

GULLS, TERNS AND SKIMMERS

Order LARIFORMES

THIS order comprises the gulls, terns and skimmers, of which only the terns are other than accidental in Malayan waters ; these, however, are abundant both in species and in individuals.

The feet are always strongly webbed and the hind toe small, sometimes absent, generally raised above the plane of the others, and not united to them by the web. The bill is of moderate length, but always longer than the tarsus. The wing is very pointed and narrow, with the outermost primary very short. The tail is variable, either square, cuneate or forked, the outer tail feathers in many of the terns much narrowed and pointed. The plumage is always white, grey, black or sooty, or some combination of these, but in some species there is a beautiful though evanescent rosy flush on the lower plumage in the breeding season. The winter plumage is distinct from the breeding one, and there are therefore two moults in the year. The sexes are alike, though there is often a small difference in size, and it is two, three or even four years before the fully adult plumage is assumed.

The eggs are very pointed at one end, spotted and blotched with two colours, one beneath the surface. In the local species a nest is almost lacking, and the eggs are laid on the rocks or on sand or among grass, and are one or two only in number. The young are hatched covered with down, generally of two colours, and are cared for by the parents.

The distribution is cosmopolitan and mainly marine, though a few forms are lake and river birds ; some breed in inland districts or visit them in search of food.

Some of the Malayan species are permanent residents but others are winter visitors only.

Of the two families into which the order is divided, *Laridæ* and *Stercorariidæ*, or robber gulls, the latter is characterized mainly by the presence of a cere or fleshy base to the bill, and very strong curved claws. It is temperate and circumpolar in its distribution, though one species has been obtained as far south as Moulmein, while another is regularly found on the northern coasts of the Arabian Sea.

The *Laridæ* include the true gulls, the terns and the skimmers, aberrant river-haunting birds, in which the bill is long, much compressed laterally, and

knife-like in form. They are not known in Malaya, though one species is found in India, Burma and Siam.

The true gulls can be separated from the terns by the character of the bill, which is stouter and less pointed, the upper mandible longer than the lower, whereas in the terns they are of equal length. Their build is heavier and less slender. Gulls are practically unknown in Malaya, but in the north the brown-headed gull, *Larus brunneicephalus*, common in Rangoon, has been doubtfully recorded from Tongkah or Junk Zeylon, while quite recently a wandering specimen of the laughing gull, *Larus ridibundus*, has been obtained in Singapore.

The terns are numerous, and about twelve species of very varied appearance are known from the seas and islands in the vicinity of the Malay Peninsula. In the present volume, one species is selected for description.

Sterna sinensis sinensis

The White-shafted Ternlet

Sterna sinensis, Gmelin, *Syst. Nat.*, i., 1788, p. 608 (China); Oates, *Birds, Burma*, ii., 1883, p. 430; *id.* in Hume's *Nests and Eggs Ind. Birds* (2nd. ed.), iii., 1890, p. 312; H. Saunders, *Cat. Birds, Brit. Mus.*, xxv., 1896, p. 113; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 320.

Malay Name.—Chamar kechil.

Description.—A small species, wing less than 7.5 in.; shafts of all the primaries white.

Adult in breeding plumage.—Forehead to back of eyes, white, forming a triangular patch, the point directed backwards; crown and a stripe from the eye to the lores, separated from the base of the bill by a narrow white stripe, black; back, rump and wing coverts, pale pearl-grey; upper tail coverts and tail, white. Primaries, darker grey, the outer primary, with the outer web and part of the inner web, blackish, the inner webs of all broadly bordered with white; all the shafts of all the primaries, white; under surface, white.

Adult in non-breeding plumage.—The white on the forehead more extensive and the black of the nape much duller; outer tail coverts and tail mixed with grey, with the outermost tail feathers shorter.

Immature.—Crown, greyish white, mixed with black, a dark grey band on the lesser upper wing coverts.

Soft Parts.—*Adult breeding*: irides, dark hazel; legs and feet, yellowish orange; bill, yellow, with a broad black tip. *Adult non-breeding*: feet, brownish red; bill, brownish, the black tip discernible. *Immature*: feet, dark brown; bill, black.

Dimensions.—Total length, 10 in.; wing, 7.3 in.; tail about 5 in.; tarsus, 0.7 in.; bill from culmen, 1.3 in.; bill from gape, 1.6 in.

Range in the Malay Peninsula.—Along the coasts of both sides of the Malay Peninsula and for some distance up the larger rivers on the east, but not the western side.

Extralimital Range.—Ceylon and the east coast of India, throughout

South-East Asia to the Malay Archipelago, Southern Japan and Eastern Australia.

Nidification.—On the east coast of the Peninsula this species is said to breed after the conclusion of the north-east monsoon, on the sand and gravel banks of the Pahang river and, probably, also on the Kelantan river. I believe also that it breeds on the extensive sand-beaches at Tanjong Patani, though I never obtained eggs.

According to Oates, the eggs, two or three in number, are laid in a hollow on a sandbank, and are pointed ovals, averaging 1'22 by 0'95 in., of a pale cream or buff ground-colour, boldly blotched with different shades of brown and with underlying markings of a pale lake-purple.

Habits.—This is the only species of tern that is ever found far inland in the Malay Peninsula, being met with for over a hundred miles from the mouth of the Pahang river, as far as there are extensive sandbanks. We have never seen it on the Tembeling river where the conditions would appear to be the same. In winter it frequents the coast, generally near the shore, where there are muddy flats. It is not a rock tern, and I have never seen it at Tioman or other islands on the east coast. Its habits are those of other terns, and it feeds on small fish and surface crustacea. It rarely swims or lights on the water for any length of time, and does not hover when fishing like some of the larger terns.

Remarks.—Two other terns closely resembling this are found in winter in the Straits of Malacca, and can hardly be distinguished in life. They are rather smaller birds, and have the shafts of the primaries brownish black or brownish.