# **FROGMOUTHS**

# Family Podargidæ

Vol. I., p. 121.

FROM the nightjars, to which they are closely related, the frogmouths are distinguished by their much less flattened and more horny bill, slightly hooked at the tip and very broad in the gape; the nostrils are narrow slits near the base of the bill, concealed by long bristly plumes, highly developed in some of the species. There are no stiff bristles at the gape.

The tarsi and toes are short, and the claw of the middle toe is not serrated as in the nightjars. The wings are more rounded, and the tail relatively longer and more graduated than in that family. Plumage, soft and moth-like, usually much mottled and vermiculated, like the owls, in brown, rufous, grey and white tints. Sexes usually rather different.

The breeding habits are highly peculiar; the nests of the local species are small pads of white vegetable down, extraordinarily small for the size of the bird, often less than  $\mathbf{r} \cdot \mathbf{5}$  in. in diameter. They are placed on the upper surface of a bough, along which the bird sits longitudinally. The eggs are one or two in number, white, without much gloss.

Like the goatsuckers, all the members of the family are strictly nocturnal, nor in Malaya do they ever leave the shelter of thick jungle, and comparatively little is therefore known about them. The family comprises about thirty species, ranging from India through the Malay Archipelago to New Guinea, Australia and New Caledonia.

Three species are Malayan (Robinson, Vol. I., p. 121).

#### KEY TO THE MALAYAN FROGMOUTHS

т.	Size large: wing over 9 in Size much smaller: wing less than	Batrachostomus auritus, p. 107
_	7 in.	2
	Upper wing coverts boldly spotted with white Upper wing coverts not boldly spotted	Batrachostomus stellatus, p. 108 Batrachostomus affinis, p. 109
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## Batrachostomus auritus

### The Large Frogmouth

Podargus auritus J. E. Gray, in Griffith ed. Cuv. Anim. King., ii., 1829, p. 114 (Sumatra).

Batrachostomus auritus, Hartert, Cat. Birds, Brit. Mus., xvi., 1892, p. 636. Malay Names.—Winstedt gives burong sěgan and b. chuchor, but both need confirmation: sěgan is commonly applied to nightjars, and few Malays can be familiar with frogmouths.

**Description.**—A large species, with the wing over 9 in. Bill much flattened and very broad; the mouth frog-like. Deep chestnut-brown in colour, with a creamy white collar on the hind neck and whitish spots on the wing coverts. Plumage soft and moth-like, much mottled and vermiculated, as in owls.

Adult.—General appearance of upper parts, dark chestnut-brown on head and mantle, less chestnut, rather paler, brown elsewhere and turning to buff on the outer edge of the scapulars, almost everywhere finely vermiculated with black and narrowly barred with buff, the buff bars bordered with blackish. Lores and top of head with small, ill-defined buff spots. A buff streak above the eye and a shorter one below it. The tips of the ear coverts lengthened into hair-like processes. Across the nape a broad whitish collar narrowly barred with black. Scapulars with a few large, rounded black markings. Upper wing coverts with a few scattered, large white spots. Inner webs of wing quills, immaculate dark brown or indistinctly barred with chestnut, especially at the tip, outer webs broadly banded buff and dark brown, the dark bands usually the broader: banding less decisive on secondaries. Throat and breast, hair-brown washed with rufous on throat and greyer on breast, finely vermiculated with black: throat also with indistinct, narrow, buff, darkedged bars. Across the lower throat a row of large whitish spots form an ill-defined band. Breast with paler, buffish shaft stripes. Upper breast with small buffy-white spots. Abdomen and under tail coverts, buffy white to brownish pink, faintly marbled with greyish brown. Under wing coverts blackish brown blotched with white. Tail quills, chestnut-brown finely vermiculated with black and narrowly barred with buff, blackish-edged bars.

Note.—The plumage shows much individual variation, some specimens being darker, paler or redder in general tone than the above description indicates. It has not yet been proved that the sexes differ in colour. The only immature bird I have seen is one from Sarawak, dissected by Mr E. Banks and marked by him as an immature male. I cannot see that it differs from adults in plumage.

**Soft Parts.**—"Iris, dark brown; lids, brownish; bill, brownish horn; culmen at the base, edges of mandibles at the base, and gape, yellow; inside of mouth, lemon-yellow; feet, dull yellow; claws, dark brown" (Sarawak male,  $E.\ Banks$ ). Weight, 7.25 oz.

