

TREE-STARLINGS AND GRACKLES

Family GRACULIDÆ

THE tree-starlings or grackles are a somewhat miscellaneous assemblage of birds allied to the true starlings or *Sturnidæ*, but differing from them largely in habits and in nidification ; I have followed Oates in keeping the two groups distinct.

The tree-starlings have representatives in all the warmer parts of the Old World, though the African forms, the glossy starlings, are by some accorded family rank—they are all strictly sedentary, arboreal in their habits, and lay spotted eggs ; the true starlings, on the other hand, are in many cases migratory and terrestrial, while the eggs are usually concoloured. A minor difference is that the *Graculidæ* have bristles at the gape, of which there is no trace in the *Sturnidæ*. The plumage of the Indian and Malayan forms is always uniformly glossy, above and below, in adult birds, which is never the case in the local representatives of the true starlings.

KEY TO THE SPECIES HERE DESCRIBED

With bright-coloured wattles on the head	<i>Gracula javana javana</i> , p. 280
With no wattles	<i>Aplonis panayensis strigatus</i> , p. 278

Aplonis panayensis strigatus

The Malay Tree-Starling

PLATE 25 (*upper figure*, male adult ; *middle*, male immature)

Turdus strigatus, Horsf., *Trans. Linn. Soc.*, xiii., 1821, p. 148 (Java).

Calornis chalybea, Kelham, *Ibis*, 1881, p. 519 ; Sharpe, *Cat. Birds, Brit. Mus.*, xiii., 1890, p. 143 ; Oates, in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), 1890, p. 367 ; Oates, *Faun. Brit. Ind., Birds*, i., 1889, p. 515.

Lamprocorax chalybea, Grant, *Cat. Birds' Eggs, Brit. Mus.*, v., 1912, p. 422, pl. 18, figs. 18 and 19.

Aplonis panayensis strigatus, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1924, p. 354.

Lamprocorax panayensis strigatus, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 22.

Malay Name.—Perling.

Description.—*Adult.*—Lores, velvety black without gloss; plumage above, glossy steel-green, the feathers of the nape somewhat pointed. Primaries and tail feathers, black, the former often with a purplish gloss. Inner aspect of the wing, blackish, the edges of the inner webs of the primaries, brownish black; the axillaries and under wing coverts, black, glossed with steel-green at the edges.

Immature.—Without the lanceolate feathers on the nape; lores, dark brownish black, not so velvety as the adult. Primaries and secondaries, brownish black, with paler edges, especially on the secondaries. Tail, blackish, almost without gloss; head and upper surface, dull olive-green, each feather with a darker centre and broad whitish buff edges, the green with little gloss. Under surface, dirty-white, with broad blackish-brown streaks, broadest on the flanks, finest on the throat, where the ground-colour is washed with buffy; ear coverts and sides of face, brownish grey streaked with black.

Remarks.—In the adults there is much variation in the degree of glossiness, and in the metallic tint, which is sometimes much more purplish. The young also seem gradually to acquire a deeper green above as they grow older, losing the broad white edges to the feathers and becoming more glossy.

Soft Parts.—Iris, carmine; bill and feet, black. Quite young birds have the iris yellow, orange or pink (Kelham), but the carmine of the adult is, in my experience, very soon acquired.

Dimensions.—Total length, 8 to 8.5 in.; wing, 3.9 to 4.2 in.; tail, 2.6 to 2.9 in.; tarsus, 0.8 to 0.9 in.; bill from gape, 0.9 to 1.05 in.

Range in the Malay Peninsula.—Throughout the Peninsula and on all the islands. Slightly modified in the direction of greater size and heavier bill in the Tioman Archipelago, off the coast of Pahang.

Extralimital Range.—From Central Tenasserim to the peninsular border; Sumatra, Borneo and Java, becoming slightly differentiated in Manipur and North Tenasserim on one side, and the Philippine Islands on the other. Does not appear to occur in Siam proper or in French Indo-China.

Nidification.—Breeds socially, constructing its large, untidy nests in holes in trees, under the eaves and roofs of buildings, and in the crowns of palm-trees, more especially the betel-palm (*Areca catechu*). The nests are loose structures made ofalang grass; in one case lined with green durian leaves (Davison). The eggs, three to five in number, are rather pointed, the shell somewhat glossy blue with a slight greenish cast, variably mottled with brownish blotches—usually at the larger end. According to Grant they average 1.04 by 0.75 in. I have seen one egg without any markings whatever.

In the Malay Peninsula the breeding season is from the middle of February onwards.

