# COOTS, RAILS AND CRAKES

### Order RALLIFORMES

Vol. I., p. 15; Vol. II., p. 22.

This group contains the coots, rails, crakes, and a somewhat abnormal form, the finfoot, or *itek ayer*, and is represented in the Malay Peninsula by some thirteen species. All the birds of the order are of aquatic or semi-aquatic habits, living in swamps or among the dense and reedy vegetation bordering rivers and streams. They are of very skulking habits, difficult to flush, and running with great speed when disturbed among the thick herbage they frequent.

The characters are varied, but the legs are always long, with the toes slender, sometimes webbed or lobed. The bill is variable, but is generally sharply pointed, while a horny shield is sometimes present. Wing, in most forms, short and rounded, denoting feeble powers of flight. Eggs, usually four or more, spotted and blotched; young, hatched covered with down, usually black in colour, and able to run immediately.

### KEY TO THE SPECIES HERE DESCRIBED

_	(With a horny frontal shield .	2
Ι	With no horny frontal shield .	. 4
2	General plumage blue	Porphyrio poliocephalus viridis, p. 68
	General plumage not blue .	3
	Toes with a narrow membranous	
_	fringe, not lobed	Gallinula chloropus orientalis, p. 69
3	Toes without a membranous	
	fringe	Gallicrex cinerea, p. 71
	$\int$ Plumage uniform above .	5
4	Plumage streaked above .	IO
	(Under parts largely white; under	
5		Amaurornis phænicura chinensis, p. 73
	Not possessing the above char-	_
	acters	6
6	Tarsus longer than middle toe	
	$\downarrow$ and claw	7
	Tarsus shorter than middle toe	
	and claw	8
	67	

	Wing coverts barred; legs red .	Rallina fasciata, p. 75
7	Wing coverts uniform; legs not red	Rallina superciliaris superciliaris, p. 76
8		Limnobænus paykulli, p. 78
O	(Axillaries uniform	9
0	(Under parts reddish chestnut .	Limnobænus fuscus subspp., p. 79
9	Under parts reddish chestnut . Under parts slaty grey	Limnobænus bicolor, p. 78 (note)
	Culmen about equal to middle toe	
IO	Culmen much shorter than	
	middle toe	II
II	(Abdomen and flanks barred .	Porzana pusilla pusilla, p. 82
	Abdomen and flanks unbarred .	Porzana pusilla pusilla, p. 82 Poliolimnas cinereus cinereus, p. 83

# Porphyrio poliocephalus viridis

### The Malay Purple Moor-Hen

Porphyrio viridis, Begbie, Malayan Peninsula, 1834, p. 515 (Malacca). Porphyrio edwardsi, Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 201. Porphyrio calvus edwardsi, Robinson and Kloss, Journ. Nat. Hist. Soc. Siam, v., 1921, p. 44.

Porphyrio poliocephalus poliocephalus, Herbert, Journ. Siam Soc., Nat. Hist. Suppl., vi., 1926, p. 343.

Malay Name.—Ayam ayer: nok ee-kong (Siamese).

**Description.**—Adult.—Hind neck and nape, purplish blue; chin, throat and upper breast, bright greenish blue, distinct from the deep purplish blue of the lower breast and flanks; middle of the belly, black, thighs, more cobalt-blue. Under tail coverts, white. Lores, sides of the head, and the crown behind the shield, hoary grey, becoming deep lilac posteriorly, the feathers with pale tips. Mantle, back, rump and the median and greater wing coverts and also the primaries and secondaries, blackish brown with an oily green lustre; the primary coverts and the outer webs of the outer primaries, edged with dull blue. Angle of the wing and the lesser wing coverts on the inner margin of the wing, bright blue. Inner aspect of primaries, dull oily brown, the outer and inner under wing coverts, dark blue, the median ones and axillaries dark, oily brown. The sexes are alike.

*Immature*.—Rather duller, the feathers of the lower surface often with pale tips; the middle of the abdomen brownish.

Nestling.—Of this race not known, but in allied forms it is clad in uniform sooty black down, that of the head, neck and wings tipped with white.

Note.—The material available of this purple moor-hen is very inadequate; birds from Taiping show intergradation with the northern form, *Porphyrio p. poliocephalus*, in which the mantle, back and wing coverts are bright greenish blue, and the head and neck nearly always very pale hoary grey and the throat with little or no blue.

**Soft Parts.**—"Iris, red; bill, dark red, shaded with brown; feet, bright red, the joints, brown" (*Davison*).

**Dimensions.**—Total length, 16 in.; wing, 9.6 in.; tail, 3.4 in.; tarsus, 3.45 in.; bill from gape, 1.25 in. Females appear to have smaller and less massive frontal shields and shorter tarsi and toes, although in the allied form found in India, Mr Stuart Baker states that females are as large as males.

Range in the Malay Peninsula.—Probably over the whole of the Peninsula south to Malacca, but not in the islands. Cantor's specimens from Penang are almost certainly from the adjacent mainland, or possibly from Sumatra. They are aviary birds.

**Extralimital Range.**—Central and South Siam, east to French Indo-China and north to Tonkin.

Nidification.—There is no information as to the breeding habits in the Malay Peninsula. Mr E. S. Herbert records the bird as breeding at Hua Takhae, forty miles east of Bangkok, in the middle of June. "The nest was on the top of a clump of sedges, the seed-heads having been bent over to make a platform, with additional grasses heaped up to form the nest." The two fresh eggs are described as "elongated ovals, with one end slightly smaller than the other. The ground is stone-colour, in one case rather of a yellowish tone, and in the other more drab. The markings are blotchy spots of a very dark red, mostly distributed about the larger end, and with a few pale purple secondary markings. The eggs are without gloss." Measurements, 1'9 by 1'38 and 1'94 by 1'31 in. According to Mr Stuart Baker, in the Indian race the eggs vary from three to seven, four or five forming a normal clutch.

