

KEY TO THE SPECIES OF SHORT-WINGS

| | | | |
|---|---|--|---|
| 1 | { | Tail very short, not much more than half the wing, but slightly exceeding the tarsus | 2 |
| | | Tail much more than half the wing, almost twice the tarsus | 3 |
| 2 | { | Above, dark blue | <i>Larvivora cyane</i> (male), p. 220 |
| | | Above, greyish olive-brown | <i>Larvivora cyane</i> (female and young), p. 220 |
| 3 | { | Above, dark slaty grey | <i>B. leucophris wrayi</i> (male), p. 220 |
| | | Above, brownish olive | 4 |
| 4 | { | General colour darker, more saturate | <i>B. leucophris wrayi</i> (female), p. 221 |
| | | General colour paler | <i>B. leucophris leucophris</i> (male and female), p. 222 |

*Larvivora cyane***The Siberian Blue Chat**

Vol. I., p. 233.

This handsome little bird has been described at length in the previous volume. Adult males are dark blue above and pure white below. Females and young birds olive-brown above and whitish below, squamated with brown tips to the feathers on the sides of the breast. Feet, whitish or pinkish flesh in both sexes. Total length, about 5.5 in.

Common on most of the hills of the Peninsula from November to March at elevations of from 2500 to 4000 ft., and occasionally as high as 5000 ft. Mr Kloss has met with the bird in December as far south as Gunong Pulai in Johore, but it is not recorded from Singapore Island.

*Brachypteryx leucophris wrayi***Wray's Short-wing**

Brachypteryx wrayi, Ogilvie-Grant, *Bull. Brit. Orn. Club*, xix., 1906, p. 10 (Gunong Batu Puteh, South Perak); id. *Journ. Fed. Malay States Mus.*, iii., 1908, p. 26.

Brachypteryx nipalensis (nec Moore), Sharpe, *P.Z.S.*, 1888, p. 273.

Brachypteryx nipalensis wrayi, Rothschild, *Nov. Zool.*, xxxiii., 1926, p. 271.

Heteroxenicus nipalensis wrayi, Robinson, *antea*, Volume I., p. 233.

Description.—*Adult male.*—Above, dark slate; lores, black, a silky white half-concealed stripe over the eye; primaries, dark brown, more rusty on the outer webs; inner aspect of wing, dark brown; axillaries and under wing coverts, brownish grey; tail feathers, slate-grey as the back, black on the

inner webs ; beneath, greyish, whiter on the throat and the middle of the belly ; darker grey in a band across the breast and on the flanks.

Adult female.—The slaty grey of the male replaced by russet-brown ; head, darker brown ; rump, wing coverts and outer aspects of primaries, more rusty. Flanks and band across the breast conspicuously brown.

Immature.—Very dark brown above, inconspicuously mottled with black, and with indistinct pale shaft stripes to the feathers of the mantle. Wing coverts with dull, ruddy buff, subterminal spots. Beneath, flammulated, the feathers with large yellowish buff centres and dark edges. Flanks and middle of the belly more uniform, and more ferruginous in tint.

Soft Parts.—Iris, hazel to dark brown ; bill, black ; gape, pinkish in young birds ; feet, brownish, ash or lead-colour ; claws, pale.

Dimensions.—Total length, about 4·5 in. ; wing, 2·3 to 2·5 in. ; tail, 1·2 to 1·3 in. ; tarsus, 1·1 to 1·2 in. ; bill from gape, 0·7 in. ; culmen, 0·5 to 0·55 in.

Range in the Malay Peninsula.—North Perak to Southern Selangor, and in Pahang. Always at high elevations.

Extralimital Range.—The bird described is a very dark-coloured race, peculiar to the southern portion of the Malay Peninsula. Other subspecies are found from the Himalayas, through Burma, south through Tenasserim to Peninsular Siam ; French Indo-China and Southern China ; Sumatra and Java, east to Bali.

Nidification.—That of the Malayan form unknown. The typical race from the Himalayas builds a globular nest of moss, etc., bound together with moss and grass and lined with skeleton leaves. It is generally placed against a tree, sometimes low down amongst the branches, or rarely on the ground. Three or four eggs are laid, of a greenish ground-colour, so thickly freckled with light reddish as to appear almost unicoloured. Average dimensions, 0·77 by 0·57 in. (*Baker*). The breeding habits of our bird will almost certainly be identical, and the nests may be searched for in mossy rain forest. The eggs will probably be fewer to the clutch and possibly rather smaller.

Habits.—Generally distributed over the whole of the high mountains of the Malay Peninsula which harbour any mountain fauna, but not found below about 3500 ft., and nowhere particularly common. Met with singly or in pairs, occasionally three or four, which are probably family parties, but never in flocks. The situations affected are damp gullies, the edges of small streams, and hillsides clothed with small trees and encumbered with boulders, and the birds seem to shun the drier zones and bracken thickets. It is generally found on the ground or near it, but is less purely terrestrial than such birds as *Turdinulus* or *Pnoepyga*, and is often seen perched on low boughs or creepers. The food is entirely insectivorous or animal, consisting of ants, spiders and small slugs and shells. It has an occasional song of a very few notes, rather like that of a robin.

