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## RESULTS OF THE ARCHBOLD EXPEDITIONS. NO. 25

### NEW BIRDS FROM THE 1938-1939 EXPEDITION

By A. L. RAND

Following our established practice I am presenting some of the more interesting findings of the 1938-1939 expedition in advance of the complete report.

The 1938-1939 expedition coöperated with the Netherland Indian Government in a joint expedition to New Guinea, known as the Indisch-Amerikaansche Expeditie. The expedition was in the field from May, 1938, to May, 1939, and collected at from near sea level to snow line on the northern slopes of the Snow Mountains.

As we worked in an unmapped area, I am including a sketch map of the area with the camps and routes marked. As we were transported in part by airplane the routes are only those covered on foot. Mt. Wilhelmina and the junction of the Idenburg and Mamberamo rivers, both marked on the present map, will serve to orient it with existing maps.

The present paper contains diagnoses of one new genus, four new species and fifteen new subspecies from the present expedition's collections and two new subspecies from earlier collections, one from southeast New Guinea and one from the Weyland Mountains.

#### *Falco cenchroides baru*, new subspecies

TYPE.—No. 305656, Amer. Mus. Nat. Hist.; ♂ ad. (shot at nest); 11 km. northeast of Mt. Wilhelmina, 3400 meters, Snow Mountains, Netherland New Guinea; September 6, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—The male differs from that of *cenchroides* from Australia in the adults (3♂) having a dark gray crown and nape and this gray being much darker than in any Australian birds that have this character; the side of the head back of the eye and side of neck being like crown, with only an indication of a light area in the auriculars and the gray extending downward

to form a sharp boundary for the pale throat; the upperparts being deeper red; the tail being gray without a rufous tinge, unbarred except for the subterminal black and terminal white band; in the richer and much more widely spread darker color below, the breast band being much darker, and tinged with grayish on the sides, which gray is continuous with the gray of the sides of the neck; and in the breast band being wider, shading off gradually to the pale abdomen; the flanks being much darker and thighs more buffy; in the markings on the flanks being larger, tending toward spots; and in the under wing-coverts having a few scattered spots or shaft-streaks.

ADULT FEMALE.—This differs from the male only in having the gray feathers of the head heavily margined with reddish so that in a worn specimen like the present one the head appears gray tinged reddish; in the heavier markings of the back; in the gray tail having the outer tail-feathers with incomplete bars on the inner webs, in the more richly colored underparts with heavier markings. Thus it differs from any of the Australian females in the much darker slate of the head (when the Australian bird has a gray head); very reduced auricular light spot; much richer colored upperparts; gray tail untinged with rufous; the much more richly colored underparts with much heavier markings; thighs deep buffy and under wing-coverts with some dark markings.

IMMATURE MALE.—This nestling bird compared with fully fledged birds in their first-year plumage from Australia is very much darker above, with coarser markings; the side of the head blackish with only an indication of the light-colored auricular area; the very much richer and more widely distributed dark color below; the much heavier markings below; the dark gray, black-barred tail with black subterminal band and ochraceous terminal band; the outer edges of the rectrices tinged ochraceous, and the heavier markings in the under wing-coverts.

	MALE AD.	FEMALE AD.
Wing	254,259,262	269
Tail	160,166,174	174

RANGE.—Known only from the vicinity of Mt. Wilhelmina above 3200 meters.



FIG. 1. Principal collecting camps are indicated by numbers as follows:

- 1.—Bernhard Camp, alt. 50 meters.
- 2.—4 km. southwest of Bernhard Camp, alt. 850 meters.
- 3.—6 km. southwest of Bernhard Camp, alt. 1200 meters.
- 4.—15 km. southwest of Bernhard Camp, alt. 1800 meters.
- 5.—18 km. southwest of Bernhard Camp, alt. 2150 meters.
- 6.—Balim River Camp, alt. 1600 meters.
- 7.—Bele River Camp, alt. 2200 meters. (18 km. north of Lake Habbema)
- 8.—9 km. northeast of Lake Habbema, alt. 2800 meters.
- 9.—Lake Habbema, alt. 3225 meters.
- 10.—7 km. northeast of Mt. Wilhelmina, alt. 3600 meters.
- 11.—2 km. east of Mt. Wilhelmina, alt. 3800 meters.

REMARKS.—Junge (1937, Nova Guinea, p. 150) was the first to record this species for New Guinea, a single immature female from near Mt. Wilhelmina.

The type specimen is the male of a pair which had a nest with one young in it on a ledge of rock.

This is a very well-marked race. At

first, because of the gray head and a slight tendency toward spotting in the flanks, I thought it might be referred to the species *tinnunculus*, but on the basis of the color pattern below, the pale throat and abdomen, dark breast and flanks, the markings largely streaks rather than spottings, and the scarce markings in the under wing-

coverts it seems referable to *cenchroides* if it be kept a different species.

**Porzana tabuensis richardsoni,**  
new subspecies<sup>1</sup>

TYPE.—No. 305646, Amer. Mus. Nat. Hist.; ♂ ad.; Lake Habbema, 3225 meters altitude, Snow Mts., Netherland New Guinea; August 2, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Characterized by the paler more olive-brown, less dark chocolate-brown upperparts; the paler gray underparts, and the shorter bill. In size it is intermediate between *tabuensis* and the Australian, Tasmanian and New Zealand birds.

		MALE	
<i>richardsoni</i>			
Habbema Lake	Wing	83,83,83,84, 84,86,86,88	
	Exposed culmen	16-17	
<i>tabuensis</i>			
Balim River	Wing	76,78,78,83	
	Exposed culmen	16,17.5,18	
Arfak	Wing	80,83,83,83, 84	
	Exposed culmen	18.5,18.5,19	
Pacific Islands	Wing	(10) 80-85 (av. 82.4)	
	Exposed culmen	(10) 18-19.5 (av. 18.8)	
<i>immaculata?</i>			
Australia	Wing	84,84,87,87, 87,87,90,91	
	Exposed culmen	18, 19, 19, 19.5, 19.5, 20,20	
Tasmania	Wing		
	Exposed culmen		
<i>plumbea</i>			
New Zealand	Wing	85	
	Exposed culmen	19	
		FEMALE	
<i>richardsoni</i>			
Habbema Lake	Wing	80,80,82,83, 83,83,87,89	
	Exposed culmen	15-16	
<i>tabuensis</i>			
Balim River	Wing	77,80	
	Exposed culmen	16,16	
Arfak	Wing	80,81,82,83	
	Exposed culmen	17.5,18,19	
Pacific Islands	Wing	(10) 73-85 (av. 78.9)	
	Exposed culmen	(10) 16.5- 18.5 (av. 17.5)	

<i>immaculata?</i>			
Australia	Wing	85,85,90,90	
	Exposed culmen	16.5,18,18, 18.5	
Tasmania	Wing	89	
	Exposed culmen	20	
<i>plumbea</i>			
New Zealand	Wing	(sex? 80,90, 90)	
	Exposed culmen	(sex? 17,19)	

RANGE.—Known only from the vicinity of Lake Habbema.