Habits.—For some reason the purple moor-hen is now by no means so numerous in the Malay Peninsula as it was fifty years ago, when Davison found it abundant between Klang and Kuala Selangor where it certainly does not now occur, the district being given over to rubber cultivation. It is probably still common in swamps in the middle reaches of the Perak river between Kuala Kangsar and Telok Anson, where we have seen living birds exhibited at agricultural shows. At times it is not rare near Taiping. The situations affected are reedy swamps, overgrown with thick vegetation, amongst which the birds work their way with great rapidity, occasionally emerging on small patches of turf, surrounded by bushes. Mr Keilich, who secured specimens near Taiping, tells us that the birds shot by him were obtained at dusk and uttered a cackling note quite different from that of other rails. The food, according to Kelham, is mainly water-weeds and other vegetable matter, but in captivity they are said to kill young birds. In many places the species feeds largely on young rice plants and does great damage to growing crops.

# Gallinula chloropus orientalis

### The Malaysian Moor-Hen

Gallinula orientalis, Horsf., Trans. Linn. Soc., xiii., 1821, p. 195 (Java). Gallinula chloropus (part), Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 169.

Malay Name.—Unrecorded.

**Description.**—Adult male.—Head and neck all round, greyish black, passing into lighter grey on the rest of the under surface; many of the flank feathers with broad stripes of white; middle of the abdomen, greyish white. Back, scapulars, tertiaries, rump and upper tail coverts, slightly washed with oily bronze-brown. Lesser and median wing coverts, dark grey; primary coverts, primaries and secondaries, blackish brown, the edge of the wing and the outer web of the outer primary white. Under wing coverts and axillaries, greyish, narrowly fringed with white. Tail feathers, black; outer longer tail coverts, white, often with a tinge of fulvescent buff, the shorter median ones black.

Adult female.—In colour like the male, but the frontal shield smaller and less extended backwards and with the upper edge more rounded and less square.

*Immature*.—The grey parts much more tinged with brown; the under parts more mixed with white, often almost entirely greyish white.

Nestling.—Clad in deep glossy black down.

**Soft Parts.**—Adult.—Iris, red; bill, yellowish green at tip, basal half and shield dull red; feet, apple-green, bluish at joints and with a garter of orangered above the "ankle" joint.

*Immature.*—Iris, greyish brown; bill, sage-green, brown on culmen and shield; tarsi and toes, yellowish green, rather greener at joints.

**Dimensions.**—Total length, about 12. in.; wing, 6 in.; tail, 2.75 in.; tarsus, 1.9 in.; bill from gape, 1 in.

Range in the Malay Peninsula.—Though not improbably widely spread in the Peninsula, south of the latitude of Patani this moor-hen is not a common bird and has actually been obtained only in the vicinity of Kuala Lumpur, by Messrs A. L. Butler and E. Seimund, though the latter has seen it in the vicinity of Taiping, and on Singapore Island where a specimen was collected by Mr G. H. Sworder in October 1922. No other collector seems to have come across the species in the Malay Peninsula.

Extralimital Range.—Sumatra, Borneo, Java and Celebes.

Nidification.—In the Malay Peninsula the species in all probability breeds between March and June. Very little information is available concerning the nidification. A nest found by Mr E. Seimund near Kuala Lumpur, Selangor, on 25th April 1927 contained four eggs. In colour they are exactly like those of the European moor-hen. One egg measures 1.5 by 1.15 in.

**Habits.**—As noted above, the moor-hen is by no means a common bird in the Malay Peninsula, but it is probably resident throughout the year, having been obtained from February to June and in September and October.

Note.—In the Siamese portion of the Peninsula the Indian moor-hen (G. c. indicus) is almost certain to occur, but we have, as yet, no definite record of this form from south of Bangkok in Siam. It differs from the Malayan bird in having the upper surface and wing coverts distinctly more brownish. The frontal shield is also rather narrower and is more parallel-sided and less expanded posteriorly. Another point of interest is that, although we have included the Malayan bird under the heading of G. c. orientalis, the limited number of birds at our disposal are not strictly identical with examples from Java and the other Sunda Islands to which the name more properly applies. The island birds are

darker and greyer on the back, almost devoid, in adults, of the bronzy-brown wash present in all Peninsular birds, which, however, have the grey wing coverts of the Javan and Sumatran specimens. The Malayan birds are, indeed, as might be expected, intermediate between those of India and Java, but they are without doubt much nearer to *orientalis* than to *indicus*.

### Gallicrex cinerea

#### The Water-Cock

Fulica cinerea, Gmel., Syst. Nat., i., 1789, p. 702 (China).

Gallicrex cinerea, Oates in Hume's Nests and Eggs Ind. Birds (2nd ed.), iii., 1890, p. 387; Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 183; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 176; Oates, Cat. Birds' Eggs, Brit. Mus., i., 1901, p. 125, pl. x., fig. 6; Robinson and Kloss, Journ. Nat. Hist. Soc. Siam, v., 1921, p. 44; Herbert, Journ. Siam Soc., Nat. Hist. Suppl., vi., 1926, p. 342; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 29.

Malay Name.—Ayam ayam: ayam mek (Kelantan); nok ee-loom (Siamese).

**Description.**—Adult male.—General colour above, blackish grey, the feathers of the mantle and scapulars with lighter margins, those of the under surface slightly tipped with white, more broadly so on the under tail coverts. Wing coverts, brownish black, broadly edged with grey or dirty buffy white; edge of the wing and lesser coverts at the angle, pure white; primaries, primary coverts, secondaries and tail feathers, blackish brown, the outer primary with the outer web white; tail feathers edged with lighter brown; under wing coverts and axillaries, slaty grey with narrow white tips. In the breeding season the male acquires a fleshy horn at the end of the frontal shield.