Note.—On the high mountains of Peninsular Siam, Kao Luang and Kao Nawng, at altitudes of from 4000 ft. upwards, this bird reappears. It differs from the southern peninsular race in that the sexes are alike, the male

resembling the female, and both sexes being slightly paler than specimens from Perak and Selangor. They differ in no way that we can see from birds from Java and Sumatra, described in 1827 by Temminck as *Brachypteryx leucophris*, and we are forced to associate them with that form, which may possibly be considered as extending into Tenasserim, where also the sexes are alike.

I have followed Lord Rothschild (*loc. cit.*) in considering the genera *Brachypteryx* and *Heteroxenicus* as identical.

Sub-family ENICURINÆ

Forktails

Vol. I., p. 234.

THREE, or perhaps four, species of this very well characterized group occur in Malaya, of which two are common residents in the montane zone, one being almost confined to it. A third species is very abundant in the southern third of the Peninsula, but does not seem to exceed an altitude of more than 2000 ft., and is therefore described in a later volume. The evidence for the occurrence of the fourth species is weak.

KEY TO THE SPECIES OF FORKTAILS FOUND IN THE MALAY PENINSULA

- | | | | |
|---|---|--|---|
| 1 | { | Tail distinctly longer than wing | 2 |
| | { | Tail distinctly shorter than wing | 3 |
| 2 | { | Chin and throat only black | <i>Enicurus schistaceus</i> , p. 222 |
| | { | Chin, throat and breast black | <i>Enicurus leschenaulti indicus</i> , ¹ p. 222 |
| 3 | { | With chestnut or reddish brown in plumage | <i>Hydrocichla frontalis</i> , p. 224 |
| | { | Plumage, entirely black and white | <i>Hydrocichla ruficapilla</i> , p. 224 |

Enicurus schistaceus

The Slaty-backed Forktail

PLATE 19 (*right-hand figure*)

Enicurus schistaceus, Hodgs., *Asiat. Res.*, xix., 1836, p. 189; Sharpe, *Cat. Birds, Brit. Mus.*, vii., 1883, p. 365; Oates, in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), ii., 1890, p. 61; Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 84; Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 32, 1899, p. 19; Hartert, *Nov. Zool.*, ix., 1902, p. 570; Ogilvie-Grant, *Fascic. Malay., Zool.*, iii., 1906, p. 79; Oates and Reid, *Cat. Birds' Eggs, Brit. Mus.*, iv., 1905, p. 136.

¹ Cf. *Henicurus chinensis*, Stoliczka, *Journ. Asiat. Soc. Bengal*, xxxix., 1870, p. 304 (Province Wellesley).

Enicurus immaculatus (part), Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), ii., 1924, p. 61.

Malay Name.—Burong chegar besar.

Description.—*Adult.*—Sexes alike. Nasal plumes, lower lores, chin, throat and sides of the neck, glossy black; a narrow frontal band running across the forehead and over the eye, white; eye nearly surrounded by a white ring; crown, nape and mantle, dark grey; rump and upper tail coverts, white; lesser, median and primary coverts, black, greater series broadly tipped with white. Primaries, brownish black, the bases of outer and inner webs white; secondaries, glossy black, edged and tipped with white, their bases broadly white; under wing coverts and axillaries, white, black or greyish at the bases. Two outer pairs of tail feathers, pure white, the remainder black, white at the tips and extreme bases. Lower surface, white, running up into the black of the throat; flanks, somewhat greyish.

Immature.—The upper surfaces sooty brown, not grey; the under surfaces with narrow, brownish edges to the feathers.

Fledgelings.—With the head entirely sooty brown, without the frontal white band.

Soft Parts.—Iris, dark; bill, black; feet, yellowish flesh-colour; claws, pale.

Dimensions.—Total length, 10 to 10.5 in.; wing, 3.6 to 4 in.; tail, 4.3 to 5 in.; tarsus, 1.15 to 1.25 in.; bill from gape, 0.95 to 1 in.; culmen, 0.7 in.

Range in the Malay Peninsula.—Ulu Selama, North Perak, the Larut Hills, Fraser's Hill, Selangor-Pahang boundary, and Gunong Tahan, Pahang.

Extralimital Range.—Widely spread from the Western Himalayas to Eastern Assam, south through Burma to Tenasserim; Shan States, North Siam, Yunnan and Southern China.

Nidification.—Nests and eggs have not, as yet, been found in the Malay Peninsula. Colonel Bingham obtained nest and eggs on 1st March under a fallen tree, "beautifully concealed in a crevice between the roots, and made of moss fitted together into a cup about two inches deep, and the same in diameter, lined with the skeletons of peepal leaves. The eggs, three in number, were bluntish ovals, pure dead-white, sparsely spotted and speckled, chiefly at the larger end, with pale brown."