REMARKS.—This is another high altitude race comparable with *Synoicus ypsilophorus monticola* and *Megalurus timoriensis alpinus*.

I have listed the Australian and Tasmanian specimens as *immaculata*, but that they differ from *plumbea* is doubtful; *oliveri* and *tenebrosa* appear very similar in size and color to *plumbea*; the races *filipina*, *caledonica* and *vitiensis* appear to be small, dark forms.

**Rallicula rubra subrubra,** new subspecies

TYPE.—No. 305648, Amer. Mus. Nat. Hist.; ♂ ad.; Lake Habbema, 9 km. northeast, altitude 2800 meters, Snow Mts., Netherland New Guinea; October 29, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Differs from *klossi* in the larger size and slightly paler average coloration; differs from *rubra* in color as does *klossi*, i.e., in lacking the blackish tips to the feathers of the back of the neck and nape; in the reduced white barring in the underside of the remiges; and the slightly paler general rufous coloration.

WING MEASUREMENTS

		MALE	
<i>subrubra</i>		(10) 94-100	(av. 97.5)
<i>klossi</i> (Weyland Mts.)		(7) 90-93	(av. 92)
<i>rubra</i> (Arfak)		95,98	
		FEMALE	
<i>subrubra</i>		(10) 93-102	(av. 97.8)
<i>klossi</i> (Weyland Mts.)		87,89,89,93,95,95	
<i>rubra</i> (Arfak)			

RANGE.—Known only from the slopes north of Mt. Wilhelmina between 2200 and 2800 meters.

REMARKS.—It is surprising that the birds from south of Mt. Wilhelmina (Treubivak and Bijenkorf) are apparently the small race *klossi*. Junge (1937, Nova Guinea, p. 144) gives the wing measurements as: ♂ 87, ♀ 90.

<sup>1</sup> Named in honor of Mr. W. B. Richardson, mammalogist of the expedition.

**Fulica atra novaeguineae**, new subspecies

TYPE.—No. 305645, Amer. Mus. Nat. Hist.; ♂ ad., Lake Habbema, 3225 meters, Snow Mts., Netherland New Guinea; August 7, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Differs from *australis* in the darker coloration especially of the underparts; the longer wing; larger bill; and the very much larger shield on the forehead, which shield reaches back of a line between the posterior margin of the eyes in all but two females of a series of 4♂, 6♀ and 4 sex?

From *atra* it differs in the shorter wing, darker coloration, especially below, and the much restricted or absent grayish-white tips to the inner secondaries. The race *lugubris* S. Müller from Java is apparently much smaller (1937, O. M. B., p. 16).

	MALE
<i>novaeguineae</i> (New Guinea)	
Wing	200,206,211,212
Bill (from nostril)	17.5,17.5,18,18
Bill (from back edge of shield)	59–62
<i>australis</i> (Australia)	
Wing	190,190,190,195,195, 198,201,201
Bill (from nostril)	15.5–16
Bill (from back edge of shield)	42,44,45,45,46,48,55
	FEMALE
<i>novaeguineae</i> (New Guinea)	
Wing	190,191,191,194,200, 200,202
Bill (from nostril)	15,16.5,16.5,17.5
Bill (from back edge of shield)	46,57,58,58,58
<i>australis</i> (Australia)	
Wing	180,181,184,185,185, 188,193,201
Bill (from nostril)	14.5–15
Bill (from back edge of shield)	41,42,44,45,46,48,50

Hartert (Vogel Pal. Fauna, p. 1851) gives the following measurements for *atra*: wing ♂ 216–225, occasionally 206–232; ♀ 198–208, occasionally up to 216; bill from end of shield ♂ ♀ 54–66.

RANGE.—Known only from the Snow Mountains and Arfak Mountains, from 2000 meters to 3700 meters.

REMARKS.—Probably the Arfak specimen recorded by Hartert (1930, Nov. Zool., p. 123) belongs to this race.

The coots were in breeding condition at Lake Habbema in August.

**Saxicola caprata belensis**, new subspecies

TYPE.—No. 305651, Amer. Mus. Nat. Hist.; ♂ ad.; Balim River, 1600 meters altitude, Snow Mts., Netherland New Guinea; December 14, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—This race belongs to the section of the species in which the female has the upper tail-coverts white (*francki*, *albonotata* and *aethiops*). It has no concealed white in the upper wing-coverts (which *albonotata* has) and is distinguishable from all three of the above races by its larger size.

WING MEASUREMENTS	
	MALE
<i>belensis</i>	
(Balim River)	79,82,83,84,84
(southeast New Guinea)	77,77,79,79,79,80,81
<i>aethiops</i>	
(Ifaar)	72,74,76,76,77
(Huon Peninsula)	74
(New Britain)	69,70,71,75
	FEMALE
<i>belensis</i>	
(Balim River)	79,81,81,81,82
(southeast New Guinea)	72,75,76,76,76,77
<i>aethiops</i>	
(Ifaar)	70,70,71,72,73
(Huon Peninsula)	73,74,75
(New Britain)	

RANGE.—Known from the grasslands of the Balim River and its tributaries from 1600 to 2400 meters in the Snow Mountains of Netherland New Guinea, and from the midmountain country of southeast New Guinea.

REMARKS.—On size alone the New Guinea and New Britain birds can be separated into two races. The coloration of the females is a factor which I am unable to use as I have no females from New Britain (typical *aethiops*), the females from Ifaar are all too worn to be used in comparisons, and all but one of the southeast New Guinea females are in worn plumage. For comparison in fresh or fairly fresh plumage I have only the Balim Valley females, three from the Huon Peninsula and one from southeast New Guinea.

The Balim River females are all very dark, with obscure streaking evident; the Huon Peninsula females are paler, especially below, as well as smaller; and the single female from southeast New Guinea is pale, with obscure streakings little evi-

dent and with a rusty tinge to the plumage which is lacking in the others.

This suggests that more endemic races may be recognized, but until sufficient female material in fresh plumage is available it is advisable to use size only as the criterion for separating the Snow Mountains and southeast New Guinea birds as *belensis* from north New Guinea (Huon Peninsula and Ifaar) and New Britain birds which are *aethiops*.