The bird described above was shot in April, and has practically completed its moult into the breeding plumage, though the frontal horn is not developed. Another male, dated 11th May, retains more traces of the "winter" plumage, but the frontal horn is very prominent. Birds dated February and March are in winter plumage, which closely resembles that of the female, but one specimen collected on 5th March is mostly in the black dress. Another bird, dated as late as 27th May, shows only traces of black on the chin and throat. We have also seen a male from an unknown locality, dated "May," in which there is a well-developed frontal horn, although the breeding plumage is only half assumed. From these facts it will be apparent that the plumage changes in the male are not yet fully understood. Robinson believed that the deep black under surface of the fully adult bird was attained in part by a direct change of colour in the feather, in part by abrasion of the paler edges, and also by moult.

Adult female.—General colour above, brown, the head almost uniform, the rest of the upper surface with broad sandy buff edges to the feathers, most marked on the mantle and scapulars, giving a streaked appearance. Wing coverts, greyish brown or brownish grey, with broad buff edgings, those at

the angle of the wing white, not forming so large a patch as in the male. Primaries, brownish, the outer primary edged with white on the outer web, the others with ashy grey; inner secondaries, warmer brown with lighter edges; tail feathers, dark brown, edged with lighter and sometimes slightly freckled; sides of the head, neck and superciliary stripe sandy buff; chin and throat whitish, as also the centre of the abdomen; rest of the under surface, sandy buff with narrow, irregular, wavy bars of blackish, the sides and flanks rather greyer and the under tail coverts pale ochraceous buff with broader black bars; thighs, with the feathers sooty, tipped with sandy buff; under wing coverts, greyish, broadly edged with white.

*Immature.*—Like the female, but the general colour, above and below, warmer in tone, the bars on the under surface much narrower, especially on the under tail coverts.

Nestling.—Uniformly sooty black, becoming slightly greyer with age. Base of bill, black; remainder reddish yellow.

**Soft Parts.**—Male in breeding plumage.—Iris, brown; bill, yellow, red at base; frontal shield, red; horn, reddish flesh; feet, olive-green.

Male in winter plumage and female.—Iris, brown; bill, olive, washed with brown on the upper mandible; feet, olive.

**Dimensions.**—Male.—Total length, 16.5 in.; wing, 8.2 in.; tail, 3.3 in.; tarsus, 3 in.; bill from gape, 1.5 in.

Female.—Very much smaller and lighter in weight. Total length, 13 in.; wing, 7 in.; tail, 3 in.; tarsus, 2.5 in.; bill from gape, 1.2 in.

Range in the Malay Peninsula.—Throughout its whole length. Singapore and Penang Islands and probably the other larger islands.

**Extralimital Range.**—Ceylon, India, Burma and the Andamans through Indo-China to China, Japan and the Philippines. Sumatra, Java and Borneo, but not farther east.

Nidification.—There is no record of the water-cock breeding in the Malay Peninsula nor are there any dated specimens in collections between the end of May and the middle of November. Over the greater part of its range it breeds from June to September, but in Ceylon in January and February also. In Central Siam Mr E. G. Herbert gives the breeding season as from mid-June to mid-September, and describes the nest as "usually built on the top of a clump of coarse grass, the seed-heads being turned down to start a platform, and then more grass added for the construction of the nest. Occasionally it is built in a similar way on growing paddy (rice), and one nest was situated on a heap of vegetable rubbish at the side of a paddy-field." The clutch in Siam is four: "the eggs are moderately broad ovals, slightly compressed towards one end, and the small end often presents a rather blunt appearance." Texture is fine and there is usually little gloss. "The ground-colour is a rich yellowish stone-colour, with markings in bright brownish red, golden brown, and a pale purple, sometimes in the former colour only, but most eggs carry all three colours. The markings are most numerous on the large end, where they often form a mottled cap, with blotchy spots running into irregular streaky lines on the remainder of the egg. This is the most general type, but for the other extreme we find eggs which are closely freckled, and are without any large or heavily grouped markings, although there are of course many intermediate forms." The average measurements are about 1.7 by 1.25 in.

Habits.—The status of the water-cock in the Malay Peninsula is not known with certainty, and, as mentioned above, specimens are not on record between the end of May and November. It is certainly at least partially migratory: two specimens have been obtained on the One Fathom Bank Lighthouse in the Straits of Malacca at the end of November, and it is well known as a bird of passage on the coast of Kelantan, where it appears in May and June. In its season the bird is found generally distributed over the whole of the Peninsula in suitable localities, swamps, the edges of ricefields and the banks of the larger rivers, but not as a rule in jungle, or in brackish or salt-water swamps. For its family it is not particularly shy, but runs with considerable speed when alarmed, and flies with much flapping of the wings and rather heavily. The note is a loud, booming quack, rather resembling that of Amaurornis phænicura but more resonant, and, like it, often heard at night. The food is largely vegetable, including water-weeds and young rice plants, but snails, grasshoppers and other insects are also eaten.

The water-cock is very palatable and is much eaten by all races in the Malay Peninsula.

# Amaurornis phænicura chinensis

#### The White-breasted Water-Hen

Vol. I., p. 17.

Fulica chinensis, Boddaert, Tabl. Pl. Enl., 1783, p. 54 (Hongkong, Stresemann).

Erythra phænicura, Kelham, Ibis, 1882, p. 188; id. Journ. Straits Branch, Royal Asiatic Soc., No. 16, 1884, p. 192; Oates in Hume's Nests and Eggs Ind. Birds (2nd ed.), iii., 1890, p. 391.

Amaurornis phænicura (part), Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 173; Oates, Cat. Birds' Eggs, Brit. Mus., i., 1901, p. 121, pl. ix., fig. 5.

Amaurornis phænicura chinensis, Stresemann, Nov. Zool., xx., 1913, p. 304; Herbert, Journ. Siam. Soc., Nat. Hist. Suppl., vi., 1926, p. 341; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 24; Edgar, Bull. Raffles Mus., 8, 1933, p. 123 (Nidification).

Malay Names.—Ayam-ayam, burong uwak-uwak: nok kuark (Siamese).

**Description.**—Above, slaty grey, below, white; under tail coverts, chestnut; upper mandible expanded on the forehead into a narrow frontal shield.