**Dimensions.**—Total length, about  $16\cdot3$  in.; tail,  $7\cdot5$  to  $8\cdot1$  in.; wing,  $10\cdot25$  to  $10\cdot6$  in.; bill from gape,  $2\cdot4$  in.; width of gape,  $2\cdot3$  to  $2\cdot4$  in.; tarsus,  $0\cdot85$  in. (Sarawak birds).

Range in the Malay Peninsula.—Selangor and the territory of Malacca.

Extralimital Range.—Known only from Sumatra, Borneo and the North Natura Islands.

Nidification.—No record from the Malay Peninsula. Shelford has described the nest from Sarawak examples. It appears to be typical of the genus, a small but thick circular pad of closely matted fine down. It is said to be firmly attached to a slender branch of a shrub or small tree and to contain a single egg. Shelford adds, "the egg by its weight soon forms a small depression in the pad of down, but at first there is no such depression, and it is never deep enough to hold the egg securely. It is difficult to understand how the egg is kept in position; the slightest oscillation of the branch on which the nest is made would suffice to throw the egg to the ground if the mother-bird were not incubating it." According to the same observer, this frogmouth, when incubating, rests along and not across the branch bearing the nest.

**Habits.**—Essentially a bird of undisturbed jungle, this large frogmouth is only known to us by a few recent specimens taken in the lowlands of Selangor and some older skins from the territory of Malacca. The provenance of specimens labelled "Singapore" is doubtful, and the species certainly does not occur on the island at the present time. Essentially a denizen of undisturbed forest country, and apparently rare. On the label of a specimen collected in Sarawak, Mr E. Banks has written: "One of two said to have been taken from hole in tree."

### Batrachostomus stellatus

#### Gould's Frogmouth

Podargus stellatus Gould, Proc. Zool. Soc., 1837, p. 43 (Malacca).

Batrachostomus stellatus, Hartert, Cat. Birds, Brit. Mus., xvi., 1892, p. 639.

Malay Name.—Unrecorded.

**Description.**—Much smaller than *B. auritus*, but general appearance rather similar. Feathers of the under parts with dark edges, producing a scaly appearance. Under parts without pure white markings.

Adult male.—General colour above, pale chestnut-brown, darkest on head and mantle, palest on the wings. Lores and superciliary streak, buff. Across the hind neck a broken collar of white. Median and greater wing coverts with a few large white spots; a few of the long scapulars largely white, the white area margined with blackish. Outer webs of wing quills, blackish at the base, pale chestnut terminally, inner webs greyish black. Inner secondaries faintly vermiculated and indistinctly barred with black and tipped with whitish. Tail with paler chestnut-buff bands, the bands with thin black margins. Under parts, creamy buff washed with tawny on the throat, the feathers of the breast and upper abdomen with narrow tawny-brown fringes, producing a scaly appearance. Feathers of the under parts

black on the hidden bases. Under wing coverts, whitish, variegated with black.

Adult female.—Averaging darker, more reddish and less tawny chestnut in general tone.

*Immature.*—Duller brown in both sexes with the white spots on the upper wing coverts less pronounced.

Juvenile.—Pale chestnut, darkest on the upper parts; hidden parts of wing quills, dusky. Upper parts including tail, but excluding wing, barred with black (Pahang, June).

*Note.*—There is much variation in colour in both sexes. The ground-colour is often minutely freckled with black, especially in females.

**Soft Parts.**—(a) Iris, pale yellow or dark brown; eyelids, deep yellow; upper mandible, dirty brown; lower mandible, yellowish horn-colour tinged with brown; feet, dull pale yellow; gape, fleshy and yellow. (b) Bill, yellowish horn-colour tinged with rich brown on the upper mandible.

**Dimensions.**—Total length, 9.75 in.; tail, 4.5 in.; wing, 4.9 to 5.1 in.; tarsus, 0.6 in.; bill from gape, 1.4 to 1.6 in.; width of gape, 1.4 in.

Range in the Malay Peninsula.—Bandon, Peninsular Siam; Perak; Pahang; Selangor; Negri Sembilan; the territory of Malacca; doubtfully from Singapore.

**Extralimital Range.**—Sumatra, the Rhio and Lingga Archipelagos; Borneo and the North Natuna Islands.

Nidification.—I know of no specific record from the Malay Peninsula.

Habits.—A specimen from Perak was killed in the same locality as an example of Blyth's frogmouth, at dusk, on the edge of a patch of swampy jungle. The Peninsular Siam record is based on a skin collected by Mr C. J. Aagaard, on the 21st July 1929. Old specimens attributed to "Singapore" must be regarded with suspicion, and the bird certainly does not occur on the island nowadays.