**Malurus alboscapulatus balim,**  
new subspecies

TYPE.—No. 305653, Amer. Mus. Nat. Hist.; ♀ ad.; Balim River, altitude 1600 meters, Snow Mts., Netherland New Guinea; December 14, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—This new race has the female brown and white as in *lorentzi* and *dogwa*. It is closest to *lorentzi*, from which it may be distinguished in the adult male by the longer tail and shorter bill; in the adult female by the longer tail, slightly shorter bill, and the darker and more extensive ochraceous color of the flanks. The two adult females of *lorentzi* for comparison have a few white feathers in the scapulars; if this is constant it is another difference, as they are lacking in all the females of *balim*. The immature males of the present race differ from those of *lorentzi* in the shorter bill, longer tail and the rich and more extensive ochraceous color of the flanks.

From *dogwa* the new race is easily distinguished by the larger size and the darker coloration above.

<i>balim</i>	MALE ADULT	
Wing	(9) 49–52 (av. 50.2)	
Tail	(7) 44–48 (av. 45.9)	
Bill	13–14	
<i>lorentzi</i>		
Wing	47, 50, 51	
Tail	42, 43, 44	
Bill	14.5–15	
<i>balim</i>	MALE IMMATURE	FEMALE
W.	(6) 50–52 (av. 50.8)	(8) 48–51 (av. 49.4)
T.	55, 52 (others moulting)	(8) 52–57 (av. 53.9)
B.	13.5–14	13–14
<i>lorentzi</i>		
W.	47, 48, 48, 48	46, 50
T.	50, 51, 51, —	48, 47
B.	14–15	14, 14

RANGE.—Known only from the grasslands of the Balim and Bele rivers from

1600 to 2300 meters, in the Grand Valley of the Snow Mountains.

REMARKS.—This was a common species; specimens in breeding condition were taken in December. It is interesting that though the Grand Valley lies to the north of Mt. Wilhelmina, it breaks through the central range some twenty-five kilometers east of that peak and drains to the south, and the endemic race of this species has, as might be expected, its closest relative in south New Guinea.

**Petroica bivittata caudata,**  
new subspecies

TYPE.—No. 305649, Amer. Mus. Nat. Hist.; ♂ ad.; 9 km. northeast of Lake Habbema, altitude 2850 meters, Snow Mts., Netherland New Guinea; October 25, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Differs from *bivittata* in the smaller size, the slightly smaller bill, slightly smaller extent of the white in the forehead and the much reduced white markings in the tail. In the two males of the present race the white in the outer tail-feathers is reduced to a terminal mark two and four millimeters in length, and restricted chiefly to the inner web of the feather; in *bivittata* two males have the white spot on the end of the outer tail-feathers seven and ten millimeters long, in two other males the white extends up the shaft nearly to the base of the feathers as it does also in an adult female and an adult sex?. One other female and one sex? have the white about eight millimeters long.

MEASUREMENTS.—Wing. Male 72, 72; female 70, 71 (*bivittata* male 74–77; female 72, 74).

RANGE.—Known from the Snow Mountains in the vicinity of Mt. Wilhelmina, from 2850 to 3225 meters altitude.

REMARKS.—This species was known only from the mountains of southeast New Guinea between 2840 and 3680 meters altitude until Junge (1939, Nova Guinea, p. 13) recorded a specimen from the Hurbrecht Mountains south of Mt. Wilhelmina.

**Petroica archboldi,** new species

TYPE.—No. 305641, Amer. Mus. Nat. Hist.; ♂ ad.; Mt. Wilhelmina, altitude 4100 meters, Snow Mts., Netherland New Guinea; September 18, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DESCRIPTION.—This is a typical *Petroica* in structure and color pattern but is very different from any known species. It is characterized by its comparatively large size, slaty-gray coloration, red breast spot and white forehead.

**MALE.**—Feathers above nostrils and at base of culmen black; forehead with a white band across it, sometimes reaching 4–5 mm. in width; top and back of head dark slate tinged with reddish-pink; upper part of body dark slate-gray, slightly paler on rump; upper wing-coverts black, the lesser tinged with gray; lores black; rest of side of head slate-gray; throat slate, tinged with reddish-pink; upper breast slate with a bright red spot (measuring 20–25 mm.  $\times$  20–25 mm. in skins) in its center; lower breast slate, shading to gray posteriorly and on flanks and to the grayish-white abdomen; under tail-coverts white, with dark central streak more or less pronounced; thighs slate; primaries and secondaries black, the secondaries with a narrow grayish edging on part of the distal half of the outer web; on the inner webs of all but the innermost secondaries and on the inner primaries about one-third of their length from the base is a white area, giving a stripe on the underside of the wing; under wing-coverts dark, the lesser with white tips; axillaries white; rectrices black, with white streaks on the basal half of the outer web, and usually on the distal half of the inner web, and a large white apical spot on the outer pair; narrow white tips on the next two pairs.

**ADULT FEMALE.**—Very similar to the male, but averages slightly smaller, slightly paler, and the red of the breast slightly lighter. In addition there is a faint indication of a wing-bar formed by small grayish areas on the outer webs of the inner primaries and outer secondaries; in some specimens this condition is more pronounced and the spots, though small, are well defined and white.

**IMMATURE FEMALE.**—Dark slate on the upper-parts, top and sides of head tinged brownish; throat and upper breast brownish-gray, the feathers with slaty tips giving a mottled or spotted appearance especially in the breast; lower breast slaty, shading to dirty gray of flanks and abdomen; thighs and under tail-coverts as adult; tail as adult but feathers slightly more pointed; wings as adult but with a pronounced short white wing-bar formed by small white areas on the outer webs of inner primaries and outer secondaries, and small whitish tips to the secondaries.

**COLOR OF SOFT PARTS (♀).**—Iris dark, bill black, feet black, undersides of toes yellowish.

#### MALE ADULT

Wing	(8) 88–95 (av. 91.9)
Tail	(8) 60–65 (av. 62.6)
Bill	(9) 14–15.5 (av. 14.8)
Tarsus	(9) 22–23.5 (av. 22.9)

#### FEMALE ADULT

Wing	89, 89, 90 (others worn)
Tail	(6) 60–62 (av. 60.5)
Bill	(6) 14–15 (av. 14.3)
Tarsus	(6) 22–23 (av. 22.4)

#### FEMALE IMMATURE

Wing	86, 88
Tail	61, 61
Bill	14, 14.5
Tarsus	22.5, 22

**MATERIAL.**—Mt. Wilhelmina, 4100–4200 m., 9 ♂ ad., 1 ♂ subad., 6 ♀ ad., 1 ♀ subad., 2 ♀ imm., 3 sex?

**RANGE.**—Known only from above 4000 meters on Mt. Wilhelmina in the Snow Mountains of Netherland New Guinea.

**REMARKS.**—The amount of reddish tinge on the head and throat varies, apparently decreasing with wear. The grayish-white edgings to the outer edges of the secondaries disappear with wear. The amount of white in the forehead varies somewhat.

