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BIRDS COLLECTED DURING THE WHITNEY SOUTH SEA EXPEDITION XVII¹

THE BIRDS OF MALAITA ISLAND (BRITISH SOLOMON ISLANDS)

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When the Whitney South Sea Expedition undertook the exploration of the Solomon Islands, bird collections had been made by earlier explorers on all the larger islands except Malaita. The only place I find Malaita mentioned in ornithological publications is in some of Ramsay's papers. But the locality in these cases cannot be correct, as neither of Ramsay's two collectors (Cockerell and Morton) ever visited Malaita Island.

Malaita was formerly considered a dangerous place on account of its very independent and savage natives, and even the fearless Meek did not risk going there, in spite of being urged to do so by Lord Rothschild. In the last twenty years the situation has greatly improved, but even recently there have been several clashes between the natives and the whites which delayed the work of the Whitney Expedition for a considerable time. Due to these circumstances, Malaita was the last island of the Solomon Group to be visited. After all the hardships and the danger connected with this visit, the members of the expedition felt amply repaid by the success of the first ornithological exploration of this large island, a task of high interest and value to science.

The present paper consists of a preliminary report on the bird collection, including a list of the specimens taken and descriptions of the new forms. In a few cases a review of the geographic variation of a whole species has been given. In the final report on the birds from the Solomon Islands collected by the Whitney South Sea Expedition, more details will be given about the zoögeographic position of Malaita Island and its bird life.

Here it may be briefly stated that Malaita, although it has three endemic species (*Rhipidura malaitæ*, *Pachycephala sanfordi*, and *Zosterops stresemanni*) and several indigenous subspecies, on the whole shows a close affinity to Guadalcanar in its bird life. Concerning the geography

¹Previous papers in this series comprise American Museum Novitates, Nos. 115, 124, 149, 322, 337, 350, 356, 364, 365, 370, 419, 469, 486, 488, 489, and 502.

of the island and the collecting stations of the expedition, I shall confine myself in the present paper to the following short notes.

Malaita Island lies somewhat apart from the northern chain of the Solomon group and stretches from north-northwest to south-southeast, its northern point (Cape Astrolabe) lying at $160^{\circ} 40' \text{ E.}$ and $8^{\circ} 20' \text{ S.}$, and the southern point (Cape Zelée) at $161^{\circ} 40' \text{ E.}$ and $9^{\circ} 45' \text{ S.}$ The island is about 120 miles long, but at its widest part only 20 miles wide. There are no large plains, most of the island being covered by low hills not rising above 2000 feet in the north or the south of the island. The mountainous area is confined to the center (see map) where we find quite an extensive massif of a general altitude of more than three thousand feet. The highest summit (Mt. Torombusu) reaches about 4300 feet. The island, being the most thickly populated of the whole Solomon Group, has lost a good deal of its original forest, which has been replaced by native gardens and secondary growth.

Bird collections were made at the following places (see map):

AUKI.—Near sea-level, Jan. 26–29, 1930; H. Hamlin, E. Mayr, W. F. Coultas, and W. J. Eyerdam.

SU'U.—Near sea-level, Feb. 1–Feb. 15, 1930; H. Hamlin, E. Mayr, W. F. Coultas, and W. J. Eyerdam. Feb. 26–March 3, 1930; H. Hamlin, W. F. Coultas, and W. J. Eyerdam.

ERIGOMANO.—2000 feet, March 4–10, 1930; same party.

MT. TOROMBUSU.—4000 feet, March 12–15, 1930; same party. March 16–19, 1930 (without Hamlin).

WANGAFUFU.—Near Arorla, 3000 feet, March 20–29, 1930; W. F. Coultas and W. J. Eyerdam.

ARORLA (or Aurola).—3000 feet, March 30–April 10, 1930; W. F. Coultas and W. J. Eyerdam. April 11–15, 1930 (with Hamlin).

KWARAMBARA (Olimburi district).—Sea-level, April 17, 1930.

The collection consists of 1060 specimens representing 62 species, 16 of which are indigenous forms. Endemic forms have been named *malaitæ* in many cases, in order to make the range conspicuous. I am much indebted again to Lord Rothschild for the loan of valuable specimens from the Tring collection and to Mr. Arthur Goodson for many notes and measurements. The arrangement of the families and genera is the same as in Amer. Mus. Novit., No. 486. All measurements are in millimeters, weights in grams, and colors according to Ridgway's 'Color Standards.'

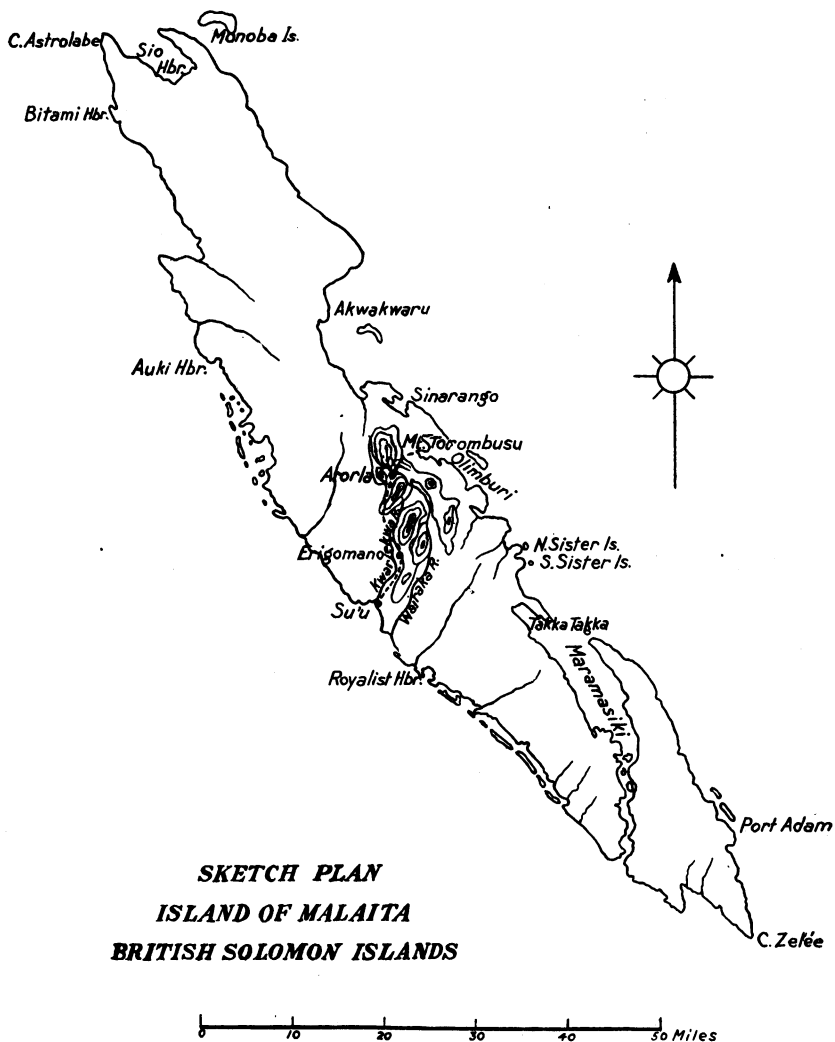


Fig. 1. Malaita Island, showing the mountainous region in the center, the route (dotted line), and the important collecting stations of the Expedition.

Outline of the island after the British Solomon Islands Public Survey; mountains, rivers, and villages in central part after the field notes and sketches of the Whitney South Sea Expedition (H. Hamlin).

1.¹ ***Demigretta sacra*** (Gmelin)

Ardea sacra GMELIN, 1789, 'Syst. Nat.,' I, part 2, p. 640, Tahiti, Society Islands.
1 ♂ (Feb. 10, 1930).

2. ***Nycticorax caledonicus mandidularis*** Ogilvie-Grant

Nycticorax mandibularis OGILVIE-GRANT, 1888, Proc. Zool. Soc. London, p. 203, Guadalcanar, Solomon Islands.
1 ♀ (April 8, 1930).

3. ***Butorides striatus macrorhynchus*** (Gould)

Ardetta macrorhyncha GOULD, 1848, 'Birds Australia,' VI, part 31, Pl. LXVI, New South Wales, Australia.
1 ♀ (Feb. 6, 1930).

4. ***Anas superciliosa pelewensis*** Hartlaub and Finsch

Anas superciliosa var. *pelewensis* HARTLAUB AND FINSCH, 1872, Proc. Zool. Soc. London, p. 108.
1 ♂ (March 4, 1930).