Baker gives the average dimensions as 0.84 by 0.64 in.

Habits.—A rare bird in the Malay Peninsula, though it used to be not uncommon on the stream on Fraser's Hill above the Semangko Pass. The habits are exactly those of other forktails, and, like them, it is never found far from water. The note is even shriller than that of *H. ruficapilla*. The present bird is shyer and of more powerful flight. In Tenasserim, where the species descends to lower levels than it does with us, Davison states that larger and more open streams are frequented than is the case with the other local forktails.

The bird figured is a female rather over half natural size from Fraser's Hill, shot in December 1909.

*Hydrocichla ruficapilla***The Chestnut-backed Forktail**

PLATE 19 (*upper figure*, immature male; *left-hand figures*, adult male and female)

Vol. I., p. 235.

The rather short tail and the presence of chestnut or rufous brown in the plumages at once distinguishes this species from all other local members of the group. Total length, about 8 in. The bird may be said to be common in all hill streams, working up towards their sources so far as there is sufficient water—*i.e.* to over 4000 ft. in certain districts.

Lieutenant H. J. Kelsall found a nest of this forktail at Kuala Tahan on 23rd July 1891. It was built on to the side of an almost perpendicular rock by the side of a jungle stream, and was a shallow, cup-shaped structure six or seven inches in diameter, made entirely of moss and lined with skeleton leaves. The eggs were three in number, white, spotted and blotched with light red and pale purplish red, the spots being larger and concentrated into a ring round the larger end. Dimensions of two: 0·97 by 0·66 in., and 0·90 by 0·65 in. (*Journ. Straits Branch, Roy. Asiat. Soc.*, No. 24, 1891, p. 170).

The birds figured, about natural size, are an immature male from Ginting Bidei, Selangor, April 1917, an adult male from Bentong, Pahang, June 1912, and an adult female from Tasan, near the Tenasserim border, March 1919.

*Hydrocichla frontalis***The White-crowned Forktail**

Like the preceding species, but the crown pure white; the wings black, with white tips to the coverts. Throat and upper breast, black; abdomen, white, with no black tips to the feathers. Size, as *H. ruficapilla*, but a more slenderly built bird.

Widely spread throughout the Peninsula, perhaps commonest in the hill streams of Negri Sembilan; rarely ascending above about 2000 ft., but of possible occurrence at higher elevations. This species will be described in detail in a later volume.

Sub-family PHENICURINÆ

Redstarts, Robins and Shamans

Vol. I., p. 236.

To the four members of this group recorded in Volume I. of this work a fifth must be added, *Trichixus pyrropygus*, a bird whose systematic position is not altogether certain, but which is best placed here.

Only one form, *Notodela leucura*, is a strictly montane bird, and as such fully described here.

KEY TO THE MALAYAN SPECIES OF PHŒNICURINÆ

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|---|---|--|--|
| 1 | } | Tail very much longer than wing, outer feathers tipped with white; belly, chestnut | } <i>Kittacincla malabarica tricolor</i> , p. 225 |
| | | Tail equal to or shorter than wing . | |
| 2 | } | Tail more or less chestnut or rufous | <i>Trichixus pyrropygus</i> , p. 226 |
| | | Tail without chestnut or rufous . | |
| 3 | } | General colour, bluish or brown, tail white at base | <i>Notodela leucura</i> , p. 225 |
| | | General colour, black or grey; tail feathers white at tips | |

Kittacincla malabarica tricolor

The Malay Shama

Vol. I., p. 237.

Malay Name.—Murai batu.

The very long tail with the two centre pairs of feathers uniform black, the four outer pairs with broad white tips, and the deep chestnut belly separate this well-known species from all its local relatives.

There is little to add to the account already given, except to state that on isolated mountains, like Mount Ophir, Kedah Peak, and perhaps Penang Hill, the bird possibly ascends rather above the limit given—viz. 1000 to 1500 ft. The same is true of the hills of Negri Sembilan, especially where the slopes are dry and rocky; on the central ranges it is, nevertheless, an uncommon bird, whereas on rocky islands and hills near the coast it is abundant and conspicuous.

Notodela leucura

The White-tailed Blue Robin

Muscisylvia leucura, Hodg., *P.Z.S.*, 1845, p. 27 (Nepal).

Notodela leucura, Sharpe, *Cat. Birds, Brit. Mus.*, vii., 1883, p. 23; Oates, in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), ii., 1890, p. 70; Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 34, 1900, p. 99; Oates, *Faun. Brit. Ind., Birds*, ii., 1890, p. 112; Kloss, *Journ. Fed. Malay States Mus.*, iv., 1911, p. 232; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), ii., 1924, p. 126.