The two subadults, one of which has nearly completed its body moult into adult plumage, are both moulting the remiges but not the rectrices.

I found this striking bird common on the edges of the bare rock slopes and cliffs, and among the talus boulders about Mt. Wilhelmina, between 4000–4300 meters, and nowhere else. The lower edge of its altitudinal range is thus higher than that of any other New Guinea bird, though another species, the pipit (*Anthus*), habitually goes higher. This red-breast was found in small parties of three to six in number. They are inactive, plump appearing birds that sit up on a rock watching their surroundings, flying down to pick their prey (probably flies) from the ground or rock, and back to the same perch or flying on to another. The open terrain of course makes them conspicuous, and in addition they are noisy birds, often giving loud chips and harsh scolding notes, which makes it difficult to overlook them. On September 25 I saw a full-grown young following an adult which stopped to feed it.

#### *Rhagologus leucostigma* (Salvadori)

The geographical variation in this species has been overlooked, partly because the species has been uncommon in collections, so that few people have had much material, and partly because the immatures and the adults have a more or less mottled plumage, so that geographical variation has been con-

fused with age variation. This is well shown by plate iv in the 1915, Ibis, Jub. Sup., where two males of different races are figured as showing the differences in plumage between males of different ages.

With the present series of forty-four specimens from various parts of New Guinea it appears that geographical variation is great enough to necessitate the recognition of at least three races.

The geographical variation in the females is slight, but in the males there is a striking reduction in brilliance and in pattern from west to east.

### *Rhagologus leucostigma leucostigma* (Salvadori)

*Pachycephala leucostigma* SALVADORI, 1875, Ann. Mus. Civ. Genova, VII, p. 933; Arfak Mts.

I have four specimens from Arfak (Bruijn coll.) which appear to be two males and two females, judging by the differences in their plumage, which is similar to the plumage differences between the sexes in Weyland Mountains birds. The two males have the gray feathers of the crown heavily edged with olive, and with whitish spots on the forehead; on the rest of the crown the shafts of the feathers show slightly paler; the back of neck, back and rump are brownish-olive, the feathers of the back of the neck having narrow whitish shaft-streaks, usually enlarging to a small spot near the tip of the feather, the upper back has a few obscure spots; the lores are white; the rest of the side of the face and chin is dull rufous, the feathers with blackish tips, giving a mottled appearance; the breast and flanks are yellowish-white, each feather edged or barred with dusky, to give a mottled appearance; the greater upper wing-coverts are edged submarginally with blackish, marginally with dull, pale brownish; the remiges are edged with brownish-olive; under tail-coverts rufous.

The two females differ from the males in the much more pronounced markings in the forehead and crown; the much wider, more plentiful whitish streakings on the hind neck and fore back; the distinct rusty streaks, outlined with black in the lower back; the much brighter rufous sides of the

face and chin; the more distinct dark markings on a lighter ground color on the underparts; and the brighter, more rufous edgings to the remiges and their greater coverts.

MEASUREMENTS.—Wing: ♂ 87, 90; ♀ 85.

### *Rhagologus leucostigma novus*, new subspecies

TYPE.—No. 302289, Amer. Mus. Nat. Hist.; ♂ ad.; Weyland Mountains, 1500 meters, Netherland New Guinea; September 9, 1931; G. Stein.

DIAGNOSIS.—In the male it differs from two Arfak males in being darker on the crown and back, with the markings on the upper parts much reduced (occasionally) or absent (usually); the outer edges of the remiges more olive, less brownish; the rufous of the chin and sides of the head much paler; the ground color of the underparts darker, with the markings less distinct.

The females differ from two Arfak females in the darker general tone of the upperparts; the less plentiful and narrower markings in the back; the less deep rufous of the sides of the head and chin; and the slightly darker underparts.

MEASUREMENTS.—Wing: ♂ (10) 84–90 (av. 86); ♀ 83, 88, 88.

RANGE.—The western end of the Snow Mountains between 1300 and 1500 meters altitude. My material is all from the Weyland Mountains, but the male figured by Og-Grant (1915, Ibis, Jub. Sup., Pl. iv) from the Utanata River is apparently this form.

REMARKS.—There is some variation in the males; the upperparts are usually without markings, but in a few specimens there are some whitish streaks in the hind neck and obscure yellowish-gray markings in the back; the brightness of the rufous of the chin and the sides of the head varies considerably, as does the distinctness of the mottling of the underparts.

### *Rhagologus leucostigma obscurus*, new subspecies

TYPE.—No. 420745, Amer. Mus. Nat. Hist.; ♂ ad.; Mafulu, altitude 1250 meters, central division, Territory of Papua, New Guinea; October 23, 1933; Richard Archbold and A. L. Rand.

DIAGNOSIS.—In the male differs from *leucostigma* of Arfak in the more grayish crown, the more grayish-olive, not brownish-olive, back, both without light markings; in the olive upper wing-coverts, with faint grayish margins, not brownish-olive with rufous margins; in the

duller, less brownish outer edges of the remiges; in lacking the rufous color of the sides of the head and chin; in the dark gray underparts, the feathers with olive margins giving a slightly streaked appearance, but not distinctly marked; and in the brownish-olive, not rufous, under tail-coverts. From the Weyland Mountains (*novus*) males they differ in the grayer crown and back, without markings; in the lack of rufous edgings to the upper wing-coverts; the duller, less brownish edges of the remiges; the complete lack of rufous in the sides of the face and chin; in the darker, more grayish underparts, lacking a buffy tinge and with much reduced markings, almost lacking in some specimens; and the much duller under tail-coverts.

In the female the present race differs from the two Arfak females in the grayer crown; the paler rufous of the sides of the head; the less bright rufous edgings of the wing-coverts; the paler, less brownish edges of the remiges; and less buffy tinge to the underparts. From the Weyland Mountains females the present series, which varies considerably, differs constantly only in the considerably paler, not buffy tinged underparts.

MEASUREMENTS.—Wing: ♂ (8) 82–90 (Av. 87.8); ♀ (10) 83–89 (Av. 86.2).

RANGE.—The midmountain forest of southeast New Guinea, between 1200 and 2400 meters, the Huon Peninsula, westward to the slopes above the Idenburg River (1500 meters) on the north and to Mount Goliath (1500 meters) on the south.

REMARKS.—There is some variation in this series, some of which may be geographical, but I cannot determine this with the material available. The five southeast New Guinea males, which are almost without markings except on the throat and upper breast, show little variation, but two of them, collected in 1903 and 1905, are slightly more brownish than material collected in 1933. Probably this is the result of foxing. Two males from the Huon Peninsula, which have nearly completed the moult from the streaked immature plumage to the adult plumage, are slightly more brownish-olive above, somewhat more barred below and have a trace of rufous in the upper wing-coverts. A male from Mount Goliath differs from southeast New Guinea males chiefly in having the barring below nearly as distinct as in Weyland Mountains birds, but on the other characters is better placed here.

