# **BROADBILLS**

#### Order EURYLAIMIFORMES

Vol. I., p. 158; Vol. II., p. 117.

ANATOMICALLY the broadbills are very closely allied to the pittas, though externally their appearance is very different and their habits are quite dissimilar.

The most characteristic feature is the bill, which in most of the species is very broad and flat, with the nostrils visible. The tarsi, in contradistinction to the pittas, are very short, but the feet are large and strong. The wing is weak and rounded and the tail variable, one species having it much longer than the wing, another less than half the length, but the feathers are always much graduated.

The plumage in most of the Oriental species is bright coloured, though there is one dull-coloured genus; there is nearly always some difference between the sexes, and in some cases there is a rather distinct livery.

The breeding habits are peculiar; all the members of the family build large untidy nests of leaves, tendrils and vegetable debris, which in nearly all cases are suspended from a creeper over water. The eggs are generally spotted, but in one species are uniform.

The family is not a large one and has its headquarters in the Malaysian region, not extending to New Guinea or Australasia. Quite recently it has been shown that the family is represented in Africa by a genus of small birds (*Smithornis*), which has hitherto been classed with the flycatchers.

The habits of these birds are exclusively arboreal, and the diet, in the main, is insectivorous, though the species of *Calyptomena* are frugivorous. They are not particularly active in habit, but can fly well when pressed. In Malaya they are not found in open country nor, as a rule, in village and orchard-land, but are very common in secondary and old jungle to some distance up the hills, while one species is confined to the higher mountains. They are rare near the sea, but the black-and-red broadbill is occasionally seen in mangrove swamps in the extreme south of the Peninsula.

Seven distinct species are found in the Peninsula, two of which are confined to the mountains (*Robinson*, Vol. I., p. 158).

### KEY TO THE MALAYAN LOWLAND BROADBILLS

2 ·	Plumage, black with a white wing-b	ar (	Corydon sumatranus sumatranus,
	and pale brown throat		p. 192
	Breast and abdomen, pale pink	to	
	deep red		3
3 <	Scapulars streaked with white; rum	p, )	Cymbirhynchus macrorhynchus
	$\operatorname{red}$	ſ	malaccensis, p. 192
	Scapulars and rump, black, streake	ed	
	with yellow		4
	Head, black		Eurylaimus ochromalus ochromalus,
4 4			p. 191
	Head, leaden pink to purplish red	•	Eurylaimus javanicus harterti,
			p. 192

## Calyptomena viridis continentis

#### The Green Gaper or Broadbill

Vol. I., p. 159; Vol. II., p. 118.

The male is bright grass-green in colour with a partially concealed yellow spot in front of the eye, a large black spot on the side of the neck and three black bars across the wing. The female is of a much paler, duller green, and without the black markings.

Total length, 7.5 in.; wing, about 4 in.

A common bird in old forest and areas of secondary growth where there are trees, in which, among the thick foliage, it is usually seen in small parties. It is a tame, plump little bird and, unlike the black-and-red broadbills, which are mainly insectivorous, the present species is frugivorous. The bag-shaped nest of dead leaves, etc., is usually hanging over water.

# $Eury laimus\ ochromalus\ ochromalus$

#### The Black, Pink and Yellow Broadbill

Vol. I., p. 163.

The upper parts are black, streaked with pale yellow on the back and wings; tail feathers with large, white subterminal spots. Chin and upper throat, black; lower throat, and a continuous narrow band on the nape, white; remaining under parts, pale pink, except for the lower flanks and under tail coverts, which are yellow, and the thighs, which are black. There is a broad black band across the upper breast; in females the band is broken in the centre.

This is the smallest of the lowland broadbills. Total length, about 6.5 in.; wing, 3.1 in.

A common bird in forest, secondary growth and the edges of cultivated districts.

In Selangor Mr G. C. Madoc found three eggs in an unlined nest made of dry bamboo leaves, suspended from the tip of a growing bamboo, about ten feet above the water of a streamlet, on 13th May. He describes the eggs as follows: "The thick-shelled eggs are slightly pointed at one end, white with a slight gloss, and sparsely covered with small purple-brown and indistinct lavender spots, mostly at the blunt end. Average size, 1.24 by 0.77 in."

Mr V. W. Ryves found three eggs on 2nd June in a nest of "the usual broadbill type," five feet from the ground, suspended from the end of a branch of a rubber-tree growing on the jungle boundary (Selangor).

## Eurylaimus javanicus harterti

#### Van Oort's Banded Broadbill

Vol. I., p. 164; Vol. II., p. 121.

The sexes are much alike. The head, neck and under parts are dull claret-red, much washed with grey on the head and throat and darkening to almost black on the forehead. Back and wings, black, streaked and blotched with yellow; tail feathers spotted with white. In males there is a narrow black line across the upper breast.

Total length, about 9 in.; wing, 4.2 in.

Commonest in the inland forests, especially in the old jungle on the lower slopes of the hills. I know of no precise Malayan record of the nest and eggs.

## Cymbirhynchus macrorhynchus malaccensis

### The Black-and-red Broadbill

Vol. I., p. 160.

In this species the sexes are alike. Rump, deep crimson; remaining upper parts, black with a broad, long, white streak down the scapulars. Under parts, deep crimson, with the chin and a bar across the upper breast, black. Tail, black with large white spots on the inner webs of the outer feathers. Bill, bright blue and yellow.

Total length, about 8.5 in.; wing, 4 in.

This common broadbill is very catholic in its choice of country and frequents most kinds of forest in the lowlands, especially in the vicinity of rivers. Sometimes it visits the mangrove belt, and on the outskirts of cultivation it is not uncommon. The large oval nests are usually suspended over water.

# Corydon sumatranus sumatranus

#### The Dusky Broadbill

Vol. I., p. 162; Vol. II., p. 121.

Sexes much alike. Throat and upper breast, pale rusty brown; remainder of plumage, black with a narrow white bar across the wing quills and a subterminal bar of white on the outer tail feathers. In the middle of the back there is a concealed white and flame-coloured patch of feathers.

Total length, about II in.; wing, 5.3 in.

A bird of the old forest, especially near the streams, where it is usually seen in small parties in tall trees. The nest and eggs have been described from Perak and Pahang.