Description.—*Adult male.*—Above and below, lustrous black, with a slight indigo-blue tinge; shoulder, forehead and a stripe over the eye, cobalt-blue; a concealed white patch on each side of the neck formed by the bases of the feathers; primaries and secondaries, brownish black; tail feathers, black, with a bluish glaze, the centre and outermost pairs uniform, the rest with much white towards the base of the outer web, increasing inwardly; under tail coverts with paler edges.

Adult female.—Above, dark brown, greyer on the head, more ferruginous on the outer webs of the primaries; tail, blackish brown, the white on the bases of the feathers as in the male. Sides of the head, chin and throat, mottled black and brownish. A concealed white patch on the breast; rest of the under surface, dark ferruginous brown, darker and greyer on the belly and flanks, the under tail coverts dark greyish brown, with fine pale shaft stripes.

Immature.—A brighter reddish brown, with broad rufous shaft stripes, and pale rusty tips to the feathers. Tails as in the respective adults (taken from Himalayan specimens).

Soft Parts.—Iris, dark brown; bill and feet, black, the latter more brownish in the female.

Dimensions.—Total length, about 6·5 in.; wing, *male*, 3·6 to 3·7 in.; *female*, 3·4 in.; tail, *male*, 2·9 to 3·2 in.; *female*, 2·6 in.; tarsus, *male*, 1·15 in.; *female*, 1 in.; bill from gape, 0·75 in.; culmen, 0·6 in.

Range in the Malay Peninsula.—The only place in the Malay Peninsula whence this bird has been obtained is Gunong Ijau in the Larut Hills, from about 4000 to 4700 ft.

Extralimital Range.—From the Western Himalayas to Eastern Assam, eastwards over a great part of Southern China, Manipur, Burma and the Shan States, south to Tenasserim and French Indo-China to South Annam and Cambodia.

Note.—The Malayan form is rather small, and the female rather darker than that of the typical Himalayan race. More material, which is at present very limited, may prove that the Malayan as well as the Indo-Chinese bird is a distinct subspecies.

Nidification.—Though quite young birds have been obtained on the Larut Hills nothing is known of the nesting habits of this bird in Malaya. Stuart Baker found it breeding in Assam between April and August, making a domed or cup-shaped nest of leaves, roots and moss placed under a ledge of rock or in a hollow tree. Three to five eggs are laid, pinkish in ground-colour, sometimes spotless, sometimes very finely freckled in a shade darker than the ground-colour. The average dimensions are given as 0·92 by 0·67 in.

Habits.—As I am acquainted with it, this species is a very skulking bird, living almost entirely in the ground or in quite low shrubs, and taking refuge among the dense masses of bracken and tangled undergrowth that clothe the steep slopes on which it lives. I have never seen it fly into the higher trees when alarmed, as noted by Stuart Baker, but with us the bird is rare, and my opportunities of observing it have been limited; it is very easily confused with *Niltava*, which occurs in exactly the same situations.

Trichixus pyrropygus

The Orange-tailed Thrush

General colour above, more or less grey; tail, orange-rufous, with a broad black tip, rather shorter than the wing. Total length, 8 to 9 in.

This species, which is normally a low-country jungle bird, often, indeed, found in swamp jungle, has once been obtained at about 3000 ft., and may again be found on the lower slopes of the main range, and is therefore mentioned in this *fasciculus*. It will be described in detail in a later volume.

Copsychus saularis musicus

The Straits Robin or Dyal Bird

Vol. I., p. 239, pl. 19.

Black or grey above, with a broad white band on the wing; outer tail feathers, largely white; throat and breast, black in the male, grey in the female. Total length, about 8·5 in.

Though normally an inhabitant of the low country, in the neighbourhood of human habitations, the Straits Robin is a very adaptable bird, and where clearings of any extent are made in the hills soon establishes itself there. At places like Cameron's Highlands and Fraser's Hill it will soon become acclimatized. It is even now occasionally seen in Sakai clearings, and has been obtained from as high as 5000 ft. on Gunong Kerbau.

Sub-family TURDINÆ

Thrushes

WITH the exception of the whistling thrushes, whose place in this family is somewhat open to question, all the species of true thrushes in the Malay Peninsula are more or less migratory, though some, such as *Geokichla citrina* and *G. interpres*, travel within narrow limits. All are found at one time or another on the higher mountains, but only one, *Arrenga robinsoni*, is confined to the hills. Nestlings of this genus and of *Myiophonus* are urgently required in order that their systematic position may be determined, and attention is called to the Javan mountain thrush, which may possibly occur in the hill stations of British Malaya, as well as on the mountains of Peninsular Siam.