There is much more variation in the females, in the amount of streaking on fore-

head, crown, hind neck and back, and the brightness of the rufous side of the head, but this appears to be individual, as a female from above the Idenburg River differs from one female from Mount Tafa only in the less gray crown, dusky back, slightly brighter rufous side of the head and slightly brighter underparts, while three females from Mount Goliath compare fairly well with some other southeast New Guinea birds.

The immature male of this race (one with tail partly grown, from Mount Goliath, three, full grown, from the Huon Peninsula) resemble in general the female but have a softer, more fluffy plumage. In all four the crown is plentifully streaked, the white markings of the hind neck and the rusty streaks of the back are wide and plentiful, the sides of the head and margins of the upper wing-coverts are bright rufous; the underparts, which are heavily streaked, are more buffy tinged than most adult females. Two males from the Huon Peninsula, which have almost completed the moult into adult plumage, are moulting wing and tail as well as body feathers.

### *Pachycephala pectoralis balim*, new subspecies

TYPE.—No. 305652, Amer. Mus. Nat. Hist.; ♀ ad.; Balim River, altitude 1600 meters; Snow Mts., Netherland New Guinea; December 12, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Similar to *P. p. spinicauda* but with bill shorter (male 17–19, female 17.5–19 against male 19–21, female 19–20), and in the male with back much darker olive-green, less golden yellow; and the outer edges of the secondaries and basal part of the primaries olive-green, not gray; differs in the female in the much darker and more olive-green back; the much darker and brownish, not grayish, crown; in the olive-green, not gray, outer margins to the secondaries and basal portions of the primaries; in the rectrices being black, at the tip narrowly, at the base broadly edged with olive-green; in the gray breast band being but slightly tinged cream color; and in the deep yellow abdomen and flanks.

WING	
Male	(14) 89–94 (av. 92)
Female	(8) 87–92 (av. 89.3)
BILL	
Male	(14) 17–19 (av. 18.1)
Female	(8) 17.5–19 (av. 18.2)



RANGE.—Known from the Balim and Bele river valleys between 1600 and 2400 meters on the north slopes of Mt. Wilhelmina.

REMARKS.—Of *spinicauda* for comparison I have: Daru, 1 male, 1 female; Hall Sound, 1 male, 1 female; Cape York, 2 males, 1 female. These vary somewhat among themselves and the Hall Sound female approaches the present series in having the tail partly black and in being yellower below, but all are easily distinguished from this well-marked form. The male of *P. p. collaris* has an olive-colored tail, not black as in the present form.

This is the first time *pectoralis* has been found in the mountains of New Guinea. The present series was taken at 1600 to 2400 meters, the upper limit of its range meeting that of *schlegelii*, but *soror* was not found in this area, only being encountered at 1200 meters on the Idenburg slope. The forms of *P. soror* are sometimes said to be mountain races of *pectoralis*, but if this were so it would be expected that the present series would show closer relationship with *soror*, which is not the case, and *soror* with its three closely related races should not be combined with *pectoralis*.

#### *Myiolestes megarhynchus idenburgi*, new subspecies

TYPE.—No. 305658, Amer. Mus. Nat. Hist.; ♂ ad.; 7 km. southwest Bernhard Camp, Idenburg River, altitude 850 meters, Netherland New Guinea; March 30, 1939; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—This form, with a black-billed adult male, is somewhat intermediate between the gray form *hybridus* and the rufous form *maeandrinus*. From *hybridus* it differs in the grayer olive, less brownish upperparts and side of head; in the paler, more ochraceous, less brownish-gray underparts, especially pronounced on the flanks and abdomen; and in the more evident obscure streaking of the breast. From *maeandrinus* it differs in the more grayish-olive upperparts; and the paler, more grayish, less fulvous underparts.

MEASUREMENTS.—Wing: ♂, 93, 95, 97, 98, 99, 101, 102; ♀ 92, 92, 94.

RANGE.—Known from 850 and 1200 meters on the slopes south of the Idenburg River.

REMARKS.—Though intermediate between *hybridus* and *maeandrinus* it is closer to the former. In the males the color

difference of the upperparts is constant for the series; there is more variation in the underparts and a few specimens approach *hybridus* in this character; in the three females the difference in the underparts is much more pronounced. In addition to the series collected by the Archbold Expedition I have one specimen from Dormanpad-bivak (van Heurn, 1920) at 1410 meters which one would expect to be this form but which agrees better with *hybridus*. More material is necessary to elucidate this.

#### ARCHBOLDIA, NEW GENUS

One of the large bower birds (wing up to 164) with a large head, related to *Amblyornis*. It is characterized by the bill being laterally expanded at the base, the width at nostril being about equal to its depth at nostril; the nostril and part of the floor of the nasal fossa being bare, the feathering not reaching within two millimeters of the nasal opening, and these feathers tending to be bristly and curving back to be appressed to the head; by the strongly double rounded tail, the outer and the central tail feathers about 10 to 15 mm. shorter than the longest; by the peculiar texture of the plumage, the feathers having downy bases and firm terminal portions, which have in some lights, a darker colored tip giving a scaled appearance.

GENOTYPE.—*Archboldia papuensis*, new species.

#### *Archboldia papuensis*, new species

TYPE.—No. 305644, Amer. Mus. Nat. Hist.; ♂ ad.; Bele River, 2200 meters, 18 km. north of Lake Habbema, Snow Mts., Netherland New Guinea; December 3, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DESCRIPTION.—Adult male; top of head, back, rump and upper tail-coverts brownish-black, darker on the head, each feather with a darker tip, especially evident in certain lights, giving a scaled appearance. These feathers have a pale grayish sheen in certain lights. The alula is brownish-black. The secondary coverts are brownish-black; the primary coverts brownish-black with an irregular rusty orange area near their tips on the outer web; the inner web is rusty yellow except at the tip; sides of head brownish-black; throat and upper breast brownish-black, duller than the back, shading to grayish-black tinged olive on the lower breast, flanks and abdomen. The plumage of the underparts has the same scaled appearance and pale sheen as the back, though this becomes less pronounced posteriorly; thighs brownish-gray; under tail-coverts brownish-black tinged olive; under wing-coverts grayish-black, the greater series tinged olive; remiges brownish-black, primaries washed with olive on their outer web, shafts of remiges yellow below; a bright yellow

band extending across base of remiges, and extending halfway down the wing on edges of inner webs of remiges; rectrices brownish-black above, below washed olive and with yellow shafts.