Adult male.—General colour above, slaty grey, slightly tinted with olive-green, lower back, rump and upper tail coverts, earth-brown. Primaries and secondaries, brownish black, paler on the outer webs, the outer web of the outer primary, white. Under wing coverts and axillaries, slaty, narrowly tipped with white, edge of wing, white. Forehead, superciliaries, sides of the face

and the greater part of the under surface, white; sides of the breast and body, slate-grey, separated by a narrow black line from the white of the under parts, the black feathers white on their inner webs. Lower flanks, sides of the rump and under tail coverts, cinnamon-chestnut; thighs, white, with a faint rufous wash; middle of the abdomen with a fulvescent tinge. Tail feathers, dark umber-brown.

Adult female.—Similar to the male in colour, but rather smaller.

*Immature*.—Whole upper surface more brownish, extending over the forehead; chestnut of the flanks and under tail coverts paler, and the white of the face and under surface with dusky tips to the feathers.

**Soft Parts.**—Iris, red, chocolate, or dark sienna-brown; bill, sea-green, greenish olive, or greenish yellow, orange or crimson on culmen, and at base of mandible; feet, wax-yellow, yellow with a gamboge tinge, or yellowish brown.

**Dimensions.**—Male.—Total length, 13 in.; wing, 6·5 in.; tail, 3 in.; tarsus, 2·1 in.; bill from gape, 1·45 in. Female.—Total length, 12·2 in.; wing, 6·1 in.; tail, 2·8 in.; tarsus, 2 in.; bill from gape, 1·35 in.

Range in the Malay Peninsula.—Throughout the Peninsula nearly to its southern limit, and all the adjacent islands.

**Extralimital Range.**—India, the Indo-Chinese countries, to Hainan, Formosa and South China. Ceylon, Indo-Malayan and Philippine birds and those from the Lesser Sunda Islands and Celebes are all considered by Stresemann to be slightly different from the mainland birds and from each other. Sumatran, Javan and Bornean birds can certainly be distinguished from those inhabiting the Malay Peninsula, except the extreme southern extremity and Singapore Island, which are possibly identical with the Sumatran birds, and should be called *A. p. javanica* (Horsf.). They can be separated by their smaller size and purer grey colour above.

Nidification.—Nests found in Perak, in February, March and May, by Mr A. T. Edgar contained only three or four eggs. One nest was in grass only a foot high, on the edge of a buffalo wallow; another was about three feet from the ground in a patch of tall grass on the edge of a small stream; other nests were six feet from the ground, in thickets. The eggs were resting on a pad of dry grass, which was supported by the surrounding green and decaying vegetation. In colour these Perak eggs are described as pale buff, freckled and blotched all over with reddish brown, and with underlying markings of paler colour: the shell is not at all glossy and some eggs have a faint greyish bloom. In size and shape the eggs are variable, but the average size of ten is 1.55 by 1.11 in.

Habits.—Quite the commonest rail in the country, and much less shy and skulking in its habits than most of the other species. It is found abundantly along the edges of rivers and watercourses, and in the thick vegetation at the edges of ricefields. It does not, however, spread into jungle country, even in the region of swamps. When disturbed it runs like the common moor-hen, with its tail uplifted, and when pressed to flight rises almost vertically, with an obvious effort, and settles again after a very short

distance. It does not swim so much, or dive so well, as the moor-hen. The food appears to be seeds and rice, as well as small shells, worms, etc., and it is easy to keep in captivity. The call is a loud croaking cry, well expressed by the vernacular name, <code>uwak-uwak</code>, and heard in the early morning and evening, and often long after dark. This rail is migratory and has been found on One Fathom Bank Lighthouse, the Aroa Islands between the lighthouse and the Sumatran coast, and on Pulau Jarak, some twenty-five miles west of the Sembilan Islands. These birds are the larger form described above, and not the smaller <code>A. p. javanica</code>, which is presumably resident where found.

# Rallina fasciata

### The Malay Banded Crake

Vol. I., p. 18.

Rallus fasciatus, Raffles, Trans. Linn. Soc., xiii., 1822, p. 328 (Sumatra). Rallina fasciata, Schleg., Mus. Pays Bas, Ralli, 1865, p. 19; Hume and Marshall, Game Birds Ind., ii., 1879, p. 235, cum tab.; Kelham, Ibis, 1882, p. 190; id. Journ. Straits Branch, Roy. Asiat. Soc., No. 12, 1884, p. 192; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 169; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 17.

Malay Names.—Sintar merah; sintar api.

**Description.**—Bill shorter and stouter than in the preceding bird, the anterior half of the lower mandible deflected upwards. Wing, soft and rounded, secondaries about equal in length to inner primaries.

Adult male.—Head and neck all round, throat and chest, ruddy chestnut, paler on the throat; remaining upper parts, sienna-brown, darker on the rump and upper tail coverts; wing coverts, barred black and buffy white, the inner ones washed with the colour of the back. Primaries and outer secondaries, brown, barred with white, tinged with buff on the outer aspect of the wing, pure white on the inner aspect; inner secondaries and scapulars like the back; under wing coverts and axillaries barred black and white; tail like the back. Under parts below the breast, broadly banded with black and white, the black bars widest; under tail coverts similar, often stained with rufous, thighs mingled black and white.

Adult female.—The red of head and neck less chestnut, more cinnamon, and the black bars on the belly and flanks less wide.

Immature.—Head, neck and chest, brown, with a purplish flush; bars on the wing coverts ill-defined, often consisting only of a V-shaped buff spot on the shaft; the abdomen, dirty-white, with clouded dusky black bars on the flanks; feet, brownish.

**Soft Parts.**—Iris, orange or carmine, periocular skin, vermilion; bill, greenish horn, blackish on culmen, carmine at base; feet, carmine.

**Dimensions.**—Male.—Total length, 9 in.; wing, 5·1 in.; tail, 2·2 in.; tarsus, 1·7 in.; bill from gape, 1·05 in. Female.—Total length, 8·5 in.; wing, 4·8 in.; tail, 2·1 in.; tarsus, 1·6 in.; bill from gape, 0·98 in.