KEY TO THE SPECIES OF TURDINÆ HERE DESCRIBED

| | | | |
|---|---|--|---|
| 1 | { | Plumage nearly uniform blue | 2 |
| | { | Plumage with other colours than blue | 4 |
| 2 | { | Brighter blue, not spangled, sometimes with chestnut on belly and under tail coverts | <i>Monticola solitaria</i> (male), p. 233 |
| | { | Very dark blue, spangled, never with any chestnut on belly and under tail coverts | 3 |

| | | | | |
|----|---|---|---|---|
| 3 | { | Darker, less spangled; wing exceeding 6 in. | } <i>Myiophonus flavirostris dicrorhynchus</i> , p. 228 | |
| | | Brighter, more spangled; wing less than 5'6 in. | | <i>Arrenga glaucina robinsoni</i> , p. 230 |
| 4 | { | Below, with cross-bars, spots or lunate markings | 5 | |
| | | Below, more or less uniform | 7 | |
| 5 | { | Upper and under surface with lunate markings | } <i>Oreocincla aurea horsfieldi</i> , p. 234 | |
| | | Upper surface uniform russet-brown, without markings, except pale tips to wing coverts | | } <i>Geokichla sibirica davisoni</i> (female), p. 230 |
| | | Upper and under surface not cross-barred; flanks with rounded black spots; belly, white | | |
| | | Upper and under surface cross-barred | | 6 |
| 6 | { | With a large white patch on breast | } <i>Monticola gularis</i> (female), p. 233 | |
| | | With no white patch on breast | | } <i>Monticola solitaria</i> (female), p. 233 |
| 7 | { | Plumage beneath, orange | 8 | |
| | | Plumage beneath, not orange | 9 | |
| 8 | { | Crown blue, a large white patch on breast | } <i>Monticola gularis</i> (male), p. 232 | |
| | | Crown orange, no white patch on breast | | } <i>Geokichla c. citrina</i> , p. 231 |
| 9 | { | Plumage above and below, slaty black | } <i>Geokichla sibirica davisoni</i> (male), p. 230 | |
| | | Plumage not slaty black | | 10 |
| 10 | { | Chin and throat, iron grey | } <i>Turdus obscurus obscurus</i> (male), p. 233 | |
| | | Chin and throat, whitish | | } <i>Turdus obscurus obscurus</i> (female), p. 233 |

*Myiophonus*¹ *flavirostris dicrorhynchus*

The Larger Malayan Whistling Thrush

Myiophoneus dicrorhynchus, Salvad., *Ann. Mus. Civ. Gen.*, xiv., 1879, p. 227 (West Sumatra); Sharpe, *Cat. Birds, Brit. Mus.*, vii., 1883, p. 10; Ogilvie-Grant, *Journ. Fed. Malay States Mus.*, iii., 1908, p. 27.

Myiophoneus, *sp. inc.*, Sharpe, *P.Z.S.*, 1887, p. 436.

Myiophoneus eugenii (*nec* Hume), Butler, *Journ. Straits Branch, Roy. Asiat. Soc.*, No. 32, 1899, p. 12; Bonhote, *P.Z.S.*, 1901 (1), p. 63.

Malay Names.—Burong goa; burong siput; burong kubor rimba.

Description.—*Adult.*—Sexes alike. General colour, deep bluish black,

¹ So spelt by the author.

spangled with small shining tips to the feathers, mostly on the breast and mantle; bases of the feathers of the back, rump, belly, and especially the flanks, where they are lengthened, clear white. Angle of the wing, brighter blue, and the tips of the median wing coverts pale mauve.

Immature.—Dull brownish black, without the glistening tips to the feathers or the blue angle to the wing. Lower surface, indistinctly streaked with paler shaft stripes to the mantle and under surface. White bases to the feathers of the flanks not so noticeable.

Soft Parts.—*Adult*: iris, hazel; bill, yellow, culminal region, corneous; feet, black. *Immature*: iris, dark; bill, blackish horn, yellow at gape and tip.

Dimensions.—Total length, 12 to 13 in.; wing, 6·2 to 6·6 in.; tail, 4·3 to 4·6 in.; tarsus, 2·1 to 2·2 in.; bill from gape, 1·75 in.; culmen, 1·35 in.

Range in the Malay Peninsula.—From the Patani States south to Central Selangor and probably in Pahang.

Extralimital Range.—Sumatra; a closely allied race occurs in Java, but the Bornean whistling thrush is not a member of this species.

Nidification.—Nests of this bird have been obtained in the vicinity of the Batu Caves, Kuala Lumpur, where it was formerly abundant; the eggs are not known, but judging from the analogy of other members of the genus will probably be rather like those of blackbirds, but larger. The nests are very massive structures of fairly coarse twigs, piled up on a foundation of the same, and placed between large boulders on steep slopes—the nesting hollow is very shallow. They are lined roughly with moss and a little grass, and, judging by the size to which they attain, must be used year after year if undisturbed. The breeding season is about February or March.