ADULT FEMALE.—Like male.

COLOR OF SOFT PARTS (♀).—Iris dark; bill black, mandible gray at base; feet gray, nails blackish.

	WING
Male	155, 155, 164
Female	145, 147, 148, 153

	TAIL (central feathers)
Male	123, 122, 138
Female	—, —, 113, 123

	BILL
Male	32.5, 33, 33
Female	33, 31, 34, 36

	TARSUS
Male	41, 42, 42
Female	42, 38, 37, 42

MATERIAL.—9 km. NE. Lake Habbema, 1 ♂ ad., 2 ♀ ad., October 11–29, 1938; Bele River, 18 km. north Lake Habbema, 2 ♂ ad., 2 ♀ ad., November 20–December 4, 1938; 18 km. SW. Bernhard Camp, Idenburg River, 1.

RANGE.—Known only from area between Mt. Wilhelmina and the Idenburg River between 2100 and 2800 meters.

REMARKS.—The color of these birds becomes much browner with wear. There is considerable variation in the extent and shade of the orange in the primary coverts and in the shade of the yellow underwing. One of the three males differs from the others in having the wing much more washed with olive; in lacking the orange area in the outer web of the primary coverts; in being paler gray below and more strongly washed with olive; in having the outer tail-feathers strongly washed with olive, and in having pale yellow tips to the outer pair of tail-feathers and to one of the pair next the central pair of tail-feathers. Only one other bird has an indication of a light tip to the tail and that is on only one of the outer pair of tail-feathers. This male also has a strange condition of plumage in that the feathers of the posterior part of the body, especially noticeable on the rump, do not have plain gray proximal portions but have yellowish-white bases

and a yellow shaft. This does not appear in the other six specimens.

The few specimens of this bower bird that I collected I saw flying through the forest to perch well up in the forest sub-stage. The yellow in the wing shows rather conspicuously in flight when the bird is seen from below. Stomachs examined contained fruits.

### *Neositta papuensis* (Schlegel)

This rather rare mountain species has long been known by two very different forms, one from Arfak and one from southeast New Guinea. The material of the present expedition from the central part of the range of the species shows that two more well-marked races exist.

The variation in the males of this species is striking: a form with the male with the pileum black, the female with a gray head occurs in Arfak; a form in which the male has a white head occurs on the mountains above the Idenburg; the form from southeast New Guinea has a male with a streaked head, the female with a gray head; and in the Snow Mountains there is a form with the male having a streaked head and the female a white head. The four well-marked races are listed below.

### *Neositta papuensis papuensis* (Schlegel)

*Sitta papuensis* SCHLEGEL, 1871, Ned. Tijdschr. Dierk., IV, p. 47 (Hatam, Arfak Mountains).

Hartert (1930, Nov. Zool., p. 89) has already pointed out that Schlegel had the sexes of his specimens reversed, as later collections have shown. The male has the black cap, the female the head and neck all around grayish-white with dark shaft lines.

MEASUREMENTS.—Wing: ♂ 82, 86; ♀ 82, 84.

RANGE.—Mountains of the Arfak Peninsula.

### *Neositta papuensis alba*, new subspecies

TYPE.—No. 305659, Amer. Mus. Nat. Hist.; ♂ ad.; altitude 1800 meters, 15 km. southwest Bernhard Camp, Idenburg River, Netherland New Guinea; January 24, 1939; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Differs from any other known form of this species in the male having the head

and neck all around pure white; differs also from *papuensis* in the much paler edgings to the feathers of the breast and abdomen.

MEASUREMENTS.—Wing: ♂ ad. 81, 82, 82, 83.

RANGE.—Only known from the type locality; probably occurs along the mountains above the Idenburg and Rauffaer rivers.

REMARKS.—The four specimens, taken at the same place on the same day, are all very similar except for the much wider dark markings on the breast and back of one example.

Though the male of this species is very different in the pattern of the head from the male of *papuensis*, it is less different from the female, from which it differs in the pure white instead of gray head and neck, and in the much lighter colored upper- and underparts. The female of this new race is not known.

#### *Neositta papuensis toxopeusi*, new subspecies<sup>1</sup>

TYPE.—No. 305654, Amer. Mus. Nat. Hist.; ♂ ad.; Bele River, altitude 2200 meters, 18 km. north of Lake Habbema, Netherland New Guinea; December 1, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—The male differs from the two preceding races in the streaked crown and in this is much closer to *albifrons* from which it differs in having much more white in the plumage of the head; the forehead is nearly pure white; the grayish-white edgings of the feathers of the top and back of the head are much broader and the dark streakings of the chin and throat are much reduced compared with *albifrons*. The single female available is moulting into adult plumage and appears similar to the female of *albifrons* except that the plumage of the head and neck is white instead of grayish and it lacks the dark shaft streaks to the feathers.

MEASUREMENTS.—Wing: ♂ 79, 81, 82; ♀ 80.

RANGE.—Probably the north and south slopes of the Snow Mountains. Taken at 2200 and 2650 meters on the slopes of the Snow Mountains north of Mt. Wilhelmina and probably Og-Grant's specimen from the Utakwa River, 5500 feet (1915, Ibis, Jub. Sup., p. 86) belongs to this species.

REMARKS.—One male, the type, is in adult plumage; one moulting into adult plumage appears to be coming into a plum-

age very similar to that of the adult, the third male is in immature plumage. This race appears intermediate between *albifrons* and *alba* but closest to the former.

#### *Neositta papuensis albifrons* (Ramsay)

*Sitella albifrons* RAMSAY, 1883, Proc. Linn. Soc. N. S. W., VIII, p. 24 (Astrolabe Mountains).

In this subspecies the male has the feathers of the forehead, crown and nape dusky with broad grayish-white margins; the lores and ear-coverts black; and the feathers of chin and throat black with white margins. The female has the head and neck all around grayish-white, the feathers with dark shaft-streaks. In this it is similar to the female of *papuensis* but differs in the whitish, not brown, margins to the feathers of the underparts.

MEASUREMENTS.—Wing: ♂ 80, 82, 85; ♀ 78, 78, 79, 79, 81.

RANGE.—The mountains of southeast New Guinea.

REMARKS.—I have the following material: Bihagi, head of the Mambare River, 2 ♂, 3 ♀. Owgarra, Angabunga River, 6000 ft. altitude, 1 ♂, 1 ♀. There is only slight variation in this series.

#### *Climacteris placens inexpectata*, new subspecies

TYPE.—305650, Amer. Mus. Nat. Hist.; ♂ ad.; Lake Habbema, 9 km. NE., altitude 2800 meters, Snow Mts., Netherland New Guinea; November 1, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Differs in the male from *steini* in the paler more sharply defined markings of the forehead, the gray, not olive-tinged rump and upper tail-coverts, the grayer tail, the paler, more whitish breast, and slightly paler rest of the underparts, and the larger light spot in the third primary. The female differs from that of *steini* on the upperparts as does the male. There is less difference on the underparts.