In the Malay Peninsula this is a rare bird found only in the undisturbed jungle of the lowlands and not ascending the hills. Judging from the number of specimens obtained it is the commonest of the three local species of the genus. Two birds obtained by my collectors at Kuala Tahan on the Pahang river, in November 1921, were shot in forest a few hundred yards from the river.

# Batrachostomus affinis

#### Blyth's Frogmouth

Batrachostomus affinis Blyth, Journ. Asiat. Soc. Bengal, 1847, p. 1180 (Malacca); Hartert, Cat. Birds, Brit. Mus., xvi., 1892, p. 639; Blanford, Faun. Brit. Ind., Birds, iii., 1895, p. 196; Robinson and Kloss, Journ. Nat. Hist. Soc. Siam, v., 1922, p. 118; Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), iv., 1927, p. 380; Stuart Baker, Nid. Birds Ind. Emp., iii., 1934, p. 493.

Malay Name.—Unrecorded.

**Description.**—Even smaller than B. stellatus. Plumage a confused

pattern in white, grey, brown or rufous. Sometimes the predominating tone is bright rufous. Under parts always with conspicuous white markings in some form or other.

Adult male.—Entire plumage a fine, complicated mixture of grey, brown, black and white. Lores, forehead and superciliary stripe, buff; top of head, brown, spotted with white. An indistinct white collar across the hind neck. A large patch of white, lined with black, on the scapulars. Wing quills, brownish black, notched with rich buff on the outer webs. Under side with more white than the upper side; sides of abdomen the whitest. White feathers on the throat are black-tipped. A suggestion of a coloured pectoral zone and white patches on the sides of the breast.

There is much variation in the general tone of males, some being comparatively grey and others much washed with rufous, especially on breast, nape and wing coverts.

Adult female.—Quite different. General plumage, bright cinnamonrufous, paling to almost grey, minutely freckled with black on the inner greater wing coverts and inner secondaries, and whitish on the sides of the lower abdomen and under tail coverts. Lores, forehead, superciliary stripe and a streak under the ear coverts, indistinctly buff. Ear coverts, dark chestnut and terminating in long hair-like processes. A collar round the hind neck, white, the feathers with black edges. A few very large white spots, margined with black, on the scapulars. Outer aspect of wings minutely freckled with Primaries and outer secondaries, blackish brown, the outer webs largely chestnut. The tail feathers are crossed by zones of black freckles, giving a regularly barred appearance. Large white spots margined with black are confluent on the centre of the throat; fewer, more oval in shape, and more scattered on the breast and less defined on the abdomen. Under tail coverts and sides of the abdomen irregularly marked with black. Axillaries white. Under wing coverts, white, washed with rufous and barred with black.

**Soft Parts.**—Iris, pale yellow; upper mandible, brownish, yellowish brown or pinkish brown; lower mandible, greenish or yellowish brown or yellow; feet, fleshy brown or pinkish white.

**Dimensions.**—Total length, 9.25 in.; tail, 4.25 to 4.6 in.; wing, 4.2 to 4.7 in.; tarsus, 0.55 in.; bill from gape, 1.35 in.; width of gape, 1.3 in.

Range in the Malay Peninsula.—Peninsular Siam; Perak; Selangor; the territory of Malacca.

Extralimital Range.—Sumatra, the Rhio and Lingga Archipelagos and Borneo

Nidification.—Mr Stuart Baker records two nests obtained by Kellow near Simpang in Perak, one nest with two eggs, the other with one egg, all fresh, on 16th February and 15th March. The nests measured about two inches in diameter and about three-quarters of an inch in depth. They are described as little rounded pads of firmly woven down from the bird's breast (most authors state that the nest in this genus is composed of vegetable down) decorated outside with bits of moss, lichen, etc., matching the bark of the tree.

The nests were built on branches of small saplings beside a stream in dense evergreen forest. The eggs are white and measure about 0.95 by 0.67 in.

Habits.—As a Malayan bird, this frogmouth is known to us by very few specimens. One obtained at Tasan, Chumporn, Peninsular Siam, was collected in heavy evergreen jungle. Robinson and Kloss refer to this species a second Peninsular Siam example from Langsuen, but this skin has not been examined by us. A female obtained by a museum collector at Parit, on the Perak river, is recorded as having been shot at dusk on the edge of a patch of swampy jungle.

A rare bird confined to the lowland forest.