5. ***Accipiter novæhollandiæ malaitæ***, new subspecies

TYPE.—No. 226706, Amer. Mus. Nat. Hist., ♀ ad.; Malaita Island, British Solomon Islands; April 15, 1930; H. Hamlin, W. F. Coultas, and W. J. Eyerdam.

SUBSPECIFIC CHARACTERS.—The gray of the upperside much darker than in any of the other subspecies of *novæhollandiæ* in Melanesia; underside not uniform, but with narrow whitish bars.

FEMALE ADULT (type and unique specimen).—Cheeks, ear-coverts, sides of neck, hindneck, pileum, and forehead dark neutral gray (R.53); back, wing-coverts, edges of wings, dark fuscous-gray; tail-feathers dark gray, with indistinct black cross-bars; middle of throat dark gray with narrow whitish or rusty bands; breast dark rust-colored (Mikado-brown, R.29) with fuscous and buff bands; belly and flanks lighter (about pale orange-cinnamon, R.29) with white cross-bands, which broaden toward the thighs, crissum, and under tail-coverts; under wing-coverts and axillaries orange-cinnamon with white bars; quills with indistinct narrow black bars, inner webs of primaries with broad buff bands. "Iris chrome-yellow; lid cadmium-yellow; bill black, base of under mandible chrome-yellow; cere cadmium-yellow; feet cadmium-yellow." "Female with a pair of ovaries containing small white eggs."

MEASUREMENTS.—Wing, 238; tail, 196; culmen (without cere), 17.5; tarsus, 62; weight, 290 gr.

This very striking new subspecies is easily distinguished from all other representatives of *Accipiter novæhollandiæ* in the Solomon Islands by its dark upperside and barred under surface. There is also a tendency to have bars on the primaries; in the other Melanesian subspecies of *novæhollandiæ* the primaries show very light bars. From *leucosomus* (New Guinea) and *dampieri* (Bismarck Archipelago) *malaitæ* differs by its richer coloration on the underside and the darker head and upperside.

¹Species collected on Malaita Island are numbered consecutively.

6. *Accipiter albogularis* Gray

Accipiter albogularis GRAY, 1870, Ann. Mag. Nat. Hist., (4) V, p. 327, San Cristobal Island, British Solomon Islands.

1 ♀ (Feb. 15, 1930).

This specimen belongs to the variety which is white underneath with no rufous band across the neck.

Haliæetus species and *Haliastur indus girrenera* (Vieillot), both common species in the Solomon Islands, were observed, but not collected.

7. *Aviceda subcristata gurneyi* (Ramsay)

Baza Gurneyi RAMSAY, 1881, Journ. Linn. Soc. London, XVI, p. 130, Ugi Island, British Solomon Islands.

1 ♀ juv. (Feb. 8, 1930).

8. *Pandion haliaetus cristatus* (Vieillot)

Buteo cristatus VIEILLOT, 1816, 'Nouv. Dict. d'Hist. Nat.,' nouv. éd., IV, p. 481, Australia.

1 ♂ (Feb. 8, 1930).

9. *Megapodius freycinet brenchleyi* Gray

Megapodius brenchleyi, G. R. GRAY, 1870, Ann. Mag. Nat. Hist., (4) V, p. 328, Gulf Island (= Ugi Island).

1 ♀ (March 2, 1930).

As I have no typical material of *eremita* Hartlaub from the Ninigo Islands, I cannot say by what characters *brenchleyi* can be distinguished from *eremita*.

10. *Porphyrio albus* subspecies

3 ♂ (February 9, March 7, and April 13, 1930).

The geographic variation of this species will be treated in a later paper.

A forest rail (either *Amaurornis olivacea* or *Eulabeornis woodfordi*) was observed, but no specimens could be obtained.

11. *Actitis hypoleucos* (Linnæus)

Tringa hypoleucos LINNÆUS, 1758, 'Syst. Nat.,' 10th Ed., p. 149, Sweden.

1 ♂ (Feb. 5, 1930).

12. *Pluvialis dominicus fulvus* (Gmelin)

Charadrius fulvus GMELIN, 1789, 'Syst. Nat.,' I, part 2, p. 687, Tahiti.

1 ♀ (Feb. 26, 1930).

13. *Ptilinopus superbus superbus* (Temminck)

Columba superba TEMMINCK, 1810, 'Les Pigeons,' p. 75, Pl. XXXIII, Otaheiti, (error =) Halmahera.

15♂, 12♀ (Jan. 28–April 11, 1930). From the lowland up to 3000 feet.

Ptilinopus solomonensis Gray

Several subspecies of this species (*meyeri* and *neumanni*) have been described by Hartert in recent years from the Bismarck Archipelago. A study of the geographical variation of this species in the Solomon Islands has been thus far impossible because of inadequate material. A splendid series of 128 males of this dove from thirteen different islands of the Solomon Group gives me the welcome opportunity to complete this task. Even this rich material is not sufficient to settle every point. My series from three islands (Pavuvu, Buena Vista, and Ramos) is too small to decide to which subspecies the specimens belong.

Ptilinopus solomonensis solomonensis G. R. Gray

Ptilinopus solomonensis G. R. GRAY, 1870, Ann. Mag. Nat. Hist., (4) V, p. 328, Wanga, San Cristobal [description of juvenal].

Ptilopus ceraseipectus TRISTRAM, 1879, Ibis, p. 442. Makira Harbour, San Cristobal.

SUBSPECIFIC CHARACTERS.—Small size; lores and forepart of the crown covered with a single violet patch; red patch on belly pale and rather vinaceous, about tourmaline pink (R. 28); upperside rather dull green.

	WING ¹	WEIGHT
♂	116–125(120.6)	83–112(98)
♀	115–122(119.2)	83–107(95)

RANGE.—San Cristobal and Ugi Island, eastern Solomon Islands. Rare in the lowland, common in the hills and mountains.

Ptilinopus solomonensis ocularis, new subspecies

TYPE.—No. 218786, Amer. Mus. Nat. Hist.; ♂ ad.; Guadalcanar Island, British Solomon Islands; July 27, 1927; R. H. Beck and F. P. Drowne.

SUBSPECIFIC CHARACTERS.—Large size; red on the crown restricted to two small anteocular patches; middle of crown green like hindneck; belly-patch less vinaceous, with a tendency toward purple.

	WINGS
10♂	127–134(130.7)
2♀	126, 127

RANGE.—Guadalcanar Island, British Solomon Islands.

¹The tail of this species has not been measured, since it is impossible to get correct results on account of the heavy upper tail-coverts.

14. *Ptilinopus solomonensis ambiguus*, new subspecies

TYPE.—No. 226573, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; March 15, 1930; H. Hamlin, W. F. Coultas, and W. J. Eyerdam.

SUBSPECIFIC CHARACTERS.—Very similar to *solomonensis*, but less red on the head; the red patch on the forepart of the crown restricted to two loreal spots in all of the adult males, but occupying a larger area than in *ocularis*; belly-patch usually paler; green on the upperside and on the flanks slightly richer and more olive; larger than *solomonensis*.

	WING	WEIGHT
9 ♂ ad.	120-127(124)	104-123(115.3)
9 ♀ ad.	118-126(120.4)	88-116(106.6)
3 ♂ I.Y.	117, 120, 123	96, 97, 100
4 ♀ I.Y.	112-117(115.8)	88-101(96.6)
6 ♂ juv.	110-115(112.3)	81-99(90.3)

FIRST-YEAR PLUMAGE

MALE.—So similar to the adult male that it is possible that this plumage may not be recognizable in every specimen; differs by being smaller; the red on the forepart of the crown is still connected; the primaries, especially the second, third, and fourth narrower and more pointed; the under wing-coverts, especially on the wing-bend, are distinctly margined with yellow; the yellow edges on secondaries and tail-feathers are broader, and the primary-coverts have narrow light edges.

FEMALE.—Very similar to adult female, but usually distinguishable by smaller size and more pointed wing-feathers.

It is doubtful if this plumage is really a first-year plumage. All the characters that distinguish it from the adult plumage show a tendency toward juvenal plumage, and, as there is no other known case of a pigeon having two plumages before reaching the adult dress, it is possible that the above-described plumage is only a "Hemmungskleid"¹ or "retarded plumage" of the adult. This possibility is strengthened by the fact that this plumage is recognizable only in exceptional cases in the other races of *Ptilinopus solomonensis*. A more exhaustive study of this phenomenon will be undertaken in one of my next papers.