MEASUREMENTS.—Wing: ♂ 84, 87, 88, 91; ♀ 83, 83, 83, 83, 84, 85, 86.

RANGE.—Known from the slopes of the Snow Mountains to the north of Mt. Wilhelmina between 2200 and 3000 meters.

REMARKS.—The gray rump, upper tail-coverts and tail separate this race from all the other races of this species. This is the grayest race, *steini* from the Weyland

<sup>1</sup> Named in honor of Dr. L. J. Toxopeus, entomologist of the expedition.

Mountains is the next grayest, and *placens* from Arfak and *meridionalis* from south-east New Guinea are the least grayish.

***Cinnyris jugularis idenburgi*,**  
new subspecies

TYPE.—No. 305657, Amer. Mus. Nat. Hist.; ♂ ad.; Bernhard Camp, altitude 50 meters. Idenburg River, Netherland New Guinea; March 22, 1939; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—In the male differs from the other New Guinea race (*frenata*) in having the yellow of the underparts, except the pectoral tufts, replaced with glossy bluish-black, the yellow about the face with dull blackish, the pectoral tufts bright orange, the darker green top of the head, the darker, golden-brown-tinged back, and the black tail, with only an indication of small terminal gray marks, not large white marks, in the outer feathers. In the female it differs in having a whitish throat and yellow breast and belly, instead of uniformly yellow underparts, in having darker brownish-washed upperparts, and in having smaller and more grayish terminal marks in the outer tail-feathers. Both sexes have about the same wing measurement as *frenata*, but have smaller bills and tails.

This race differs from all of the *clementiae* group chiefly in the much more orange pectoral tufts and the golden-brown-washed back.

MALE

<i>idenburgi</i>	Wing	53, 53, 54, 55
	Bill	18.5, 20, 20, 21
	Tail	30, 30, 31
<i>frenata</i> (from Hollandia area)	Wing (10)	54–56 (av. 55)
	Bill	(10) 20–22 (av. 21.4)
	Tail	(10) 34–39 (av. 35.1)

FEMALE

<i>idenburgi</i>	Wing	49, 50, 50, 50, 52
	Bill	19.5, 20, 20
	Tail	27, 28, 29, 29
<i>frenata</i> (from Hollandia area)	Wing (8)	51–53 (av. 51.8)
	Bill	19, 20, 20, 20, 20.5, 21
	Tail	31, 32, 32, 32, 33

RANGE.—Known only from the type locality; probably occupies the Meer-vlakte of the Idenburg River. Thus its range is completely enclosed by the range of *frenata*.

REMARKS.—One of the males has no olive tinge in the flanks, two have a slight olive tinge. The male without olive in the flanks has a few reddish-brown tips to the

glossy bluish-black breast-feathers just below the iridescent breast shield. A fourth male is moulting into typical male plumage for this race, but some of the old feathers of the lower breast are not the yellow feathers of the typical female plumage but are partly black and partly yellow. Evidently the previous plumage was partly cock, mostly hen feathered. The five females are all similar on the underparts, but there is some variation on the upperparts, especially in the amount of golden wash on the head.

The relationship of this very distinct form is especially interesting. On the characters of the male it could be considered close to the *clementiae* group. Stresemann (1939, J. F. O., p. 402) evidently considers that *teysmanni* is a geographical representative of *clementiae* and derived from it. Rensch (1931, Mitt. Zool. Mus. Berlin, p. 612) says that in spite of the agreement in color their geographical distribution suggests that both *clementiae* and *teysmanni* may each have had an independent origin from different races of *jugularis*.

The present discovery adds weight to the view that each of the black-bellied forms may have had an independent origin, the tendency toward a black abdomen being latent in the species and appearing only in a few areas. If this is not accepted, it seems difficult on the basis of geographical distribution to consider that the black-bellied forms have had but a single point of origin and then evolved various races, except by considering the black-bellied forms as three, old, distinct species, without close connections with the present-day *jugularis*. To me it seems advisable to consider these black-bellied forms as local races of *jugularis*, each with a separate origin.

The range of this race is completely surrounded by that of the yellow-bellied *jugularis frenata* of New Guinea, but its habitat and habits are typically those of *jugularis frenata*. It is not a forest bird, but a bird of the second growth and forest edges which are the result of the extensive marshy conditions of the Meer-vlakte, somewhat similar to the habitat of *frenata* on the middle Fly River.

***Ptiloprora meekiana occidentalis*,**  
new subspecies

TYPE.—No. 305655, Amer. Mus. Nat. Hist.; ♂ ad.; Bele River, 18 km. north of Lake Habbema, 2200 meters, Snow Mts., Netherland New Guinea; November 23, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—Differs from *meekiana* in the brighter green, less grayish edgings to the feathers of the top of the head, neck and back; in the brighter rump, and edges of the remiges and rectrices; in the darker gray of the throat, with brighter yellowish margins; in the brighter yellowish of the rest of the underparts; and in the average larger size.

WING MEASUREMENTS

<i>occidentalis</i>	♂ 82, 84, 86, 91, 91, 92
	♀ (10) 77-82 (av. 79.6)
<i>meekiana</i>	♂ 82, 82, 83, 83, 85, 88
	♀ 71, 76

RANGE.—Probably the Snow Mountains between 2200 and 2800 meters.

REMARKS.—The material of *meekiana* for comparison consists of eight skins including the type from the heads of the Mambare and Aroa rivers, Mt. Tafa and the Huon Peninsula. Stresemann and Paludan (1936, Mitt. Zool. Mus. Berlin, XXI, p. 199) consider this species as the geographical representative of *P. erythropleura* in southeast New Guinea, but both species occur together in the Snow Mountains.

***Philemon brassi*, new species<sup>1</sup>**

TYPE.—No. 305643, Amer. Mus. Nat. Hist.; ♂ ad.; Bernhard Camp, Idenburg River, altitude 50 meters, Netherland New Guinea; April 20, 1939; Richard Archbold, A. L. Rand and W. B. Richardson.

DESCRIPTION.—Adult male and female: bill with no protuberance on culmen; forehead and stripe extending back over each eye bare; lores and an area about eye nearly bare, scantily beset with feathers; general color above uniform dark brown soon fading to much paler grayish-brown, the remiges and rectrices darker; the inner edges of remiges whitish; there is some variation in the amount of feathering on the sides of the head in adult birds; the feathers on the lores, about eye, edging the crown posteriorly and covering auricular area and malar region dark gray tipped whitish; chin white; feathers of throat dark gray tipped white give a finely spotted appearance; breast smoky gray; rest of underparts paler gray; thighs brownish-gray; iris dark brown; bill black; bare skin of

face slate or grayish-black; feet dark gray or slate.