Range in the Malay Peninsula.—Throughout the Peninsula. Terutau, in the Langkawi group and Singapore: rather doubtfully in Penang.

**Extralimital Range.**—From Central Burma through Tenasserim and the Malay Peninsula. The Malay Archipelago to Celebes and the Moluccas, and far into the Pacific. The species has not been critically studied, but a division into local races may be possible.

**Nidification.**—Nothing is known of the nesting habits in the Malay Peninsula.

Habits.—We know little of the habits of this rail in the Malay Peninsula, where it is generally distributed, though not particularly common, but more abundant in the north than in the south. It is found at the edges of rice-fields and along watercourses and rivers, and sometimes, though not often, in the mangrove belts. It is, like its relatives, of very skulking habits, and hard to shoot though easy to snare.

It is a resident in the Peninsula throughout the year, but in the months from October to April its numbers are very largely augmented by migrants. In October 1911, at Alor Star, in Kedah, very many were captured in the rice-fields round the town in an exhausted condition, and sold in the streets for a couple of cents apiece. There had for some days previously been heavy rain and strong northerly and north-easterly winds. The bird is also common on migration at the lighthouse on the One Fathom Bank, fifteen miles from land, off the coast of Selangor, in the months of November and December.

# Rallina superciliaris superciliaris

### The Banded Crake

Vol. II., p. 22.

Rallus superciliaris, Eyton, Ann. and Mag. Nat. Hist., xvi., 1845, p. 230 (Malacca).

Rallina superciliaris, Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 76; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 76; Robinson, Journ. Fed. Malay States Mus., ii., 1909, p. 150 (Cameron's Highlands); Robinson and Kloss, op. cit., vi., 1913, p. 225 (Kedah Peak).

Rallina superciliaris superciliaris, Stuart Baker, Journ. Bombay Nat. Hist. Soc., xxxii., 1927, p. 9; id., Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 17.

Malay Name.—Sintar merah.

**Description.**— Adult.—Sexes probably alike. Head and neck, all round, rich chestnut-red, the throat white; rest of upper parts, including wings and tail, warm olive-brown, the inner coverts occasionally with small white bars narrowly bordered above and below with blackish. Inner aspect of quills, blackish, the inner webs with white bars; under wing coverts and axillaries barred with black and white. Breast, uniform chestnut; rest of under surface, including the under tail coverts, barred black and white. Thighs, fulvous grey, mingled with white.

Immature.—Whole upper surface, olive-brown, with no chestnut; sides of the face, dusky brown; breast, olive-brown, with only a slight chestnut tinge, the full colour appearing to be gradually acquired. It is not quite certain that this plumage is not also that of the adult female, but reliably sexed specimens in sufficient numbers are not available to determine the point.

**Soft Parts.**—" Iris, blood-red; base of upper mandible and greater portion of the lower, green; remainder of bill, dark brown; legs, black" (*Oates*). *Immature*.—Iris, orange; bill, dark slate, sea-green at base of lower mandible; tarsus, Payne's grey.

**Dimensions.**—Total length, 8.7 to 9 in.; wing, 5.1 in.; tail, 2.4 in.; tarsus, 1.5 in.; bill from gape, 1.2 in.; culmen, 1.1 in.

Range in the Malay Peninsula.—From the northern border south to Malacca; on Junk Zeylon and the Langkawi Islands, and on Pulau Rumpia, one of the Sembilan Islands. The occurrence on Singapore Island is open to doubt.

**Extralimital Range.**—Along the base of the Himalayas to Eastern Assam, the Western Ghauts and Kandala, and scattered localities in Continental India and Central Burma; Tenasserim (?); Ceylon, where it is common; Siam and Annam.

Nidification.—This rail has not been recorded as breeding in the Malay Peninsula, and very probably does not do so. Stuart Baker ( $loc.\ cit.$ ) states that in the Western Ghauts it breeds from June to December during the heavy rains, the nests being in heavy jungle, placed on the tops of tree stumps, etc.—at most, six feet from the ground. The clutches are of from four to seven, and the eggs are of a type very unusual in the family, being dirty-white, without markings, with a thick, chalky texture, like that of a heron. The shape is a very round, blunt oval, and the average dimensions are given as  $\mathbf{1} \cdot \mathbf{33}$  in. by  $\mathbf{1} \cdot \mathbf{02}$  in.

Habits.—Two specimens have been obtained from Lubok Tanom, on the Bertang river, Cameron's Highlands, in November and January, and a third from 3000 ft. on Kedah Peak at the end of November. As in other localities affected by this bird, very little is known of the habits in the Malay Peninsula. It has been obtained only during the winter months, and we are of opinion that the bird is migratory and not resident with us. The habits, so far as we are aware of them, are similar to those of other rails, but it is an even more skulking bird than R. fasciata and distinctly rarer. Speaking of the Indian bird, Bell states that it calls in morning and evening and during wet misty weather, and that its cry is like that of a common hen after laying an egg, with a difference. It has also an alarm note like "k-r-r-r-r," pronounced in a subdued voice. The food is insects of various kinds and small mollusca. From the fact that on two visits of short duration to the Cameron Highlands Sakais brought us trapped specimens, the bird is probably not uncommon during the winter months. In India and Ceylon it has the curious habit of flying into houses.

# Limnobænus paykulli

#### The Chinese Banded Crake

PLATE 10 (right figure)

Rallus paykulli, Ljungh, Svensk. Vet. Akad. Handlingar, 1813, p. 258 (Batavia).

Limnobænus paykulli, Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 149; Robinson and Kloss, Journ. Nat. Hist. Soc. Siam, v., 1925, p. 41.

Malay Name.—Unknown.

**Description.**—Sexes alike. Above, including the wings and tail, olivebrown; darker, inclining to blackish, on the tail; extreme forehead, rufous. Greater wing coverts with sparse white bars and tips diminishing with age. Edge of wing and outer web of first primary, white; under wing coverts and axillaries, barred black and white. Lores, superciliary stripe, sides of head, neck and breast, chestnut; the chin whitish. Remaining under parts barred black and white, the white bars narrower; middle of abdomen, dirty-white; under tail coverts, barred black and white; thighs, pale dusky.