JUVENAL PLUMAGE

MALE.—Green, darker above, lighter below, somewhat glossy on wings and tail; throat grayish-green; feathers of back, rump, upper tail-coverts, and breast with narrow yellow edges; feathers of abdomen, under and upper wing-coverts and secondaries with broad yellow edges; middle of lower abdomen and under tail-coverts yellowish; forehead with a few vine-colored feathers.

FEMALE.—Similar to juvenal male, but forehead gray-green; yellow edges on body feathers narrower or absent; yellow on lower abdomen and under tail-coverts paler, almost whitish; the young male has also sometimes a few reddish feathers and an indistinct yellow band on the upper belly which are always absent in the female.

¹For this term see Stresemann, 1920, 'Avifauna Macedonica,' p. xvi.

Ptilinopus solomonensis vulcanorum, new subspecies

TYPE.—No. 220412, Amer. Mus. Nat. Hist.; ♂ ad.; Kulambangra Island, British Solomon Islands; R. H. Beck and F. P. Drowne.

SUBSPECIFIC CHARACTERS.—Similar to *solomonensis*, red on the forehead not split into two supraloral patches; but belly more violet, about argyle purple (R.37) against tourmaline pink (R.38) in *solomonensis*; the green of the upperside more olivaceous; more and larger blackish spots on the scapulars.

WING MEASUREMENTS

	MALES	FEMALES
Kulambangra	123-129(125.2)	121-128(124)
Rendova		120, 122
Vangunu	120-126(123)	
Gatukai	118-123(120.2)	120
Ganonga	120, 122	
Vella Lavella	124	

RANGE.—Volcanoe Islands of central Solomon Islands.

There is some variation in size and the coloration of the belly-patch, but all specimens are distinguished by the large spots on the scapulars.

Ptilinopus solomonensis bistictus, new subspecies

TYPE.—No. 221078, Amer. Mus. Nat. Hist.; ♂ ad.; Bougainville Island, British Solomon Islands; January 27, 1928; F. P. Drowne.

SUBSPECIFIC CHARACTERS.—Very similar to *ocularis* from Guadalcanar, but supraloral spots much larger, sometimes almost meeting on the pileum; general coloration paler, which applies to the yellow on the breastband and on the under tail-coverts, to the red on the belly-patch and supraloral spots, and to the green on upper-side and flanks.

Wing: males, 126-133 (130.5); females, 124-131 (127.5).

RANGE.—Bougainville Island.

It is remarkable how similar the Bougainville subspecies is to the one inhabiting Guadalcanar. Both islands are 270 miles apart and separated by a long chain of islands which are inhabited by another subspecies of *solomonensis*.

Ptilinopus solomonensis subspecies

Besides the islands mentioned above, representatives of this species were also collected on Buena Vista Island (1 ♀ juv.), on Ramos Island (2 ♂ juv.), and on the Pavuvu Islands. This material is not sufficient to decide as to what subspecies these birds belong. The single adult male of Pavuvu Island (wing, 122 mm.) is remarkably similar to typical *solomonensis*.

Ptilinopus solomonensis neumanni Hartert

Ptilinopus solomonensis neumanni HARTERT, 1926, Nov. Zool., XXXIII, p. 42, Nissan Island.

SUBSPECIFIC CHARACTERS.—Large, red on forehead more purplish than in *solomonensis* and decidedly paler (not of the same color, as Hartert says), reaching farther up the pileum; red on belly slightly less vinaceous; green on upperside, on throat and flanks darker; wing of males, according to Hartert, 130–134.

Material collected by the Whitney Expedition (Aug., 1929) has the following measurements.

	WING	WEIGHT
5 ♂	127–131 (128.6)	91–105 (98.2)
4 ♀	124–133 (128.0)	92–98 (95)

To the west of the Solomon Islands, we find the following subspecies.

Ptilinopus solomonensis johannis Sclater

Ptilopus johannis SCLATER, 1877, Proc. Zool. Soc. London, p. 556, Admiralty Islands.

RANGE.—Manus (Admiralty Islands), St. Matthias Island, Squally Island, New Hanover, and Nusa Island (north of New Ireland).

Ptilinopus solomonensis meyeri Hartert

Ptilinopus solomonensis meyeri HARTERT, 1926, Nov. Zool., XXXIII, p. 173, Witu Islands.

RANGE.—New Britain, Uatom Island, Witu or French Islands, and Rook Island.

Ptilinopus solomonensis speciosus Schlegel

Ptilopus speciosus SCHLEGEL, 1871, Nederl. Tijdschr. Dierk., N., p. 23, Méfoor et Soék [Numfor and Biak], Islands of Geelvinkbay.

SUBSPECIFIC CHARACTERS.—Supraloral spots very small; green of head and neck very brilliant, almost glossy; green of back, rump, and scapulars with a distinct olive tinge; bluish-black spots of scapulars absent; lower and lateral edge of yellow breast-band white; small size.

RANGE.—Islands of Geelvinkbay (Numfor, Biak = Misori, and Traitor Islands)

This bird has always been somewhat of a puzzle to the systematist because, although resembling *Ptilinopus rivolii bellus*, it occurs on the same islands as *Ptilinopus rivolii prasinorrhous*. A remark in the great work of Salvadori,¹ who compared the bird with *P. s. johannis*, put me on the right track. An examination of specimens which I received from Tring Museum justified my suspicion that *Ptilinopus speciosus* is merely a subspecies of the widespread *Ptilinopus solomonensis*. Except for the yellow-and-white breastband it shows very little similarity to *Ptilinopus rivolii bellus*.

¹1882, 'Ornitologia della Papuasie e delle Molucche,' III, p. 48.

15. *Ptilinopus viridis lewisi* Ramsay

Ptilopus Lewisi RAMSAY, 1882 (March), Proc. Linn. Soc. N.S.W., VI, 1881, p. 724, Lango, Guadalcanar.

9♂, 4♀ (Feb. 5-15, March 2-10, and April 5, 1930).

Ducula pistrinaria pistrinaria Bonaparte is a common species along the coast, but no specimens were collected, as the expedition had already secured a sufficient series on other islands.

16. *Ducula brenchleyi* (Gray)

Carpophaga Brenchleyi G. R. GRAY, 1870, Ann. Mag. Nat. Hist., (4) V, p. 328, Wanga, San Cristobal.

1♀ im. (Feb. 4, 1930).

17. *Ducula rubricera rufigula* (Salvadori)

Carpophaga rufigula SALVADORI, 1878, Atti R. Acad. Sci. Torino, XIII, p. 536, San Cristobal Island.

8♂, 6♀ (Feb. 3-12, March 17-25, 1930).

18. *Columba vitiensis halmaheira* (Bonaparte)

Carpophaga halmaheira BONAPARTE, 1855, 'Consp. Gen. Avium,' II, p. 44, Halmaheira Island, northern Moluccas.

2♂ (March 15, April 5, 1930).

There is a great deal of individual variation in this species, but many of the birds of eastern New Guinea ("*rawlinsoni*") and the Solomon Islands seem to be more greenish, the birds of western New Guinea and the Moluccas more purplish. However, I cannot definitely settle this point because I have seen only very little material from the Moluccas. A few specimens from the Solomon Islands are almost as purplish as typical birds, so it does not seem to be advisable to separate the eastern birds.

The last revision of this species by Hartert, (1925, Nov. Zool., XXXII, p. 118) is rather misleading. *Columba pallidiceps* (+*philippinæ*) is a distinct species, which occurs side by side with *Columba vitiensis halmaheira* Bonaparte over a wide range. I have, at present, not enough material to decide whether or not *philippinæ* differs any from *pallidiceps*.

Genus *Gymnophaps* Salvadori

Gymnophaps SALVADORI, 1874, Ann. Mus. Civ. Gen., VI, p. 86.

TYPE (by monotypy).—*Gymnophaps albertisii* Salvadori.

GENERIC CHARACTERS.—Strong, heavy, and well-curved bill; lower mandible consisting of two plates; nostrils covered with a long-stretched operculum; circum-ocular space and lores naked; tarsus feathered about half of its length or more. Toes with broad soles, even middle toes slightly webbed; tail long, not graduated.

This genus has been sunk by Stresemann and other authors, but I do not think it can be united with *Columba*, especially since the new species *solomonensis*, which is undoubtedly a representative of *albertisii*, shows many striking peculiarities that make it impossible to regard it as a member of the genus *Columba*.