IMMATURE MALE AND FEMALE.—A single immature male resembles in general the adult but has the first primary more rounded; the rectrices narrower; the plumage generally softer in texture; the spotting on the throat less pronounced; a yellowish tinge on the upper breast; the inner edges of the rectrices ochraceous; and some darker feathers of the scapular area, back and rump narrowly tipped with white. Two immature females are similar but lack the yellowish tinge on the breast, though one has some yellowish tinge on the lower throat. A similar yellowish tinge occurs in *P. citreogularis* where it appears to be correlated neither with age nor sex.

MALE

Wing	(6) 102-106 (av. 103.2)
Bill	(8) 28.5-32 (av. 29.6)
Tail	(6) 80-87 (av. 85.6)
Tarsus	(8) 24-28 (av. 26.4)

FEMALE

Wing	(9) 98-102 (av. 99.9)
Bill	(10) 26.5-29.5 (av. 28)
Tail	(7) 79-83 (av. 80.6)
Tarsus	(10) 23.5-26 (av. 24.7)

RANGE.—Known only from the type locality.

REMARKS.—This species is somewhat specialized in having a pronounced pattern on the throat and in having bare areas on the head. It is most closely related to *citreogularis* and *inornatus*. From the former it differs significantly in the pattern of the throat, in lacking the spotting of the breast, and in having the head less extensively bare; from *inornatus* it differs in having the bare area of the head more extensive, the pattern of the throat more pronounced and in lacking the lanceolate shape of the breast feathers.

The discovery of this new *Philemon* raises the number of species of this genus in New Guinea to five: *P. novaeguineae*, *corniculatus*, *citreogularis*, *brassi* and *meyeri*.

This species was found only in the dense second growth along the margin of one of the Idenburg River lagoons. It was a noisy bird and congregated in parties of a dozen or so. Its food, as shown by stomach examination, consisted of both fruits and insects. One male taken in March had enlarged gonads.

<sup>1</sup> Named in honor of Mr. L. J. Brass, botanist of the expedition.

**Lonchura teerinki**, new species<sup>1</sup>

TYPE.—No. 305642, Amer. Mus. Nat. Hist.; ♂ ad.; Bele River, 18 km. north of Lake Habbema, 2200 meters, Snow Mts., Netherland New Guinea; November 23, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DESCRIPTION.—Adult male: forehead blackish shading to dark brown of top of head, nape and hind neck; back, scapulars, upper wing-coverts and rump dark reddish-brown tinged gray in fresh plumage; upper tail-coverts straw-color; lores, sides of head including an area above eye, chin, throat and upper breast black, the posterior portion of the side of the head tinged with the brownish of the top of the head; the feathers of the sides of the upper breast mixed whitish and light earthy brown; lower breast and abdomen white; the feathers of the sides of the lower breast and flanks with blotches of black or black and light earthy brown, giving an irregular band down each side of the body; under tail-coverts and thighs black; tail acuminate, the central pair of feathers pointed and straw-color, the others blackish-brown, more or less edged straw-color on their outer webs; remiges blackish-brown, edged with brown like the back on their outer margins, and with pale ochraceous on inner margins; under wing-coverts light ochraceous.

ADULT FEMALE.—Similar to the male but duller; in two specimens there is a tendency for the marking on the flanks to break up into bars.

IMMATURE MALE.—Upperparts brown, darker on the head; forehead blackish; rump and upper tail-coverts paler, rusty brown; auriculars grayish-brown; chin and throat gray; upper breast grayish-brown with dark centers to the feathers giving an obscure spotting; rest of underparts whitish, more or less strongly tinged ochraceous; under tail-coverts pale ochraceous; thighs darker ochraceous, tinged with dusky from the darker bases of the feathers; rectrices less pointed than in adult, brownish-black, and edged with color of upper tail-coverts; remiges and their coverts brownish-black, edged with brown like the back.

IMMATURE FEMALE.—Similar to immature male.

	WING
Adult male	(10) 51-54 (av. 51.9)
Adult female	(10) 50-53 (av. 51.9)

	TAIL
Adult male	(9) 36-41 (av. 38.2)
Adult female	(8) 36-39 (av. 37.4)

RANGE.—The grasslands of the Grand Valley, north of Mt. Wilhelmina in the Snow Mountains, between 1600 (Balim River) and 2300 meters (Bele River).

<sup>1</sup> Named in honor of Capt. C. G. J. Teerink, in charge of the military escort of the expedition.

REMARKS.—Worn specimens are considerably duller than fresh plumaged birds. In both November and December many of the adults collected were in breeding condition, and young birds just out of the nest were collected.

**Oreostruthus fuliginosus pallidus**, new subspecies

TYPE.—No. 305647, Amer. Mus. Nat. Hist.; [= ♂?] ad.; Lake Habbema, 3225 m., Snow Mts., Netherland New Guinea; August 17, 1938; Richard Archbold, A. L. Rand and W. B. Richardson.

DIAGNOSIS.—The adult male is characterized by its paler, more brownish upperparts; the much paler brownish, not sooty black, underparts; and the paler red of the breast and flanks. The adult female is also distinguished by the more brownish upperparts; the paler more rufous brown underparts; and the paler red of the flanks. The immature female also shows clearly the browner back and paler, more rufous brown, underparts.

## WING MEASUREMENTS

MALE AD.	FEMALE AD.	FEMALE IMM.
74	71, 71, 71, 73, 73, 74	72

MATERIAL.—*pallidus*: 7 km. NE. Mt. Wilhelmina, 1 ♀ ad., 1 ♀ imm., September 16, 19, 1938; Lake Habbema, 1 sex? [= ♂ ad.], 1 ♀, August 17, 1938; 9 km. NE. Lake Habbema, 2 ♀ ad., October 19, 25, 1938; Bele River, 18 km. N. Lake Habbema, 3 ♀ ad., November 24–December 2, 1938.

*fuliginosus*: Mt. Albert Edward and Murray Pass, 4 ♂ ad., 4 ♂ imm., 2 ♀ ad., 2 ♀ imm.

RANGE.—Known from the Snow Mountains north of Mt. Wilhelmina, from 2700 to 3600 m.

REMARKS.—This species was hitherto known only from the Wharton and Owen Stanley ranges of New Guinea. Though the adult male which I selected for the type was not sexed, it evidently is an adult male because of its bill color, the red of which has not yet faded to yellow. Adult females have the maxilla black.

Specimens brought in by natives, at our 2200 meter camp, quite possibly came from higher up in the hills.