GOATSUCKERS

Family CAPRIMULGIDÆ

THE goatsuckers, nightjars or fern-owls are a sharply defined family of birds, well distributed over the tropical and subtropical zones of both hemispheres and visiting the more temperate regions in summer.

The family characters are very uniform; all the species have short depressed bills, very broad in the gape and generally, but not always, furnished with bristles. The plumage is very soft and the colours are blended tints of brown, black, grey, white and dull fuscous, so that the birds are protectively coloured. Tail feathers are often tipped with white and many forms have white bars on the wings. The Asiatic species have the claw of the middle toe with a peculiar comb-like margin, the use of which is not understood.

Many species are supplied with ornamental appendages, such as elongated ear-tufts, lengthened tail feathers or specialized primaries. The sexes in the majority of species differ in plumage, but only very slightly.

The goatsuckers lay their eggs on the ground without a nest. The eggs are usually two in number, and are generally protectively coloured; the young are hatched covered with down.

KEY TO THE SPECIES HERE DESCRIBED

Ι.	With elongated ear-tufts; no bristles at gape . With no elongated ear-tufts;	Lyncornis temmincki, p. 119
	bristles at gape	2
	[Two outer pairs of tail feathers]	Caprimulgus macrourus bimaculatus,
2 '	with buff or white tips	р. 116
	Four outer pairs of tail feathers	
		Caprimulgus indicus jotaka, 3, p. 118
	Outer tail feathers with no pale	
	tips at all	Caprimulgus indicus jotaka, ♀, p. 118

Caprimulgus macrourus bimaculatus

The Malay Long-tailed Nightjar

PLATE 9 (upper figure, male; lower figure, female)

Caprimulgus bimaculatus, Peale, U.S. Explor. Exped., xiii., 1845, p. 170 (Malacca).

Caprimulgus macrourus (part), Hartert, Cat. Birds, Brit. Mus., xvi., 1892, p. 537.

Caprimulgus ambiguus, Oates and Reid, Cat. Birds' Eggs, Brit. Mus., iii., 1903, p. 69, pl. 1., fig. 4.

Caprimulgus macrourus anamesus, Oberholser, Proc. U.S. Nat. Mus., xlviii., 1915, p. 593.

Caprimulgus macrourus bimaculatus (part), Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), iv., 1927, p. 363.

Malay Names.—Burong segan; burong malas.

Description.—Adult male.—Above, a mixture of finely vermiculated brownish and greyish; an ill-defined collar formed of black and golden buff barred feathers on the hind neck, top of the head with broad black longitudinal stripes; mantle and back with very much narrower ones; scapulars mainly glossy black, with broad pale buff edges forming two converging stripes on the back; wing coverts, mingled black and brownish, with broad pale buff edges. Primaries, blackish brown, first with a narrow white spot edging on the middle of the outer web and a large rounded white spot on the inner web, the two not meeting on the shaft, second, third and fourth with a broad white band running right across the feather; secondaries, brownish, narrowly and irregularly barred with rufous. Two outer pairs of tail feathers with broad white tips, 1½ in.; remainder of the feathers, blackish, with bands of brown with blackish vermiculations, the uniform blackish being much more extensive on the outer feathers. Beneath, chin, breast and throat, narrowly barred with rufous and black, a narrow buff stripe from an angle of the gape, an interrupted white gorget bordered with deep black and buff. Rest of under surface regularly barred with golden buff and deep chocolate; under wing coverts, chocolate and buff.

Adult female.—Differs from the male in having the spots on the primaries reduced in extent and deep buff, and in the white tail tips being sullied, not pure white, mottled with dusky; rictal bristles white at the base.

Immature (half-fledged).—Much paler, top of the head and wing stripes, pale sandy buff, slightly mottled with blackish (near Taiping, February 1912). Newly hatched young covered with uniform cinnamon down.

Soft Parts.—Iris, hazel; bill, horn; feet, pinkish flesh-colour, tinged with purple.

Dimensions.—Total length, about 11.5 in.; wing, 7.8 to 8 in.; tail, 5.8 to 6 in.; tarsus, 0.65 in.

Range in the Malay Peninsula.—From about the latitude of Penang down to the extreme south of the Peninsula; Penang and Singapore Islands.