19. *Gymnophaps solomonensis*, new species

TYPE.—No. 226670, Amer. Mus. Nat. Hist.; ♀ ad. (ovary with large yellow eggs); Malaita Island, March 13, 1930, Hamlin, Coultas, and Eyerdam.

DESCRIPTION.—Male and female adult: forehead, crown, and hindneck pale gull gray; throat and sides of neck lighter, almost whitish; middle of throat sometimes with a light-vinaceous tinge, color of breast and belly very varying, rarely of a pallid neutral gray (R.LIII), mostly a mixture of pallid gray and pale vinaceous, sometimes an almost pure pale vinaceous; thighs pale gray; under tail-coverts light gray; feathers on the middle of the back dark gull-gray with a slight greenish sheen, a sub-terminal black band and a deep gull-gray edge; scapulars and lesser wing-coverts dark gray with a black edge and a distinct greenish sheen; rump light gull-gray, darker toward the back; upper tail-coverts and tail-feathers pale neutral-gray, in worn condition tinged with brownish; wing-feathers and greater wing-coverts blackish with a green gloss.

Juvenal: similar to adult, but feathers softer; crown cinnamon-buffy; underside with hardly any vinaceous tinge; all feathers of underside and neck with minute blackish spots; tertials, innermost lesser wing-coverts, and under tail-coverts tinged with cinnamon; wings and wing-coverts duller.

Iris orange, eye-lid red, bill straw-yellow, feet pinkish (lead-gray).

Culmen, 22–23; exposed culmen, 17–19; tarsus, 28–32; tail about 150–170.

	WING	WEIGHT	WING	WEIGHT
Malaita				
♂ ad.	222–236(230.2)	300–400(325)	♀ ad.	211–224(219.6) 275–325(315)
Bougainville				
♂ ad.	223–236(230.4)		♀ ad.	213–225(218.6)
Guadalcanar				
♂ ad.	233		♀ ad.	216–224(218.2)
Vangunu				
♂ ad.	215, 216, 225, and 226		♀ ad.	

Two young birds from Bougainville Island (1♂, 1♀) have wings of 204 and 211 mm.

RANGE.—Mountainous islands of the Solomon group. Malaita Island: 15♂, 6♀ (March 13–April 14, 1930).

This species shows a great deal of individual variation. Breast and belly are usually more or less vinaceous, but sometimes of a pure gray. The color of the back (and scapulars) also varies considerably, sometimes a more glossy greenish-black prevails, sometimes a dull grayish-black. In size the specimens from Malaita, Bougainville, and Guadalcanar

agree very well; four birds from Vangunu (Central Group), sexed as males, are smaller, but the sexing is perhaps not correct.

This species, one of the finest discoveries of the Whitney Expedition, is restricted to the high mountain forest (above 3000 feet). It seems to be fairly common wherever it occurs. It is not surprising that this mountain species was not previously discovered because, prior to the Whitney Expedition, the mountain forest of the Solomon Islands had never been explored.

The range of the genus *Gymnophaps* is of great geographical interest; it is almost identical with that of *Micropsitta bruijnii*, a distribution which I do not regard as accidental: mountains of the Moluccas, New Guinea, Bismarck Archipelago, and Solomon Islands. However, I do not believe that these mountain areas have been connected in recent geological times, for, in this case, we would expect a much stronger component of Papuan elements in the mountains of the Moluccas and Solomon Islands.

20. *Coryphænas crassirostris* (Gould)

Turacoena crassirostris GOULD, 1856, Proc. Zool. Soc., p. 136, Guadalcanar, British Solomon Islands.

7 ♂, 2 ♀ (Feb. 9-11, March 7-28, April 11-14, 1930).

21. *Macropygia rufa arossi* Tristram

*Macropygia arossi*¹ TRISTRAM, 1879 (Oct.), Ibis, p. 443, Makira Harbour, San Cristobal Island.

Macropygia rufocastanea RAMSAY, 1879 (Dec.), Proc. Linn. Soc. N.S.W., IV, p. 314, Lango, Guadalcanar Island.

11 ♂, 11 ♀ (March 5-26, April 4-11, 1930).

22. *Chalcophaps stephani mortoni* Ramsay

Chalcophaps Mortoni RAMSAY, 1882 (March), Proc. Linn. Soc. N.S.W., VI, p. 725, Ugi Island.

5 ♂, 4 ♀ (Jan. 31, Feb. 6-11, 1930).

23. *Eos cardinalis* Gray

Lorius cardinalis GRAY, 1849, 'Gen. Birds,' App. 20, Ysabel Island, Solomon Islands.

4 ♂, 2 ♀ (Feb. 1-5, 1930).

24. *Lorius chlorocercus* Gould

Lorius chlorocercus GOULD, 1856, Proc. Zool. Soc. London, p. 137, San Cristobal Island.

A good series of males and females (Feb. 1-15, Feb. 27, March 6-28, April 1-15, 1930).

¹Mr. Gregory M. Mathews kindly confirmed my opinion, that *arossi* is the earlier name for this subspecies.

25. *Trichoglossus ornatus aberrans* Reichenow

Trichoglossus aberrans REICHENOW, 1918, Journ. f. Ornith., p. 439 [eastern part of Kaiser Wilhelmsland, error for:] Blanche Bay, New Britain.

2 ♂, 1 ♀ (Jan. 28–Feb. 5, 1930).

26. *Charmosyna margarethæ* Tristram

Charmosyna margarethæ TRISTRAM, 1879, Ibis, p. 442, Makira Harbour, San Cristobal Island.

14 ♂, 7 ♀ (March 15–28, April 3–15, 1930).

27. *Charmosynopsis palmarum meeki* Rothschild and Hartert

Hypocharmosyna meeki ROTHSCCHILD AND HARTERT, 1901, Nov. Zool., VIII, p. 187, Kulambangra Island, British Solomon Islands.

11 ♂, 5 ♀ (March 13–25, 1930).

I do not see any reason for keeping this form specifically separated from *palmarum*.

28. *Cacatua ducorpsii* Pucheran

Cacatua ducorpsii PUCHERAN, 1853, 'Voy. Pôle Sud,' Zool., III, p. 108 [Ysabel Island], Solomon Islands.

6 ♂, 3 ♀ (Jan. 28, Feb. 5, March 5–7, 25–28, April 2, 1930).

29. *Micropsitta finschii aolæ* (Ogilvie-Grant)

Nasiterna aolæ OGILVIE-GRANT, 1888, Proc. Zool. Soc. London, p. 189, Aola, Guadalcanar Island, British Solomon Islands.

7 ♂, 1 ♀ (Feb. 3–15, 26, 1930).

Agrees perfectly with a series from Guadalcanar.

30. *Eclectus pectoralis salomonensis* Rothschild and Hartert

Eclectus pectoralis salomonensis ROTHSCCHILD AND HARTERT, 1901, Nov. Zool., VIII, p. 82, Fauro Island, Solomon Islands.

4 ♂, 8 ♀ (Feb. 3–5, March 6–7, March 26–27, April 9–12, 1930).

31. *Geoffroyus heteroclitus heteroclitus* Hombron and Jacquinot

Psittacus Geoffroyus heteroclitus HOMBRON AND JACQUINOT, 1841, Ann. Sci. Nat., p. 319, San Jorge et Ysabel.

16 ♂, 13 ♀ (Jan. 28, Feb. 5–11, Feb. 27–28, March 6, 7, 18, 25, 27, April 3–9, 1930).

32. *Cuculus optatus* Gould

Cuculus optatus GOULD, 1845, Proc. Zool. Soc. London, p. 18, Port Essington, northwestern Australia.

1 ♀ semiadult (April 15, 1930).

Mr. J. L. Peters kindly identified this bird for me.

33. *Cacomantis variolosus addendus* Rothschild and Hartert

Cacomantis addendus ROTHSCHILD AND HARTERT, 1901, Nov. Zool., VIII, p. 185, Kulambangra Island, British Solomon Islands.

6 ♂ (Feb. 8, 10, March 9, 15, April 1, 4, 1930).

34. *Eudynamis scolopacea alberti* Rothschild and Hartert

Eudynamis orientalis alberti ROTHSCHILD AND HARTERT, 1907, Nov. Zool., XIV, p. 440, Gizo Island, British Solomon Islands.

2 ♀ (Feb. 8 and 11, 1930).