Immature.—Paler beneath, the middle of the breast whitish, with ill-defined dusky bars. Very young birds have the chestnut parts of the plumage dull brownish, merely tinged with rufous; lores and sides of the head, whitish tinged with rufous.

**Soft Parts.**—Iris, light vermilion; eyelids, orange-vermilion; bill, greenish plumbeous, washed with blue above; culmen, greenish brown; legs, orange-vermilion; claws, horn (*C. B. Rickett*).

**Dimensions.**—Total length, 9.5 in.; wing, 5 in.; tail, 2.2 in.; tarsus, 1.5 in.; bill from gape, 1.15 in.

Range in the Malay Peninsula.—Only known from a few specimens obtained near Taiping, Perak and Kuala Lumpur, Selangor, by Mr E. Seimund, and one from Malacca, secured by Davison.

**Extralimital Range.**—Eastern Siberia and China. The Philippine Islands, Sumatra, Java and Borneo in winter.

**Nidification.**—Breeds on the damp steppes of North-East Asia, where it lays eggs very like those of the corn-crake (*Hartert*).

Habits.—We know practically nothing of the habits of this rare bird in the Malay Peninsula. The few specimens obtained, mostly immature, have been secured in swampy ground by Mr E. Seimund, who notes the call as a grating croak and states that, like all its family, it is very hard to flush when once it has taken cover.

The species bears a close resemblance to *Rallina superciliaris*, from which it can be distinguished by the paler and shorter tarsi and by having the inner webs of the primaries uniform, without bars.

The bird figured (two-thirds natural size) is a male shot near Kuala Lumpur, Selangor, on 3rd February 1924, by Mr E. Seimund.

Note.—Elwes' Crake, Limnobænus bicolor (Wald.), has been recorded from Kota Tinggi in Johore, almost at the southern extremity of the Malay Peninsula,

on the strength of an old skin in the Raffles Museum. Although the species is found in Burma and may visit the Malay Peninsula in winter, I believe that this skin was brought to Singapore, probably by Davison, with other non-Malayan specimens, and that it is now wrongly labelled.

Head, neck and under parts, dark grey; upper parts, rich brown; feet, red. The wing measures about 4.5 in. in length (F.N.C.).

# Limnobænus fuscus fuscus

### The Malaysian Ruddy Crake

Rallus fuscus, Linn., Syst. Nat. (12th ed.), i., 1766, p. 262 (Philippine Islands).

Limnobænus fuscus (part), Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 146.

Malay Name.—Sintar kĕchil.

**Description.**—Upper surface, olivaceous brown, rather warmer on the rump, upper tail coverts and tertiaries; primaries and primary coverts, dark brown, paler on the outer webs; tail feathers, blackish. Forehead, sides of the head, superciliaries, lower throat, breast and chest, vinous chestnut, whitish on the chin and upper throat. Sides of the body, flanks and abdomen, dark olive-brown, the feathers of the flanks tipped with white; thighs, greyish olive; under tail coverts, blackish, tipped with white, as also the under wing coverts and axillaries. There is no constant difference between the sexes.

*Immature*.—Very different from the adult. General colour above, almost uniform blackish brown, with hardly any olivaceous tint. Below, dusky grey; the throat and middle of the abdomen whitish; under tail coverts tipped with white.

Nestling.—Clad in uniform glossy black down.

**Soft Parts.**—Iris and orbital ring, crimson; bill, greenish blue, black on culmen and at base; feet and legs, coral-pink; the claws and hinder aspect of tarsus darker.

*Immature*.—Iris, brown; bill, lead-colour tinged with green; feet, reddish brown.

Nestling.—Iris and bill, black; feet, pale pinkish.

**Dimensions.**—Male.—Total length, 7.5 in.; wing, 3.6 in.; tail, 1.7 in.; tarsus, 1.37 in.; bill from gape, 1 in. Females very slightly smaller.

Range in the Malay Peninsula.—South from about the latitude of Penang to the southern extremity. Singapore Island.

**Extralimital Range.**—Sumatra, Borneo, Java, Christmas Island, Celebes and the Philippine Islands. Birds from Flores are indeterminate.

**Nidification.**—We have no details as to nesting habits and eggs in the Malay Peninsula, but from the evidence of young birds the species must breed in Singapore in November. Newly hatched chicks have been obtained in West Sumatra in the middle of March. The nest and eggs are almost certain to be precisely similar to those of the allied subspecies (q.v.).

Habits.—There is nothing special to record of the habits of this species. It is of shy and skulking habits frequenting marshy places in the midst of thick undergrowth. It cannot be said to be a very common bird in the Malay Peninsula. Davison and his parties only secured a single individual, but Mr E. Seimund has found it fairly numerous in the vicinity of Kuala Lumpur. In Sumatra we found it fairly abundant. Mr Stuart Baker has given an excellent account of the habits of an allied race, L. f. bakeri, in the Journal of the Bombay Natural History Society, xxxii., 1927, p. 3.

# Limnobænus fuscus erythrothorax

### The Japanese Ruddy Crake

Gallinula erythrothorax, Temm. and Schleg., in Siebold's Faun. Jap., Aves, 1849-1850, p. 121 (Japan).

Limnobænus fuscus (part), Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 146.

Amaurornis fuscus (part), Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 170.

Limnobænus fuscus erythrothorax, Robinson and Kloss, Journ. Nat. Hist. Soc. Siam, v., 1921, p. 42.

Amaurornis fuscus erythrothorax, Herbert, Journ. Siam Soc., Nat. Hist. Suppl., vi., 1926, p. 340; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 22.

Malay Name.—Sintar kĕchil: nok noo-deng lek (Siamese).

**Description.**—Adult.—Differs from the typical form described above in being rather paler olive-brown on the upper parts, and with the chestnut of the lower surface lighter; the chestnut-colour is also not carried so far back on the crown. Size somewhat larger.