Habits.—This bird is social in its habits, living in large flocks, that may amount to several hundred individuals, though in the south of the Peninsula I have never seen so large a one. The habits are entirely arboreal, though in towns, houses are much resorted to. Flight is swift and direct, though the bird

often seems to have difficulty in steering itself. Davison describes the note as "a sharp, metallic, single note," though I should have called it a single-note whistle, which, when the birds are about to roost, becomes a harsh chatter which goes on until after dark. The food is various kinds of berries, and the ground at the foot of the roosting places is littered with rejected seeds. The fruit of various figs is an especial favourite, and a fruiting tree of this species is crowded with this bird, fruit pigeons and fairy bluebirds (*Irena*). The country frequented is open forest and village land, the edge of jungle but not heavy forest. Flocks are occasionally, but rarely, found in the mangroves, but never far from drier country.

The birds figured are an adult male from Biserat, Patani States, and an immature male from Bidor, South Perak.

Gracula javana javana

The Malay Grackle

Eulabes javanus, Cuv., *Regne Anim.* (2nd ed.), 1829, i., p. 377 (Java).

Gracula javanensis, Kelham, *Ibis*, 1881, p. 520.

Mainatus javanensis, Sharpe, *Cat. Birds, Brit. Mus.*, xiii., 1890, p. 102.

Eulabes javanensis, Oates, *Faun. Brit. Ind., Birds*, i., 1889, p. 512; Grant, *Cat. Birds' Eggs, Brit. Mus.*, v., 1912, p. 518.

Gracula javana javana, Stresemann, *Nov. Zool.*, xix., 1912, p. 313 (review).

Eulabes javana javana, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), iii., 1926, p. 18.

Malay Name.—Tiong mas.

Description.—*Adult.*—The whole plumage glossy black, with varied metallic reflections, violet, purplish and green, confined on the lower surface to the edges of the feathers. Feathers of the crown, short, stiff and velvety, curled inwards on each side so that there is a dividing line down the middle. Primaries black, without much gloss, a large white spot running right across the feathers, except on the outer web of the first primary; wing lining, dull black with a white bar; under wing coverts and axillaries, black. Tail, black, with greenish gloss. Two fleshy lappets nearly joining at the base on the nape and running round the side of the head nearly to the eye; in front of the ear coverts and below the eye, a patch of bare skin, *not joined to the upper lappet*.

Immature.—Much duller black with hardly any gloss; lappets much less developed, but present in quite young birds; feathers of the under surface with pale edges, so that there is an approach to a streaked appearance.

Soft Parts.—Iris, dark brown; lappets, rich cadmium-yellow, lemon at the base; bill, orange, yellow at the tip; feet, pale chrome.

Dimensions.—Total length, about 12 in.; wing, 7.4 in.; tail, 3.6 in.; tarsus, 1.6 in.; bill from gape, 1.65 in.

Range in the Malay Peninsula.—From about Trang in Peninsular Siam on the west side, and from north of Patani on the east side to the southern extremity; the islands of Penang, Singapore and the Tioman group.

Extralimital Range.—Java, Sumatra and Borneo. Many insular races have also been defined. Possibly merely sporadic in Tenasserim.

Nidification.—Nests in lofty trees in natural holes. In the Malay Peninsula the breeding season is from February onwards, but we have no actual records or eggs, which are difficult to procure. Those obtained by Col. Bingham in the Thoungyeen Valley, Tenasserim, where also the smaller race, *G. j. intermedia*, was breeding, are "pale blue, spotted chiefly at the larger end with light chocolate," and measure 1.3 by 0.95 in. and 1.27 by 0.93 in.

Habits.—Very common in hilly, submontane country, especially on the edges of clearings, where there are isolated tall trees left from the original jungle, but not in heavy jungle or on the high hills. Also abundant on small forested islands rising steeply from the sea—such as those of the Tioman group, off the coast of Pahang. Not seen in flat, alluvial country. The birds live in small parties of four or five, but like many other species congregate at dusk into larger parties. The food is entirely vegetable, especially the fruit of various figs, and, like the tree-starling, the bird is never seen on the ground. The call is very melodious, a clear and powerful whistle, but when the birds are in company the note is often harsh and disagreeable. Flight is powerful and direct, though not very rapid; at even, however, fighting birds have been mistaken for *punai* (Treron).

Malays and Chinese are very fond of this grackle as a cage-bird. It is readily domesticated, feeding on boiled rice and bananas, and can be trained to be a clever talker; those seen in the bird shops of Singapore are usually imported from Palembang, in Sumatra. Many are probably brought to Penang from Indian and Burmese ports, and this possibly accounts for the occasional occurrence of one of the northern form in the more southern parts of the Peninsula.

Remarks.—In the north of the Peninsula this bird is largely replaced by a smaller form with a noticeably less robust bill. The chief difference, however, is in the arrangement of the lappets and bare postocular space—which in the northern and smaller race are invariably joined by bare skin, while in the southern and larger bird they are as invariably separated by a line of feathers more or less wide, but always present. The smaller race, *G. j. intermedia*, inhabits parts of India, the Indo-Chinese countries and Hainan. It is found also in Junk Zeylon and the islands in the Bandon Bight.