Habits.—This handsome whistling thrush is nowhere very common, and hardly exists in many places where it formerly occurred. It is, however, still fairly numerous at Fraser's Hill and at the foot of the Larut Hills, and has occurred at considerable heights on Gunong Tahan. If carefully searched for, it will probably be found at the bases of most of the limestone cliffs throughout the country, especially in damp situations, though it is evident that it is by no means confined to this geological formation. The bird is terrestrial in its habits, and usually found near water, on the edge of waterfalls and among rocks. It can hop and run with great rapidity, and when disturbed takes refuge by diving into the undergrowth and among the boulders, and does not use its wings except when compelled. Its food is almost exclusively snails, often of very large size. The bird has the habit of selecting one particular rock for cracking the shells, a habit that it shares with *Pittas*, and in some localities incredible quantities of debris accumulate—so much so, that in some cases the piles have been attributed to the Sakais or aboriginal tribes, though they have certainly been formed by the birds. The call is a very penetrating, but rather pleasant, whistle, usually in three notes, which is heard in the early morning and late evening, but sometimes quite late at night.

*Arrenga glaucina robinsoni***Grant's Mountain Whistling Thrush**

Myiophoneus robinsoni, Ogilvie-Grant, *Bull. Brit. Orn. Club*, xv., 1905, p. 69 (Gunong Mengkuang Lebar, Selangor, 4800 ft.); id. *Journ. Fed. Malay States Mus.*, i., 1905, p. 104.

Description.—*Adult.*—Sexes alike. Like the preceding species but very much smaller, with a more rounded wing. General colour, rather brighter and more spangled. Shoulder patch, brighter purplish blue; mauve tips to the median wing coverts absent or very inconspicuous; white bases to the feathers of the lower parts very clear.

Soft Parts.—Iris, dark hazel; bill, dull yellow, the culmen dark brownish horn; feet, brownish black.

Dimensions.—Total length, about 10 in.; wing, 5.3 to 5.5 in.; tail, 3.8 to 4 in.; tarsus, 1.8 in.; bill from gape, 1.3 in.; culmen, 1 in.

Range in the Malay Peninsula.—Only in Selangor, from the Semangko Pass to Gunong Mengkuang Lebar, at high elevations.

Extralimital Range.—The described form is known only from the Malay Peninsula. Allied races are found in Sumatra and Java, usually at considerable heights.

Nidification.—Unknown.

Habits.—There is little to say about this species, which as yet is known only from the higher Selangor mountains, where it keeps to deep, damp gullies and small jungle streams. It is, however, less tied to running water than is its larger relative, as on Mengkuang Lebar the original specimens were found rooting among the dead leaves of the giant screw-pine, from which the mountain derives its Malay name. Food is necessarily more varied than that of *M. f. dicrorhynchus*, as on a granite soil snails are not so numerous as on limestone. The note on the two occasions on which I have heard it has been like that of the larger species, but much softer.

The only localities where this species is abundant are remote and difficult of access, and recent activities on Fraser's Hill have probably driven it away from there, though it used to be common near the old mine-workings. Additional specimens and some account of the nesting habits are much desired.

*Geokichla sibirica davisoni***Davison's Ground Thrush**

Vol. I., p. 241.

This bird, which in the male may be recognized by the slaty black plumage, has an almost uniform under surface in fully adult birds, and a broad white stripe in front of the eye. The female is russet-brown, the under surface buffy white, with broad dark edges to the feathers and dusky flanks. Total length, about 10 in. This thrush, which has been fully described

in Volume I., is a regular winter visitor, and is common on most mountains from Kedah Peak to Selangor certainly, and probably on the hills of Negri Sembilan and Johore from November to March. The typical *G. sibirica sibirica*, a paler grey bird, with more white on the lower surface, which has a different breeding range, will probably also be found on the mountains, and observations and, if possible, illustrative specimens are solicited.

Geokichla citrina citrina

The Grey and Orange Ground Thrush

Head and nape and whole under surface, except the middle of the belly and the under tail coverts, which are white, bright orange. Rest of the plumage clear blue-grey, with a patch of white, varying in extent, on the median wing coverts. Females have the upper surface strongly washed with greenish olive, but old birds appear to approximate to the males.

The species is common in the north of the Peninsula, intermixed with an extremely doubtfully distinct form in which the white patch on the wing coverts is absent.

As regards the south of the Malayan area, it is a bird of extreme rarity. It has been seen by Butler on the Larut Hills, but not obtained. There is a female in the British Museum labelled "Malacca, January 1868," collected by Dr Maingay, and two others also labelled "Malacca"—one in the Seebohm Collection, labelled "Malaisié," and the origin of his figure of *G. innotata* in the *Monograph of the Turdidæ*, pl. xx., fig. 2, and an adult male from Cantor's collection, very likely from Perlis or north thereof.

The only fully authentic specimen obtained of late years is an adult male, with the white wing patches highly developed, shot on Menang Gasing, a mountain in Ulu Langat, Selangor, on the main range, at between 3000 to 4000 ft., on 7th February 1912. The bird will be described in detail in a later volume. Additional observations and specimens are much desired.

Geokichla interpres

Temminck's Ground Thrush

Turdus interpres, Kuhl, Temminck., *Pl. Col.*, 1828, pl. 458 (Java).

