IBISES AND SPOONBILLS

Family PLEGADIDÆ

The ibises and spoonbills are included by most authorities in the order *Ardeiformes*, and form a group equivalent in rank to the herons, bitterns and the storks, and to two other sections found only in Africa, the whale-headed storks (*Balæniceps*) and the hammer-headed storks (*Scopidæ*).

I find it difficult to give a popular definition of the family, all the members of which are moderate-sized marsh-birds, with legs relatively rather shorter than in the storks and herons, and covered with hexagonal scutes behind. There are no powder-down patches.

The local forms have the bill curved downwards with the upper mandible grooved almost to the tip. In the painted storks (Pseudotantalus), which in some respects are akin to the ibises, this groove is quite short, not more than one-third the length of the mandible.

The spoonbills are also included in the family, but in these, as their name implies, the upper mandible, though slightly bent downwards, is broadened and flattened towards the tip; none of them is found in Malaya.

The plumage in the family is very varied; some species are pure white, others black or glossy black, while one South American genus is scarlet. They are spread throughout the warmer parts of the whole world, excluding Oceania.

The family comprises about forty species, of which three are Malayan; the commonest is here described.

Threskiornis melanocephalus melanocephalus

The White Ibis

Tantalus melanocephalus, Latham, Ind. Orn., ii., 1790, p. 709 (India).

Ibis melanocephalus, Oates, in Hume's Nests and Eggs Ind. Birds (2nd ed.),

iii., 1890, p. 226; Sharpe, Cat. Birds, Brit. Mus., xxvi., 1898, p. 7; Blanford,

Faun Brit. Ind. Birds iv. 1808, p. 261; Oates Cat. Birds' Fags, Brit. Mus.

Faun. Brit. Ind., Birds, iv., 1898, p. 361; Oates, Cat. Birds' Eggs, Brit. Mus., ii., 1902, p. 99.

Threskiornis melanocephalus melanocephalus, Herbert, Journ. Siam Soc., Nat. Hist. Suppl., vi., 1926, p. 349.

Malay Name.—Unascertained: nok chon (Siamese).

Description.—Bill long, curved downwards. Upper mandible with a groove parallel to the edge, extending to the tip. Nostrils in a slit at the base of this groove. Tarsus with hexagonal scales. Tail short, of twelve feathers. Head and neck bare.

Adult in breeding plumage.—The whole plumage pure white, except the inner secondaries and tertials, which are pearly grey, the barbules elongated and loose in texture. Feathers round the base of the neck elongated and pointed; a patch of long narrow plumes on the breast.

Adult in non-breeding plumage.—White with no elongate plumes or modified secondaries, these feathers being pale grey.

Immature.—Head and neck lightly feathered; top and sides of the head dark iron-grey, merging into the white of the neck. Primaries with black shafts, the outer ones with the outer webs and tips blackish. Inner secondaries normal, dark grey. Rest of the plumage white.

Soft Parts.—Iris, dark; bill, black; legs and toes, black; skin of head and neck, dark bluish black; skin of wings and sometimes of the sides of the body, deep red; in young birds dusky or black.

Dimensions.—Total length, 24 to 28 in.; wing, 13 to 14.5 in.; tail, 5 in.; tarsus, 4 in.; bill from gape, 6 to 6.5 in.

Range in the Malay Peninsula.—South, along the coasts in suitable localities as far as Selangor on the western side, and to Patani on the east.

Extralimital Range.—Throughout India, Ceylon and the Indo-Chinese countries to China and Southern Japan. Also in Java, but apparently not in Borneo or Sumatra.

Nidification.—Is not known to breed in the Malay Peninsula, though it probably does so in the north. In Ceylon it breeds from November to February. The nest is made of sticks and placed in trees, often in numbers. The eggs are from two to four in number, bluish or greenish white, generally without markings, but sometimes delicately spotted with yellowish brown. The shape is very variable but generally distinctly pointed at one end. Texture of the shell rather rough and chalky, entirely without gloss. The average dimensions are 2.54 by 1.7 in. (Blanford).

Eggs from Central Siam, described by Mr Herbert, are very similar, but smaller, measuring 2.2 by r.58 in. They were obtained in July from one of several nests at the top of a tree forty-five feet high.

Habits.—Though there are few formal records of this ibis in the Malay Peninsula, and still fewer specimens, the bird is not really uncommon in the country, especially in the winter months, and I have frequently seen it along the Selangor Coast from the Bernam river to Port Swettenham, on the mudflats, bordering the mangrove swamps, but always under such conditions as to be unapproachable. The birds were usually singly or in pairs, never in flocks, and often in company with the milky stork (*Pseudotantalus lacteus*).

At Bandon, near the mouth of the river, Mr Seimund and myself met with a flock of some twenty or thirty individuals, and obtained one bird in commencing breeding plumage.

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It has never been recorded from inland districts in the Malay Peninsula. The food is worms, shellfish and crabs.

All the birds I have come across have been very wild and took to the wing at the least alarm. The birds seem to take some time to get up steam, and flight is at first heavy and laborious, but once started is powerful, direct and long-continued.