edges; posterior auricular region like the crown; sides of neck, together with the chin, throat, and jugulum, brown like the superciliary stripe; remainder of lower

<sup>10</sup> Named for Dr. W. L. Abbott.

parts, including the thighs and the lining of the wings, cinnamon buff, but the crissum paler, the thighs darker, and all except the sides of the body barred with the brown color of the crown.

*Measurements of type.*—Wing, 293 mm.; tail, 176; exposed culmen, 30.5; culmen from cere, 23; height of bill at base, 23; tarsus, 46; middle toe without claw, 35.

This new owl has been found on only the Banjak Islands. It may be distinguished from *Strix leptogrammica niasensis*, from the neighboring island of Nias by its larger size.

The four recognizable races of this species are:

1. *Strix leptogrammica leptogrammica* Temminck. Borneo.
2. *Strix leptogrammica myrtha* (Bonaparte.) Sumatra.
3. *Strix leptogrammica niasensis* (Salvadori.) Nias Island.
4. *Strix leptogrammica nyctiphasma* Oberholser. Banjak Islands.

ETHNOLOGY.—*The possible Siouan identity of the words recorded from Francisco of Chicora on the South Carolina coast.* F. G. SPECK (Communicated by J. R. SWANTON).

One of the most baffling problems of American ethnology has been that of the linguistic identity of the tribes inhabiting the coast of South Carolina in the sixteenth century. The meager information left to us by the early Spanish writers who dealt with the region has not been sufficient to dispel the mist of uncertainty as to whether their speech had its affinities with eastern Siouan tribes of whom the Catawba, Tutelo, and Woccon are typical, or whether their relationships were with the Yuchi or Muskhogean groups. Mooney in 1894<sup>1</sup> felt that the affinities of some of these unclassified languages were with Yuchi, while others were probably related to the eastern Siouan group, and the latter conviction has recently taken a more definite phase in the mind of Swanton.<sup>2</sup> Yet their inclination to this opinion rested more upon inferences drawn from the statements of a certain Indian, named Francisco of Chicora, who was taken by the Spaniards in 1521, and who, after his conversion, gave certain information to his captors, than upon any direct correspondence of words with the known eastern Siouan dialects so far as material in them is available. All authorities agree in accepting evidence of a similarity in phonetics and in the *-re* terminations in proper names and place names in the dialect in question as suggestive of Siouan affinity.

<sup>1</sup> JAMES MOONEY, *Siouan tribes of the East*, Washington, 1894.

<sup>2</sup> J. R. SWANTON, *Early history of the Creek Indians and their neighbors*, Bull. 73, Bur. Amer. Ethnology, Washington, 1922.