Geocichla avensis, Hume, *Stray Feath.*, viii., 1879, p. 39 (Rembau); Oates, *Faun. Brit. Ind.*, *Birds*, ii., 1890, p. 138.

Geocichla interpres, Richmond, *Proc. U.S. Nat. Mus.*, xxii., 1900, p. 319 (Trang); Robinson and Kloss, *Journ. Fed. Malay States Mus.*, v., 1914, p. 56; id. *Journ. Nat. Hist. Soc. Siam.*, v., 1924, p. 306; Seebohm, *Mon. Turd.*, i., 1902, p. 49, pl. 16, figs. 1 and 2.

Description.—*Adult.*—Sexes alike. Head and nape, dark chestnut-red; upper surface, dark grey; lesser upper wing coverts, black, median ones, mainly white, greater ones, black, with white tips forming a wing bar. Primaries, blackish in fresh specimens, hoary on the outer webs; on the inner aspect, all except the first three edged with whitish on the inner webs towards the base; secondaries, more brownish, greyish on the outer webs;

under wing coverts, black basally, white at the tips, axillaries, white basally, black at the tips, edge of wing, white. Tail, as the back, above, blackish beneath, outer feather with a large white spot at the tip. Loes and fore part of face, white, the loreal feathers tipped with black, carried as a narrow line over the eye; back of the eye ring, white; ear coverts, silvery grey, broadly tipped with black. Below, chin, throat and upper breast, black, often with a narrow white stripe down the chin; lower breast, white, with large rounded black spots continued on the upper flanks; lower flanks more dusky, middle of belly and under wing coverts, white.

Immature.—Head, neck, mantle and scapulars, rusty, with broad pale shaft stripes; white coverts tinged with rusty. Chin, throat and breast, not black but rusty, with irregular black spots; a narrow black line on the jaw and a double black bar on the sides of the face—on each side of the buffy ear coverts.

Note.—The tint of the chestnut of the head varies greatly, and in some specimens approaches chestnut-bay.

Soft Parts.—Iris, hazel; bill, black, greenish at base; feet, whitish or yellowish flesh, claws, pinkish horn.

Dimensions.—Total length, about 6 in.; wing, 4·3 in.; tail, 2·6 in.; tarsus, 1·2 in.; bill from gape 0·95 in.; culmen, 0·6 in.

Range in the Malay Peninsula.—Known from only four specimens—from the Burma border, from the mountains of Trang in Peninsular Siam, and from Gunong Tampin and Rembau in Negri Sembilan.

Extralimital Range.—The Sulu Islands and Basilan, Philippine Islands, North-West Borneo and Sarawak, Sumbawa, South Flores, Lomboch, Bali (?), Java and Sumatra.

Nidification.—Unknown.

Habits.—This ground thrush is curiously widely distributed, though whether it is resident, wherever found, or a migrant is quite unknown. It is usually, but by no means always, a bird of considerable altitudes, but possibly moves up and down the hillsides according to season. There is nothing special to note about it. Those specimens that we have obtained have all been secured in jungle, either heavy primeval or sometimes secondary scrub, and always on the ground. There seems to be no information as to its song.

The species is figured by Gray under the name of *Turdus avensis*, from a native drawing made from a specimen obtained by Crawford, in Ava. Seeing that we have obtained it on the borders of Burma this further extension is quite possible.

More information as to the occurrence of the bird in the Malay Peninsula is much desired.

Monticola gularis

Swinhoe's Rock Thrush

Sexes very different. Male with the head brilliant pale blue; back and wing coverts, black, with fuscous edges to the feathers; a large white patch on the base of the inner secondaries; rump and under surface, rufous

orange, with a white patch on the middle of the throat. Female, greyish above, the mantle, back and rump with zigzag bars of black; beneath, greyish white, with irregular barrings of black, the white patch on the throat running up the chin. Total length, in both sexes, about $5\frac{1}{2}$ in.

A very wandering bird that has twice occurred in winter on the Larut Hills, in Peninsular Siam and Malacca. The species probably breeds in North China and Manchuria, and visits us in winter only. It will be described in full in a later volume.

Monticola solitaria

The Blue Rock Thrush

Males with the whole plumage a lively blue-grey, brightest on the crown, with a variable amount of chestnut-red on the belly and under tail coverts, never very much, sometimes entirely absent.

Females, above, greyish brown, sometimes with a bluish tinge; wings and tail, brown, the former with a whitish bar, formed by tips to the coverts, the latter with pale edges to the feathers; below, dirty-white, with dark cross-bars; the throat and upper breast more irregularly marked. Total length, in both sexes, about $9\frac{1}{2}$ to 9 in.

I have purposely avoided attaching a subspecific name to this reference. The blue rock thrush is a migratory bird, with a very extensive range from east to west and from north to south. Western birds are entirely blue in the male, but those from the far east have the belly and under tail coverts entirely chestnut-red, and there are also correlated differences in the females. Almost every possible intergradation is known between the two extremes, of which the Malay Peninsula is the meeting-place.