35. *Urodynamis taitensis* (Sparrman)

Cuculus taitensis SPARRMAN, 1787, 'Museum Carlson.', fasc. II, No. 32, Tahiti Island.

1 ♀ (April 15, 1930).

Collected at an altitude of 3000 feet. Ovary small.

Migrant from New Zealand.

36. *Ninox jacquinoti malaitæ*, new subspecies

TYPE.—No. 226710, Amer. Mus. Nat. Hist., ♂ ad.; Malaita Island, British Solomon Islands; April 6, 1930; H. Hamlin, W. J. Coultas, and W. J. Eyerdam.

SUBSPECIFIC CHARACTERS.—Similar to *Ninox jacquinoti roseoaxillaris*, but much darker and larger, under- and upperside slightly barred.

DESCRIPTION.—Type specimen (male adult): Upperside dark rufous-brown (natal brown, R.XL); edges of feathers lighter rufous, especially on head, neck, and rump; all feathers with more or less distinct pairs (one on each web) of rufous-buffy spots, which are most conspicuous on hindneck and scapulars; wing-coverts similar, but less rufous; forehead, superciliary stripe, and triangular spot on throat white; preocular bristles blackish brown, some with white bases; ear-coverts dark rufous-brown; breast and sides of the breast rufous-brown (mars brown, R.XV), belly and flanks much lighter and more rusty; feathers of the middle of the breast with whitish, on the sides with pale rufous spots or cross-bars; abdomen and flanks with numerous, but indistinct, narrow whitish cross-bars; thighs buffy, under tail-coverts buffy with rufous tips. Wing- and tail-feathers dull brown; tail-feathers with a few narrow white bars; three outer primaries with buffy-whitish spots on the outer web, inner primaries with one or two spots on the lower end; on the inner web with broad white bars which are pinkish near the base; axillaries pinkish, under wing-coverts partly rufous-brown, partly pinkish.

The other specimen collected (female juvenile) is very similar, but the cross-bars on under- and upperside are more pronounced, even visible on the ear-coverts; forehead and superciliary dirty white. "Iris dark gray, bill pale greenish-yellowish white, feet dirty yellow brown."

	WING	TAIL	TARSUS	CULMEN (FROM CERE)	WEIGHT
♂	165	93	32	16	
♀	164	(84)	30	15	174

Only two specimens were obtained.

RANGE.—Malaita Island.

All the *Ninox* from the Solomon Islands must be treated as one species; they represent each other and are characterized by the more or less pinkish axillaries and the white throat.

37. *Tyto alba delicatula* (Gould)

Strix delicatulus GOULD, 1837, Proc. Zool. Soc. London, 1836, p. 140, New South Wales.

1 ♀ ad. (April 12, 1930).

Two species of *Collocalia* were observed, but no specimens secured.

38. *Hemiprocne mystacea woodfordiana* (Hartert)

Macropteryx mystacea woodfordiana HARTERT, 1896, Nov. Zool., III, p. 19, Guadalcanar Island, British Solomon Islands.

3 ♂, 4 ♀ (Feb. 4-8, March 18-19, April 8-12, 1930).

Alcedo atthis salomonensis ROTHSCHILD AND HARTERT, was observed on several rivers, but no specimens could be obtained.

39. *Ceyx lepidus nigromaxilla* (?) Rothschild and Hartert

Ceyx lepida nigromaxilla ROTHSCHILD AND HARTERT, 1905, Nov. Zool., XII, p. 256, Guadalcanar Island.

Only one specimen (♀, April 1, 1930, 3000 ft.) was collected on Malaita Island.

	WING	TAIL	CULMEN	TARSUS	WEIGHT
1 ♀	61	25	38	9	23

"Iris brown, bill, upper mandible black, lower mandible deep yellow, feet deep yellow."

This unique specimen is closest of all the Solomon Island forms to *nigromaxilla*, of which also I unfortunately have only one specimen for comparison. The Malaita bird differs from the Guadalcanar bird in the following characters: underside much lighter, on breast and flanks not of a deep ochraceous-orange (almost xanthine-orange, R.III), but yellow ochre; upperside also decidedly lighter; blue¹ spots on head and neck not violet-ultramarine (R.X), but about phenyl-blue (R.IX); the same differences exist for the tips of the wing-coverts, the edges of the inner secondaries and the scapulars; back, rump, and upper tail-coverts between methyl-blue and light methyl-blue; lower mandible deep yellow, not red.

More material must be inspected before this apparently new form can be named.

40. *Halcyon chloris alberti* Rothschild and Hartert

Halcyon tristrami alberti ROTHSCHILD AND HARTERT, 1905, Nov. Zool., XII, p. 256, Kulambangra Island, British Solomon Islands.

5 ♂, 7 ♀ (Feb. 4-10, March 27, April 1-14, 1930).

The Malaita specimens are decidedly lighter underneath than

¹Blue colors as seen with the light.

alberti. But as typical *tristrami* are also lighter than *alberti*, I must first see a series of New Britain specimens, before I can name the Malaita bird.

Halcyon saurophaga Gould is common along the coast, but was not collected because many specimens had been taken previously on other islands of the Solomon Group.

41. *Eurystomus orientalis solomonensis* Sharpe

Eurystomus solomonensis SHARPE, 1890, Proc. Zool. Soc. London, p. 552, Solomon Islands.

5♂, 5♀ (Feb. 3-9, March 19-29, 1930).

42. *Rhyticeros plicatus mendanæ* Hartert

Rhyticeros plicatus mendanæ HARTERT, 1924, Bull. Brit. Orn. Club, XLV, p. 46, Guadalcanar Island, British Solomon Islands.

4♂, 1♀ (March 7, 18, April 1-8, 1930).

Hirundo tahitica subfusca was frequently recorded, mainly along the coast.

43. *Coracina papuensis eyerdami*, new subspecies

TYPE.—No. 227189, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; H. Hamlin, E. Mayr, W. F. Coultas, and W. J. Eyerdam.

SUBSPECIFIC CHARACTERS.—Similar to *elegans*, but above darker gray, breast-band also darker gray; larger; bill longer and heavier.

	WING	BILL ²	WIDTH OF BILL ³	WEIGHT
<i>eyerdami</i> ¹ (Malaita)				
13♂ ad.	140-146(142.2)	18-20	13	66-86(75)
3♂ juv.	135, 137, 140			64, 68, 69
13♀ ad.	136-144(139.6)			69-82(74.6)
1♀ juv.	136			70

Collected Jan. 27-31, Feb. 1-10, 26, March 6, 1931.

elegans (Guadalcanar, Malapar, Beagle Island)

15♂ ad.	135-141(138.5)	17-18	12	
1♂ juv.	134			
11♀ ad.	130-137(132.8)			
1♀ juv.	129			

RANGE.—Malaita Island, British Solomon Islands.

¹The length of the tail (approximately 107-111) cannot be used as comparative measurement in this species, for the heavy upper tail-coverts prevent correct measuring.

²From anterior edge of nostril to the tip.

³On the base of the lower mandible.

I name this new subspecies in honor of Mr. W. J. Eyerdam, our associate on the Whitney Expedition, since he always showed much interest in this species.

44. *Coracina lineata malaitae*, new subspecies

TYPE.—No. 227165, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; April 4, 1930, H. Hamlin, W. F. Coultas, and W. J. Eyerdam.

SUBSPECIFIC CHARACTERS.—Similar to *solomonensis*, but males: slightly lighter and less bluish; secondaries and wing-coverts with narrow white edges; lower abdomen and under tail-coverts with signs of transversal bars; axillaries and under wing-coverts barred black and white; in *solomonensis* they are bluish-gray like the rest of the body with narrow white bars. Females: much lighter than *solomonensis* females, white edges on wings and wing-coverts much broader; white bars on abdomen, under tail-coverts, under wing-coverts, and axillaries much broader.

	WINGS	WEIGHT
12 ♂ ad.	131-139(134.4)	58-71(63.7)
1 ♂ juv.?	134	
5 ♀ ad.	129-131(130)	65-70(67.4)
4 ♀ juv.	126-128(127)	61-71(63.8)

13 ♂, 9 ♀ (Feb. 3, 15, March 5, 10, 22-31, April 1-12, 1930).

RANGE.—Malaita Island, British Solomon Islands.

Edolisoma holopolium

Only a few specimens of this rather rare species were collected before the activities of the Whitney Expedition. Thus far no subspecies have been separated.