*Immature*.—Young birds from China and Japan are distinctly paler above and much more whitish beneath than birds of a corresponding age of the typical race.

**Soft Parts.**—As in the typical race.

**Dimensions.**—In this form the wing is over 3.95 in. and it runs up to 4.4 in. In China and Japan birds occur in which the wing reaches a maximum of 4.75 in. in length. The typical form is smaller and the wing rarely measures more than 3.85 in.

Range in the Malay Peninsula.—Known only from the north-east coast; Patani; and Koh Samui, in the Bandon Bight.

**Extralimital Range.**—Japan and Eastern China; Yunnan; Southern Siam; French Indo-China; Formosa.

Nidification.—Mr E. G. Herbert found a nest at Ban Khang, Central Siam, at the beginning of July, in a fallow field. It consisted of a thin pad of dead grass, well protected by growing grass, and contained six eggs. The eggs were mostly broad ovals, with the two ends about the same shape, but one was an elongated oval. Shell smooth and without gloss, the ground-colour pinkish

cream with markings in the form of specks and spots of reddish brown and pale inky purple; the spots with a streaky appearance and more numerous at one end than the other, but nowhere very dense. Measurements about 1'1 by 0'94 in.

**Habits.**—The same as those of L. f. fuscus. The only Malayan specimens obtained to date have been secured among thick, reedy vegetation on the banks of rivers and on the edges of ricefields.

# Hypotænidia striata

#### The Blue-breasted Banded Rail

Vol. I., p. 15.

Rallus striatus, Linn., Syst. Nat., i., 1766, p. 262 (Philippines).

Rallus gularis, Horsf., Trans. Linn. Soc., xiii., 1822, p. 196 (Java).

Rallus albiventer, Swains., Animals in Menag., 1837, p. 337.

Hypotænidia striata, Hume and Marshall, Game Birds Ind., ii., 1879, p. 245, pl. 43, fig. 2; Kelham, Ibis, 1882, p. 189; Oates in Hume's Nests and Eggs Ind. Birds (2nd ed.), iii., 1890, p. 399; Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 33; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 160; Edgar, Bull. Raffles Mus., 8, 1933, p. 125 (Nidification).

Hypotænidia striata gularis, Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 7.

Malay Name.—Sintar: nok noo-deng (Siamese).

Description.— Adult male.—Head, nape and neck, ruddy chestnut, the head streaked with black, rest of upper surface, blackish brown, the feathers broadly edged with yellowish olive, and with broken bars or spots of white; wing coverts like the back, but the white bars broader and continuous. Primaries and secondaries and primary coverts, dark brown, narrowly and irregularly barred with white. Under wing coverts and axillaries, fuscous brown, barred with white. Tail, very dark brown, narrowly barred with white. Beneath, throat, whitish, sides of the head and breast, ashy grey, darkest on the sides of the head. Middle of the abdomen whitish, the bases of the feathers black, sides of the body, flanks and under tail coverts barred with dark brown and white.

Adult female.—Similar to the male, but the chestnut of the head and nape duller, and the white bars of the flanks tinged with fulvous.

Immature.—With hardly a trace of rufous chestnut on the head, centres of the feathers of the back, browner. White markings on upper surface less conspicuous, and tinged with fulvous.

Nestling.—The nestling is clothed in sooty black down, greyer beneath, the flanks inconspicuously barred with dirty-white.

**Soft Parts.**—Iris, red; basal half of bill, rose-pink, the anterior half, horn-colour; legs and toes, deep olive-brown (*Oates*).

**Dimensions.**—Male.—Total length, 9.2 in.; wing, 4.5 in.; tail, 1.75 in.; tarsus, 1.4 in.; bill from gape, 1.4 in.

Range in the Malay Peninsula.—Probably everywhere from north to south, and on the larger adjacent islands.

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**Extralimital Range.**—Ranging from India, throughout Southern Asia, Formosa and the Philippines, and the Malay Archipelago as far as Celebes.

In different parts of its extensive range this widespread bird has received different names. The original bird (striata) came from the Philippines, that from Java was subsequently named gularis, and that from India, albiventer. All the forms are extremely closely allied, and, pending a critical examination of the whole group, the Malayan bird is left under the oldest name, striata. The question is complicated by the fact that during October to March the resident population is augmented by migrants from the north certainly, and possibly from the south also.

Nidification.—Robinson considered that the breeding season in Malaya was from "May onwards." For Perak, Mr A. T. Edgar gives November to May. The nest is a pad of grass placed among long grass and other vegetation, usually near water. The eggs of a clutch taken in October, five in number, are pale stone-colour, with purplish-brown blotches and spots, mostly congregated near the larger end, and some appearing beneath the surface. The surface is chalky, without lustre, and the measurements are about 1.4 by 1 in. Mr Edgar gives the average measurements of seven eggs as 1.26 by 1.06 in., and considers that the clutch is from four to six.

**Habits.**—This water-rail is not very commonly observed in the Malay Peninsula, but is probably fairly abundant. The chief localities affected are swamps and abandoned mining areas, where the bird lives and breeds in the thick vegetation surrounding excavations that have become filled with water. It is occasionally flushed in the early morning from the spoil pits adjoining roads and railways, and flies for a short distance, with a laboured fluttering action, before taking cover again. It has been seen in gardens.

# Porzana pusilla pusilla

### The Eastern Little Crake

Rallina pusillus, Pall., Reise Russ. Reichs., iii., 1776, p. 700 (Dauria).

Porzana pusilla, Oates in Hume's Nests and Eggs Ind. Birds (2nd ed.), iii., 1890, p. 395; Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 106; Blanford, Faun. Brit. Ind., Birds, iv., 1898, p. 165.

Porzana auricularis, Oates, Cat. Birds' Eggs, Brit. Mus., i., 1901, p. 118.

Porzana pusilla pusilla, Robinson and Kloss, Journ. Nat. Hist. Soc. Siam, v., 1921, p. 42; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), vi., 1929, p. 16.

Malay Name.—Unrecorded.