The bird is at no time common, though it has occurred in many places, and in many months, from August onwards. Butler obtained it on the Larut Hills, and Kloss collected a male of the Western race at the Batu Caves, near Kuala Lumpur.

I hope to discuss the species as a whole in Volume V. of this work in the section devoted to migratory birds.

Turdus obscurus obscurus

The Dusky Thrush

Vol. I., p. 243.

Above, earthy olive-brown; beneath, male, with the throat, sides of the neck and chest, clear grey; sides of the breast and flanks, bright brown. Female, with the chin and throat white, with no grey on the sides of the neck and breast. Total length, about 10 in.

Very common on the higher hills throughout the country, above about 2500 ft., from October to March, feeding almost exclusively on the ground.

Mr F. N. Chasen found the bird numerous near the summit of Penang Hill, at 2700 ft., in December.

*Oreocincla aurea horsfieldi***The Javan Mountain Thrush**

Oreocincla horsfieldi, Bp., *Rev. et Mag., Zool.*, 1857, p. 205 (Java).

Geocichla horsfieldi, Seebohm, *Cat. Birds, Brit. Mus.*, v., 1881, p. 153, pl. x.; id. *Mon. Turd.*, i., 1902, p. 17, pl. v.; Hartert, *Nov. Zool.*, iii., 1896, pp. 555, 593.

Oreocincla horsfieldi affinis, Richmond, *Proc. Biol. Soc. Washington*, xv., 1902, p. 158 (Kao Nok Ram, Trang, Peninsular Siam, 3000 ft.).

Oreocincla aurea horsfieldi, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 308.

Description.—Third and fourth primaries longest, second between the fifth and sixth.

Adult.—Sexes alike. Above, with the ground-colour a warm, olive-brown, with very faint yellowish buff shaft stripes, the feathers paler subterminally, and with broad crescentic black tips, broadest on the mantle; wing coverts, sooty black at bases, broadly edged with olive, and with yellowish buff tips; the primary coverts broadly black on the inner webs and at the tips, deep yellowish buff mesially. Primaries, brownish, edged externally with golden olive, the secondaries more broadly so on the outer webs; inner aspect of wing, fuscous, the bases of the primaries buffy on the inner webs, axillaries, blackish, their bases white, reversed on the under wing coverts; edge of wing, whitish. Tail feathers, fourteen: two centre pairs olive to base, the next four pairs with a decreasing amount of blackish on the base of the feathers, the outermost pair mainly olive; all more or less indistinctly edged and tipped with buff. Beneath, golden grey, with white shafts. Lores, greyish white; sides of the face, mottled buff and black; ear coverts, pale buff, with paler shafts and broad black tips. Beneath, whitish, almost unmarked on the throat, the feathers strongly buffy subterminally, and with broad lunate black tips, densest on the flanks. Under tail coverts, whitish, not, or only lightly, marked; thighs, greyish.

Immature.—The subterminal golden olive bars on the feathers of the upper parts richer in colour and more obvious. Wing coverts more broadly tipped with golden buff. Lunate black marking on the under surface more smudgy and spotty, less defined.

Soft Parts.—“Iris, dark brown; feet, pale brownish fleshy; bill, dark horny brown, pale fleshy beneath at base” (*W. L. Abbott*).

Dimensions.—Total length, 10·1 to 10·7 in.; wing, 5·6 in.; tail, 3·6 to 3·9 in.; tarsus, 1·3 to 1·35 in.; bill from gape, 1·15 to 1·2 in.; culmen, 0·9 in.

Range in the Malay Peninsula.—Known from only three specimens from the mountains of Trang and Nakon Sri Tammarat, Peninsular Siam.

Extralimital Range.—Probably to North Siam, mountains of French Indo-China, Java and the islands to the eastward, and Sumatra.

Nidification.—Unknown from the Malay Peninsula. The allied Japanese bird builds a big cup-shaped nest of grass and moss, lined with tendrils and

placed in fruit-trees ten to fifteen feet from the ground. The eggs are three to five in number, pale sea-green to pale clay-colour in ground-colour, with very numerous tiny freckles of reddish, so closely set that the eggs appear almost unicoloured (*Baker*). Eggs of this species from Java are described by Nehr Korn as very similar to the above, measuring 1·16 by 0·82 in.

Habits.—The habits of the local form are practically unknown, but the collector describes it as living in very dense jungle, feeding on the ground and very shy. In Java and Sumatra, where I have seen numerous specimens, it was also a jungle-feeding bird, but at early morning and evening came out into more open spaces. Flight was very strong, and the birds readily took to the wing when disturbed, settling in adjacent high trees. There is an occasional burst of song, like that of the song thrush but louder, but when alarmed the note is very discordant.

Note.—After careful examination I am unable to discriminate between individuals of this species coming from the widely separated localities noted above. Indeed, the species differs from the well-known White's thrush (*Oreocincla varia varia*) only in its rather richer colouring, smaller size and more rounded wing.