Edolisoma holopolium holopolium (Sharpe)

Graucalus holopolius SHARPE, 1888, Proc. Zool. Soc. London, p. 184, Guadalcanar Island.

Buka and Bougainville: wings, ♂ 117, 119, 121; ♀ 115, 116, 116, 117.

Choiseul: wings, ♂ 109, 113, 114, 115, 116; ♀ 110, 111.

Ysabel: wings, ♂ 114, 117; ♀ 111, 114, 116.

Guadalcanar: wings, ♂ 112, 113, 114, 116, 117, 120; ♀ 106, 111, 111.

RANGE.—Guadalcanar, Ysabel, Choiseul, Bougainville, and Buka.

There is a great deal of individual variation in this subspecies, mainly concerning the shape of the nuchal collar, the size of the black patch on the forehead, and the width of the gray edges on the wing. But all these variations seem to have no geographical meaning. Bougainville birds are generally larger, Choiseul birds smaller, Ysabel and Guadalcanar specimens intermediate. The measurements overlap to such an extent that it is impossible to separate the populations of the different islands into subspecies.

Edolisoma holopolium pygmæum, new subspecies

TYPE.—No. 221686, Amer. Mus. Nat. Hist.; ♂ ad.; Kulambangra Island, British Solomon Islands; October 1, 1927; R. H. Beck and F. P. Drowne.

SUBSPECIFIC CHARACTERS.—Similar to *holopolium*, but much smaller, gray on upperside, wing-coverts and edges of wing-feathers darker; black on forehead and nuchal collar restricted.

	WING	TARSUS
Kulambangra 2 ♂ ad.	99, 104	20, 20
1 ♂ juv.	99	20
Vangunu 1 ♂ ad.	100	20.5

This is the smallest *Edolisoma*, I know of.

45. *Edolisoma holopolium tricolor*, new subspecies

TYPE.—No. 227258, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; March 28, 1930; W. F. Coultas, W. J. Eyerdam, and H. Hamlin.

SUBSPECIFIC CHARACTERS.—Very different from *holopolium*; forehead broadly black; both sides of the neck always connected with a broad black nuchal collar; primaries and primary-coverts entirely black without gray edges; wing-coverts and edges of secondaries, very light, almost whitish gray; smaller.

♂ ad.: wing 106–113 (109.1); weight 40–49 (45.1)

♀ ad.: wing 100–106 (103.4); weight 40–49 (43.1)

Birds collected at 3000 feet are slightly larger than those collected below 1500 feet (average in males 109.8 against 107.9).

The whitish upper wing-coverts contrasting with the black of the underside and the gray of the upperparts make this bird unusually handsome for an *Edolisoma*.

RANGE.—Malaita Island, British Solomon Islands (Feb. 10–15, 26, March 6–31, April 4–15, 1931).

46. *Edolisoma tenuirostre erythropygium* Sharpe

Edolisoma erythropygium SHARPE, 1888, Proc. Zool. Soc. London, p. 184, Guadalcanar Island.

15 ♂, 18 ♀ (Feb. 6–12, 26–27, March 5–9, 26–31, April 4–15, 1930).

The Malaita birds do not agree perfectly with typical *erythropygium*; although the males seem to be identical in coloration, the females are a shade paler below, have less rust color on the rump and larger blackish-brown areas along the shaft of the tail-feathers, furthermore they are slightly larger than Guadalcanar birds and have stronger bills.

For *saturatins*, Rothschild and Hartert give the following wing measurements: males, 116–126; females, 114–118.

For the Malaita and Guadalcanar birds I find the following wing measurements:

	GUADALCANAR	MALAITA
♂ ad.	(7) ¹ 114-122(118.3)	(11) ¹ 120-128(122.7)
♂ juv.	(2) 114, 115(114.5)	(4) 116-120(117.7)
♀ ad.	(9) 113-118(115.7)	(12) 113-123(119.1)
♀ juv.	(6) 109-115(112.3)	(6) 112-119(116.8)

Weights of Malaita birds: ♂ ad., 64-80 (73); ♂ juv., 71-83 (74.6); ♀ ad., 65-82 (73.4); ♀ juv., 62-72 (68.5).

47. *Mino dumontii sanfordi* Hartert

Mino dumontii sanfordii HARTERT, 1929, Amer. Mus. Novit., No. 364, p. 18, Guadalcanar Island.

A series of males and females (Jan. 27-28, Feb. 3-8, March 25-31, April 4-15, 1930).

Birds from Malaita Island agree in size with typical *sanfordi*.

48. *Aplonis metallica nitida* (Gray)

Calornis nitida GRAY, 1858, Proc. Zool. Soc. London, p. 181, New Ireland, 1 ♂, 2 ♀ (Jan. 27-28, 1930).

Aplonis grandis (Salvadori)

This large starling has been found on all the islands of the Solomon Group, but none of the several subspecies has been named thus far, except *dichroa* Tristram, a very distinct race inhabiting San Cristobal Island.

Rothschild and Hartert² have already called attention to the fact that measurements of specimens from the different islands do not agree. However, lack of available material prevented them from undertaking a revision of this species. The fine series obtained by the Whitney Expedition gives me the welcome opportunity to undertake this task.

Size is always the most useful character in distinguishing black birds. But, in this case even size does not help much because the average of wing length of this species of starling is different on every island. Before treating the subspecies recognized by me, I am giving measurements of all the material I examined. Birds collected between November and March are usually in very worn plumage or molting and often could not be used for measurements.

¹Number of measured specimens.

²1902, Nov. Zool., IX, p. 584.

	WING	TAIL	W.-T. ¹ —INDEX	WEIGHT
BUKA				
1 ♂ ad.	150	98	65.3	
2 ♂ juv.	138, 140	88, 88		
1 ♀ ad.	140	88	62.9	
BOUGAINVILLE (northern and northeastern part, mostly mountainous country)				
10 ♂ ad.	142-151(146.8)	92-99(96)	63.1-66.9(65.2)	
3 ♂ juv.	137, 139, 139	82, 89, 89		
8 ♀ ad.	139-146(142.2)	88-94(91.9)	62.0-66.7(64.6)	
6 ♀ juv.	135-139(136.7)	83-88(85.4)		
BOUGAINVILLE (lowlands of south: Buin)				
7 ♂ ad.	146-152(148.3)	93-98(96.2)	63.3-67.1(65.1)	151-203(170)
5 ♀ ad.	140-147(142.6)	88-93(90.6)	61.8-65.5(63.6)	132-162(151.2)
1 ♀ juv.	139	84		153
CHOISEUL				
14 ♂ ad.	144-157(151.3)	95-102(98.1)	62.5-66.2(64.7)	149-178(162.2)
3 ♂ juv.	140, 143	87, 88, 91		
6 ♀ ad.	141-150(145.9)	91-100(95.3)	64.1-66.0(65.1)	
YSABEL				
12 ♂ ad.	152-162(157.3)	98-106(102.2)	63-66(65.0)	
6 ♀ ad.	148-152(150.0)	95-101(97.7)	63.8-66.5(64.6)	
CENTRAL SOLOMON ISLANDS				
VELLA LAVELLA				
3 ♂ ad.	153, 156, 157	98, 99, 101	62.4, 64.7, 64.7	
3 ♀ ad.	142, 147, 148	88, 92, 94	62.0, 62.6, 63.5	
1 ♀ juv.	135			
GANONGA				
2 ♂ ad.	155, 157	97, 99	61.8, 63.9	
1 ♂ juv.	147	91		
1 ♀ ad.	147	91	61.9	
KULAMBANGRA				
2 ♂ ad.	153, 155	98, 99	63.9, 64.1	
3 ♀ ad.	143, 146, 147	86, 91, 92	60.1, 62.3, 62.6	
NEW GEORGIA				
4 ♂ ad.	147-158(152.8)	96-101(98.5)	63.6-66.7(64.5)	
2 ♀ ad.	146, 149	93	62.4	
VANGUNU				
3 ♂ ad.	148, 150, 155	92, 95, 102	62.2, 63.4, 65.8	
GATUKAI				
2 ♂ ad.	147	91, 91	61.9	
1 ♀ ad.	141	86	61.0	
RENDOVA				
2 ♂ ad.	156, 159	99, 99	62.3, 63.5	
1 ♂ juv.	143	91		

$$^1\text{Index} = \frac{\text{Tail} \times 100}{\text{Wing}}$$

	WING	TAIL	W.-T. ¹ —INDEX	WEIGHT
FLORIDA				
1 ♂ ad.	161 ²	103	64.0	
1 ♂ juv.	144	94		
GUADALCANAR (<i>macrura</i>)				
12 ♂ ad.	142-149(144.8)	97-103(101)	68.0-71.8(69.8)	
6 ♂ juv.	134-141(137.8)	88-99(95.2)		
13 ♀ ad.	135-144(140.0)	91-102(96)	67.4-71.8(69.1)	
1 ♀ juv.	131	90		
MALAITA (<i>malaitæ</i>)				
14 ♂ ad.	133-146(141.1)	89-94(91.5)	62.2-66.9(64.5)	126-154(142)
6 ♂ juv.	131-137(134.9)	82-88(86.2)		128-153(137)
15 ♀ ad.	135-144(138.8)	85-91(87.8)	61.1-65.7(63.5)	128-144(135)

Aplonis grandis grandis (Salvadori)

Lamprocorax grandis SALVADORI, 1881, 'Ornit. Pap. e Mol.,' II, p. 460, new name for

Lamprotornis fulvipennis PUCHERAN, 1853, 'Voy. Pôle Sud.,' Zool., III, p. 81, Ysabel Island (*nec* Swainson, 1837, 'Anim. Men.,' p. 298).