**Description.**—Adult.—Upper parts, golden olive-brown, the feathers with broad, mesial streaks of black, all except those of the head and nape, smeared with white; lesser wing coverts, golden olive, without black markings; the edge of the wing, pure white. Primaries, secondaries and primary coverts, brown, the outer primary and primary coverts edged with white; under wing coverts and axillaries, fuscous, tipped and barred with white. Tail feathers, brown, with broad black centres. A rufous brown stripe from the lores through

the eye to the ear coverts; sides of the neck and breast, golden olive-brown; superciliaries, throat and under surface, grey, whitish in the middle of the abdomen; flanks and sides of the rump barred with white and olive-brown, the brown bars narrowly edged with black; thighs, sooty brown, the feathers narrowly tipped with white; under tail coverts, barred black and white.

Immature.—Under parts whitish, tinged with brown.

**Soft Parts.**—"Irides, red in adults, brown in young birds; bill, green, dusky on culmen and at tip; legs and feet, green with a yellowish tinge; claws, pale brown" (Hume); "iris, bright brick-red; bill, dull green, darker on culmen; legs, olive-green; claws, horn-colour" (Williamson).

**Dimensions.**—Total length, 6.5 in.; wing, 3.5 in.; tail, 1.5 in.; tarsus, 1.1 in.; bill from gape, 0.7 in.

Range in the Malay Peninsula.—Patelung, in East Peninsular Siam; and near Kuala Lumpur, in Selangor.

**Extralimital Range.**—Eastern Siberia, China and Japan; Ceylon, the greater part of India from the extreme west, Burma and the Andamans. In winter south to Siam, Sumatra, Borneo, Java and the Philippines.

Nidification.—The eastern crake is not as yet known to breed in the Malay Peninsula as it is said to do near Tavoy, Central Tenasserim. Blanford describes the nest as a pad of rushes amidst water and grass or reeds, and the eggs as six to eight in number, pale olive, thickly freckled and indistinctly mottled with faint, dusky clouds and streaks. The eggs measure about 1'12 by 0'8 in.

Habits.—Very few of these small crakes have been obtained in the Malay Peninsula. The Patelung specimen is dated 7th April, and about half a dozen have been obtained near Kuala Lumpur by Mr E. Seimund from the end of February to the beginning of April. All these were probably on migration, but it is not impossible that if carefully looked for this crake may be found to be a resident, breeding bird. It is very shy and of exceedingly skulking habits, and all the specimens that have been obtained in Malaya have been secured among dense herbage or reeds at the edge of pools in abandoned or overgrown mining land. It is probably not uncommon in the great reed-beds and swamps at the north end of the Talé Sap and Talé Noi, in Peninsular Siam.

### Poliolimnas cinereus cinereus

#### The Grey-bellied Crake

PLATE 10 (left figure)

Porphyrio cinereus, Vieill., Nouv. Dict. d'Hist. Nat., 1819, p. 29 (Java). Poliolimnas cinereus, Sharpe, Cat. Birds, Brit. Mus., xxiii., 1894, p. 130. Malay Name.—Uncertain.

**Description.**—Adult.—Head and nape, dark grey, the feathers with darker centres; lores, black; a broad supraloral streak and one running from the angle of the gape to the ear coverts, white. Upper surface, the scapulars, tertials and inner secondaries, brownish olive, the feathers with dark centres and light edges; lesser and median wing coverts, clay-brown, with lighter edges,

darker on the inner webs. Bastard wing, primaries, primary coverts and outer secondaries, dark brown; the bastard wing, light brown on the outer web; the first primaries, white on the outer web, and the other primaries washed with greyish externally. Under wing coverts and axillaries, ashy brown, edged with buff. Beneath, white; sides of the breast and upper flanks, clear grey; browner on the lower flanks; sides of the rump, vent and under tail coverts, clear cinnamon-buff; thighs, fulvescent brown, whiter on their interior aspects. Sexes similar.

*Immature*.—Generally browner than the adults; supraloral and infraocular white stripes hardly visible; top of the head, brownish, not grey.

**Soft Parts.**—Iris and edge of lids, reddish brown; bill, pale olive-green, tinged reddish at base; feet, pale green.

**Dimensions.**—Total length, 7.9 in.; wing, 3.7 in.; tail, 2.2 in.; tarsus, 1.35 in.; bill from gape, 0.9 in.

Range in the Malay Peninsula.—South from the latitude of Junk Zeylon. Penang and Singapore Islands.

**Extralimital Range.**—Sumatra, Borneo and Java. A darker form is found in the Philippine Islands and east to the Caroline and Marianne Islands, and possibly south to Celebes; other forms are found through the islands to New Guinea and Australia.

Nidification.—Three eggs obtained by A. L. Butler near Kuala Lumpur in September 1899 vary much in shape, one being a regular oval, while the others are somewhat pointed at one end. They measure, in inches, 1'24 by 0'86; 1'13 by 0'87; and 1'13 by 0'88. They are without gloss, doubly spotted, the spots and blotches being small and fairly evenly distributed, purplish or yellowish brown on a stone-coloured ground.

Habits.—This rail is very local in its distribution, but wherever it occurs seems to be fairly abundant, though in some years it is much more abundant than in others. Near Kuala Lumpur it used to be common in open and swampy country and in abandoned mining land overgrown with "lalang" grass and with scattered pools of water. Like all rails it is a very skulking bird. Kelham's account of the species in Singapore in 1879 is worth quoting: "Very plentiful in the deepest parts of the swamp, and nearly every bush held one. When flushed they flew with a weak flight, with their long legs trailing behind them, for about fifty yards, then dropped and ran for the nearest covert, from which it was not easy to get them up a second time.

"At sunset on any fine evening during September dozens of them were to be seen out in the open on the swamps below Mount Echo, scuttling off in all directions directly they were disturbed."

Owing to drainage and the growth of the town the species is now far less common on Singapore Island than in Kelham's time.

The bird figured (two-thirds natural size) is a male collected on Singapore Island on 8th September 1909.