Extralimital Range.—South-east, but probably not West Sumatra. In the wider sense *Caprimulgus macrourus* is a very widely spread species, ranging from Central India (*C. m. albonotatus*) to Australia and New Guinea, but many slight local modifications have been developed.

Nidification.—Like others of the genus this species lays its protectively coloured eggs in a hollow in the ground, with no attempt at a nest. The eggs are two, or rarely three, in number, a regular oval in shape, with the two ends almost symmetrical, shell smooth and slightly glossy; ground-colour, pinkish, blotched over with deeper pinkish and occasionally with small spots of deeper

colouring. The situation of the nests in this country is usually in orchards, among dead leaves, etc., occasionally among stemless palms, bertram and the like (Eugeissona tristis).

The breeding season in Southern Malaya seems to be from December to March, during which time the birds are certainly most vociferous.

Habits.—One of the most familiar Malayan birds to the European resident, owing to its characteristic and singularly irritating call, "tūnk iūnk," the syllables being repeated up to seven or eight times, and then reiterated after a short pause, the call going on for hours at a time, especially on still and moonlight nights, generally from some perch in deep shadow and not so often on the wing as with L. temmincki. Mr C. J. Saunders (Singapore Naturalist, i., 1923, p. 112) gives a most interesting account of the call and general habits of this bird, and states that it is occasionally heard in full daylight. The bird has the curious habit of squatting on the road with wings flattened out and tail outspread, and in the days of traps was the cause of many an accident by rising suddenly under the pony's nose. The species is found all over the Peninsula, up to quite considerable elevations. It is sedentary and does not migrate, though is apparently rarer, or at any rate more silent, during the summer months.

Remarks.—I have described the southern race. North of Penang a slightly larger and paler bird is found, to which the name, C. m. ambiguus is applicable. The differences in tint are perceptible only in a series and the variation in size is small, not exceeding on an average one-third of an inch. The birds figured are from the state of Selangor.

Caprimulgus indicus jotaka

The Migratory Nightjar

Caprimulgus jotaka, Temm. and Schleg., Faun. Japon., Aves, 1847, p. 37, pl. 12 (Japan); Hartert, Cat. Birds, Brit. Mus., xvi., 1892, p. 552.

Caprimulgus indicus jotaka, Stuart Baker, Faun. Brit. Ind., Birds (2nd ed.), iv., 1927, p. 367.

Malay Names.—As in C. macrourus.

Description.—Adult male.—Above, greyish, densely mottled and vermiculated with brownish and black; broad black stripes on the top of the head, nape and back; scapulars with large black spots, edged with rufous buff; wing coverts with triangular buff spots edged and barred with brown, some elongate buff spots on the hind neck and a golden buff spot behind the ear coverts; primaries, blackish, outer webs minutely toothed with rufous; a rounded white spot not reaching the shaft on the inner web of the first primary and a white bar across both webs of the next three, the shafts remaining black; central pair of tail feathers, vermiculated greyish brownish, with narrow, irregular black bars; the black bars much broader and more predominant on the remainder, the outer ones flecked with rufous patches on the outer webs; all the tail feathers except the central pair with a broad subterminal white

band. Beneath, with a white gorget on the throat, interrupted in the middle; chin, blackish, with whitish tips to the feathers; breast, greyish brown, mottled with white and buff, and with a few black spots; abdomen, golden buff, barred with blackish, the bars becoming fewer on the vest and under tail coverts, which are almost pure golden buff; axillaries, golden buff; under wing coverts, barred blackish brown and buff. Rictal bristles, black to the base.

Adult female.—The throat gorget buff, not white, the bars on the wing smaller and rufous buff, and the tail without the white subterminal bar.

Immature.—Are much more greyish above, and sandy buff beneath. Young males have the white spots on the wing edged and suffused with rufous buff and the white tail band narrower and less clear.

Soft Parts.—Iris, brown; bill, horn; feet, pinkish brown.

Dimensions.—Total length, about 12 in.; wing, 77 to 86 in.; tail, 54 to 5.7 in.

Range in the Malay Peninsula.—Throughout the Peninsula, as far south as the territory of Malacca, Langkawi group and Penang Island, but not recorded from Singapore Island.