Calornis maxima TRISTRAM, 1895, Ibis, p. 375, Ysabel Island.

This subspecies agrees in coloration all over the northern, western, and central Solomon Islands, but there is a considerable difference in size. The largest population is found on Ysabel Island and on Florida Island. Birds from the Central Group are slightly smaller and have sometimes considerably smaller tails (Gatukai!). Still smaller is the series from Choiseul Island, and the smallest members of this race occur on Bougainville Island. The measurements of the Bougainville and Ysabel birds do not overlap, but as the birds of so many other islands are intermediate in size, it seems to be wiser not to give any name to the Bougainville population. To state the fact that the birds of this island are smaller, is quite sufficient. Naming the Bougainville birds would raise the difficult question as to what name to apply to the birds from Choiseul and all the islands of the Central Group.

Aplonis grandis macrura, new subspecies

TYPE.—No. 218560, Amer. Mus. Nat. Hist.; ♂ ad.; Guadalcanar Island, British Solomon Islands; July 23, 1927; R. H. Beck and F. P. Drowne.

SUBSPECIFIC CHARACTERS.—Similar to *grandis*, but smaller and with relatively much larger tail (see index-table, pp. 20-21), feathers of throat and neck broader and shorter, less lanceolate.

RANGE.—Guadalcanar Island (British Solomon Islands).

¹Index = $\frac{\text{Tail} \times 100}{\text{Wing}}$

²Rothschild and Hartert (*loc. cit.*) give 152-160 for three Florida specimens.

49. *Aplonis grandis malaitæ*, new subspecies

TYPE.—No. 227576, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; Feb. 26, 1930; Hamlin, Coultas, and Eyerdam.

SUBSPECIFIC CHARACTERS.—Still smaller than *macrura* and with decidedly shorter tail; differs from both *grandis* and *macrura* in having lower throat, upper breast, sides of breast, and neck greenish instead of dark purplish; green on back, upper wing-coverts and rump sometimes more bluish; lanceolate feathers of throat and neck still shorter.

RANGE.—Malaita Island, British Solomon Islands (Jan. 28, Feb. 5–12, 26, March 27–29, April 3–8, 1930).

This subspecies approaches the peculiar *dichroa* of San Cristobal Island somewhat in size and coloration.

50. *Pachycephala sanfordi*, new species

TYPE.—No. 227316, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; March 21, 1930; H. Hamlin, W. F. Coultas, and W. G. Eyerdam.

DESCRIPTION.—Male adult: head, hindneck, chin, sides of head, and ear-coverts black; entire underside golden (chrome) yellow; feathers on throat sometimes with blackish tips; back, rump, scapulars, wing-coverts, edges of secondaries, and inner primaries dark yellowish-olive; lower edges of outer primaries fuscous; axillaries white with grayish centers and yellow edges; under wing-coverts yellow and white; upper tail-coverts black with brownish-olive tips; tail-feathers black, outer edges blackish olive near the base. Female adult: crown olive-citrine, more or less mixed with dark rufous-brown; lores lighter; circumocular feathers buffy; ear-coverts isabella to light brownish-olive; cheeks white or yellowish white with dark bands across the feathers; throat and upper breast whitish with darker shaft stripes and grayish bars which give these parts a somewhat mottled appearance; middle of breast and abdomen white with a pale-lemon wash, breast feathers with grayish centers; sides of breast light grayish-olive; flanks fulvous olive; under tail-coverts yellow; axillaries and larger under wing-coverts white with light gray centers; lesser under wing-coverts yellowish; upper wing-coverts, tertials, and outer webs of secondaries and primaries rust-brown, sometimes with narrow olive margins; upper tail-coverts and tail-feathers more or less brownish olive.

"Iris gray brown, bill black, feet grayish"; bill (from nostril), 13–14; culmen, 22–24; tarsus, 26–27.

	WING	TAIL	WEIGHT
♂ ad.	100–107(103.3)	73–78(75.5)	47–55(51.3)
3♂ juv.	100, 103, 103	73, 75, 76	51, 51, 52
♀ ad.	98–103(100.1)	71–75(73.2) ¹	46–53(49.5)
4♀ juv.	94–97(94.7)	68, 73, 73	44–49(46.8)

Series of males and females (Feb. 12–15, 26, March 5–25, 1930).

This interesting species is apparently a representative of *Pachycephala pectoralis*, but it is reasonable to treat it as a separate species because of the absence of the black pectoral band and the color characters

¹Once 79.

of the female. In habit and behavior, the bird does not differ from its relatives in the Solomon Island Group (*orioloides*, *christophori*, etc.).

51. *Monarcha castaneiventris castaneiventris* Verreaux

Monarcha castaneiventris VERREAUX, 1858, Rev. et Mag. de Zool., (2) X, p. 304, "l'Ile Samoa, l'une des Navigateurs," error, type locality fixed as Guadalcanar (cf. Hartert, 1908, Nov. Zool., XV, p. 363).

Series of males and females (Feb. 5-12, 27, March 5-28, April 2-4, 1930).

52. *Monarcha barbata malaitæ*, new subspecies

TYPE.—No. 227067, Amer. Mus. Nat. Hist.; ♂ ad. Malaita Island, British Solomon Islands; February 26, 1930; H. Hamlin, W. F. Coultas, and W. G. Eyerdam.

SUBSPECIFIC CHARACTERS.—Similar to *barbata* Ramsay, but three outer tail-feathers entirely white, central pair bluish black, fourth and fifth pair white with more or less bluish black on tip; bluish-black patch on throat and upper breast wider, almost touching the black of the hindneck and thus nearly isolating the white patch of the sides of the neck; slightly larger.

	WING	TAIL	WEIGHT
♂ ad.	83-89(85.4)	75-81(77.9)	21-26.5(22.8)
♂ juv.	76-78(77.2)	70-74(72)	19-23.5(20.6)
♀ ad.	78-85(81.9)	72-77(73.5)	20-24(21.9)
♀ juv.	77-81	74	20-24.5

RANGE.—Malaita Island (Feb. 3-15, 26-27, March 6-31, April 3-11, 1930).

Male and female are alike in coloration, but the feathers on the crown and throat are usually softer and less lanceolate in the females. The juvenal plumage of this species is very puzzling. I shall treat it later, in connection with the juvenal plumage of the other subspecies of this species.

There is considerable individual variation; the wing-coverts are in some specimens entirely white, in others more or less mixed with black, especially on the inner web; the base of the central pair of tail-feathers is in some specimens extensively white. One female (No. 227106) is albinistic and shows some white feathers on the head, in the area which is altogether white in *verticalis*; the gap between *barbata* and *verticalis* is thus lessened by individual variation.

Monarcha barbata belongs together with *Monarcha verticalis*, *menckei*, and *infelix* to the superspecies *Monarcha trivirgatus*. It is significant for the "system" in Mathews' 'Syst. Av. Austr.,' that the different species and subspecies of this superspecies are scattered over three genera: *Monarchalba*, *Piezormona*, and *Symposiachrus*, all of which are synonyms of *Monarcha*.

53. *Myiagra ferrocyanea malaitæ*, new subspecies

TYPE.—No. 227020, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands, February 3, 1930; H. Hamlin, E. Mayr, W. F. Coultas, and W. J. Eyerdam.