Extralimital Range.—Siberia, Manchuria, Japan and Assam as a breeding bird. The Indo-Chinese countries Java, Borneo, Sumatra and New Guinea in winter.

Nidification.—Does not breed in Malaya. The nesting habits are the same as other nightjars and the eggs very closely resemble those of *C. m. bimaculatus*.

Habits.—Only a winter visitor with us, the only localities known being either on—or fairly near—the coast, or high in the mountains of the main range of the Peninsula. I do not know the note, or whether it is different from that of the other Malayan species.

Remarks.—There is some trouble about the correct identification of this species, and whether it is really the same race as that which breeds in China and Japan is not yet certain. Birds from these countries seem larger than any of those that visit Malaya. There is a possibility that the form that visits Malaya in winter is the one that breeds in the Naga Hills and is met with in Tenasserim and Indo-China. If so, many of our birds will have to be called C. indicus innominatus, Hume. It is curious that no specimens are on record from Johore or Singapore.

Lyncornis temmincki

The Malaysian Great-eared Nightjar

PLATE 8

Lyncornis temminckii, Gould, Icon. Av., 1838, pt. 2; Hartert, Cat. Birds, Brit. Mus., xvi., 1892, p. 606.

Malay Name.—Burong tětábu.

Description.—Adult.—Sexes similar. No bristles at the gape. More richly coloured than other Malayan species of goatsuckers. Wings and tail without any white. General colour above, a mixture of black and maroon-grey in fine

vermiculations; head with large black spots. A golden fawn collar on hind neck. On the inner margin of each wing, two pale stripes of mingled golden buff, with large black spots converging on the mantle. Large golden spots on lesser upper wing coverts; auricular tufts black, with golden tips. An interrupted white collar on the foreneck; chin and throat, blackish, narrowly vermiculated with rufous; rest of under surface, black, with broad golden buff tips to the feathers, presenting a barred appearance, the tips narrower on lower abdomen and under tail coverts. Primaries, blackish brown, narrowly and sparsely toothed on the outer web with rufous buff. Tail feathers, blackish, with irregular bars of pale vermiculations; under wing coverts and axillaries, blackish, with narrow golden buff tips.

Immature.—Much as the adult, but fawn cervical collar less marked and the under surface blackish, and less barred, the tips to the feathers whitish, and not golden buff.

Soft Parts.—Iris, dark brown; bill, chocolate-brown; tip of upper mandible, blackish brown; feet, pinkish brown; tarsi, brownish black, with lighter edges to the scutes (Jacobson).

Dimensions.—Total length, so to is in.; wing, 7.7 to 8.1 in.; tail, 5.3 to 5.6 in.; tarsus, 0.5 in.; bill from gape, 0.6 in.

Range in the Malay Peninsula.—From the north of Perak to the southern extremity. Penang (where it meets the larger *L. cervineiceps*) and Singapore.

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

Nidification.—I have no records of the nesting habits, either in the Malay Peninsula or elsewhere.

Habits.—More of an old jungle species than the other goatsuckers of the region, though it occasionally emerges into open country abutting the forests. Flight is more powerful than that of *Caprimulgus* and, as a rule, loftier, the bird occasionally making abrupt turns and twists almost like a snipe. They feed on all kinds of insects, including evil-smelling bugs (*Pentatomidæ*) and chafers. The note is very characteristic and when once heard can never be mistaken, being the syllables, "teet-ta-bu," several times repeated.

Remarks.—The figure, one-half natural size, is taken from a male from Klang, Selangor, collected by W. Davison. In the north of the Peninsula the nightjar is replaced by a very much larger species, L. cervineiceps (Gould), with a relatively longer tail and a pale fawn head (wing, II 5 in.; tail, 8 2 in.). In habits this bird is very similar, but it frequents more open country, being very common in parkland at Chong, Trang, Peninsular Siam. The note is said to be much the same as that of L. temmincki, but on the occasions I have met with it the bird has been quite silent.

This species ranges from the north of Assam down to Peninsular Siam. There is one somewhat doubtful record from Penang Island. It also occurs in southern Peninsular India (Travancore), and is very common in Siam and French Indo-China.