SUBSPECIFIC CHARACTERS.—Male adult: similar to that of *ferrocyanea*, but back, rump, upper tail-coverts, wings, and tail less glossy, sheen on back more purple.

Female adult: similar to that of *feminina*, by having no rust color on back or tail, but differing by the longer bill and the conspicuous rusty edges of the secondaries.

	WING	TAIL	WEIGHT
♂ ad.	70–74(72.5)	59–65(62)	13–16(14)
♂ juv.	68–70(68.6)	58, 58, 60	12.5–13.5(13.1)
♀ ad.	68–72(69.2)	57–62(59.4)	12.5–14(13.3)
♀ juv.	66, 66, 67	59, 60	12, 12, 12

One adult male (No. 227059) is unusually small (wing, 69; tail, 58; weight, 12.5).

The male in first-year plumage is very much like the adult female, but crown and back more glossy.

This plumage is preceded by a downy nestling plumage (as shown by No. 227033), which is white underneath and dusky grayish above.

RANGE.—Malaita Island (Jan. 31, Feb. 1–12, 27, March 5, 10, 15, 16, 18, 20, 1930).

54. *Rhipidura*¹ *leucophrys melaleuca* (Quoy and Gaimard)

Muscipeta melaleuca QUOY AND GAIMARD, 1830, 'Voyage de l'Astrolæoe,' Zool. I, p. 180, New Ireland.

2 ♀ (Feb. 5, March 6, 1930).

55. *Rhipidura cockerelli coultasi* Mayr

Rhipidura cockerelli coultasi MAYR, 1931, Amer. Mus. Novit., No. 502, p. 5, Malaita Island.

17 ♂, 18 ♀ (Feb. 1–12, March 6–31, April 3–15, 1930).

56. *Rhipidura rufifrons brunnea* Mayr

Rhipidura rufifrons brunnea MAYR, 1931, Amer. Mus. Novit., No. 502, p. 19, Malaita Island.

16 ♂, 8 ♀ (March 4, 21–31, April 1–15, 1930).

57. *Rhipidura malaitæ* Mayr

Rhipidura malaitæ MAYR, 1931, Amer. Mus. Novit., No. 502, p. 20, Malaita Island.

21 ♂, 16 ♀ (March 13–28, April 3–15, 1930).

58. *Phylloscopus trivirgatus becki* Hartert

Phylloscopus trivirgatus becki HARTERT, 1929, Amer. Mus. Novit., No. 364, p. 13. Guadalcanar Island, British Solomon Islands.

4 ♂, 6 ♀ (March 15–17, April 11, 1930)

¹For further notes on this genus see Amer. Mus. Novit., No. 502.

The crown of the birds is slightly darker than in typical *becki*, otherwise they are identical. Bougainville, Kulambangra, and San Cristobal have endemic, not yet described subspecies.

59. *Cinnyris jugularis flavigaster* (Gould)

Nectarinia flavigaster GOULD, 1843, Proc. Zool. Soc. London, p. 104, New Ireland.
5 ♂. 6 ♀ (Jan. 27-28, Feb. 4-8, 26, March 10, 1930).

60. *Myzomela cardinalis malaitæ*, new subspecies

TYPE.—No. 227476, Amer. Mus. Nat. Hist.; Malaita Island, British Solomon Islands; Feb. 9, 1930; E. Mayr, H. Hamlin, W. F. Coultas, and W. J. Eyerdam.

DESCRIPTION.—Male adult: head, sides of head, sides of throat and breast, neck, back, wings, and tail dull black; narrow edges on wing-coverts, quills, and along the bases of the tail-feathers dull olive; middle of throat, breast, flanks, rump and upper tail-coverts scarlet-red; middle of abdomen and under tail-coverts dark gray with an olive tinge; axillaries and under wing-coverts gray.

Male in first-year plumage: forehead and forepart of crown dark brown with broad red feather-tips; chin, cheeks, upper and middle of lower throat red, hindneck hair-brown, sides of neck, scapulars, and back brownish-drab; rump dull rufous-cinnamon; underside (except throat) tawny olive (R.XXIX), middle of abdomen lighter, breast and flanks darker; wing-coverts, wings, and tail hair-brown, wing-coverts with ochraceous, wing- and tail-feathers with olive edges, inner edge of wing-feathers white.

Female: upperside dirty brownish-gray (hair-brown), head darker, on forehead with a slight reddish tinge; rump and upper tail-coverts lighter and more rufous; upper tail-coverts sometimes with an olive or reddish tinge; throat dull blackish-brown, with narrow red tips on feathers of upper throat; underside, wing, and tail as in young male.

Iris brown, bill black, feet bluish gray.

Culmen, males 19-21, females 18-20; bill (from nostril), males 13-14, females 12-12.5; tarsus 17-18.

	WING	TAIL	WEIGHT
♂ ad.	66-70(67.6)	44-49(47)	13-17(14.6)
♂ juv.	59-66(64.2)	38-44(41.9)	13-15(13.8)
♀	57-61(59)	38-41(39.6)	10.5-12.5(11.5)

Besides *Rhipidura malaitæ* and *Pachycephala sanfordi* this bird is the most interesting discovery made on Malaita. The black on head and back makes this form very different from the other subspecies of *cardinalis*, so different that I hesitated a long time before considering it a subspecies of *cardinalis*. On the other hand, this new subspecies closely approaches *Myzomela jacquinoti* in its coloration. This is the more significant as they represent each other geographically also. But the differences in coloration are important enough to keep *jacquinoti* specifically separated from *cardinalis*.

61. *Dicæum æneum æneum* Pucheran

Dicæum æneum PUCHERAN, 1853, 'Voy. Pôle Sud.,' Zool., III, p. 97, St. George (near Ysabel), Solomon Islands.

A fine series of males and females (Jan. 28-31, Feb. 1-11, 26, March 4-31, 1930).

62. *Zosterops stresemanni*, new species

TYPE.—No. 227362, Amer. Mus. Nat. Hist.; ♂ ad.; Malaita Island, British Solomon Islands; Feb. 6, 1930; Hamlin, Mayr, Coultas, and Eyerdam.

DESCRIPTION.—No traces of a white eye-ring, circumference of eye naked; back dull warbler-green (between warbler-green (R.IV) and serpentine-green (R.XVI), pileum more olive and with fuscous edges to the feathers, rump and upper tail-coverts more yellowish; sides of head and ear-coverts yellowish green; underside citron-yellow on the flanks and throat mixed with grayish green; breast, especially sides of breast, greenish; under tail-coverts citron-yellow with a rufous-olive tinge; under wing-coverts and axillaries (yellowish) white; wing- and tail-feathers fuscous-black, externally edged with bright olive, tertials dull olive; inner edge of wing-feathers white.

The juvenal plumage is almost identical with the adult, but the feathers, especially on the underside, are softer, the wing-feathers rounder, and the tail-feathers narrower with a broader olive edge.

"Iris light brown; bill grayish on upper mandible, pale yellow with a grayish tip on the lower mandible; feet greenish gray."

Culmen, 17-19; bill (from nostril), 10-11.5; tarsus, 20-21.

	WING	TAIL	WEIGHT
♂ ad.	67-73(69.2)	43-47	20-24(22.7)
♂ juv.	64-69(67.4)	42-43	21-25(22)
♀ ad.	65-69(67.7)	42-45	20.5-24(22.2)
♀ juv.	64-66(64.8)	41-43	19-22.5(20.7)

RANGE.—Malaita Island (Jan. 27-31, Feb. 1-15, Feb. 26-27, March 4-26, 1930).

I name this new species in honor of my friend Prof. Dr. Erwin Stresemann, who, in his recent revision of the Indo-Australian species of *Zosterops*,¹ was the first to succeed in giving a natural classification of this difficult genus. His paper was of great value to me in the task of finding the systematic position of this new species.

Zosterops stresemanni, one of the largest species of the genus, has apparently no close relatives. In the soft texture of its plumage, in general coloration, and the absence of a white eye-ring, it agrees rather well with *sanctæ-crucis*. But in the latter species the plumage is still softer, the vicinity of the eye is feathered (not naked), bill and tail are relatively shorter, and the entire distal part of the lower mandible dark. Considering also the wide geographic separation, it is even doubtful if both species can be called representatives. Nevertheless, there is no other species to which *stresemanni* shows as many similarities as it does to *sanctæ-crucis*.

¹1931, Mitt. Zool. Mus. Berlin, XVII, pp. 201-238.