

The Emu

OFFICIAL ORGAN OF THE
ROYAL AUSTRALASIAN ORNITHOLOGISTS UNION

"Birds of a Feather"

VOL. XXXII]

1ST JULY, 1932

[PART 1

The Yellow-billed Kingfisher

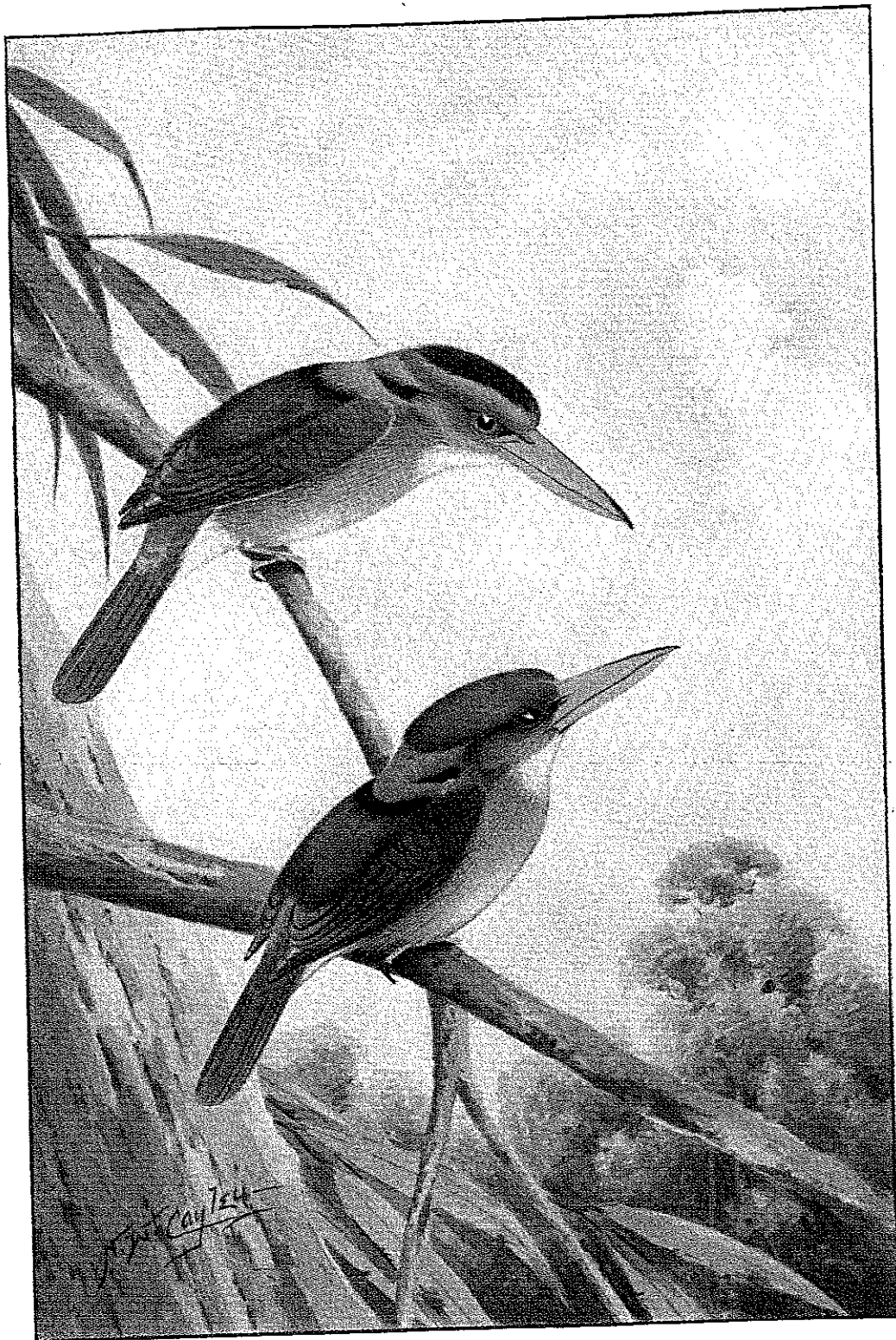
By Dr. W. D. K. MACGILLIVRAY, R.A.O.U., Broken Hill.

The genus and species—*Syma torotoro*—was originally described by Lesson in *Bull: Sci. Nat. Ferussac*, Vol. XI, p. 443, 1827, as from Dorey, New Guinea. Several sub-species have since been described and one other species, all from New Guinea and its adjacent islands.

The Australian bird was first described by John Gould as *Syma flavirostris* in Jardine's *Contributions to Ornithology*, 1850, p. 105, as from Cape York, where the first specimens were obtained by John MacGillivray in 1849, and forwarded to John Gould, then in London, together with notes as to its habits observed by himself, or obtained from the aborigines who helped him collect his specimens. Gould, whilst remarking that it might easily be mistaken for *S. torotoro*, considered that the Cape York bird differed specifically "in its lesser size, less brilliant colouring, the yellow instead of orange hue of the bill, and the smaller size of the serrations of the mandibles, besides other characters." Later authorities, however, have decided that the differences are sub-specific only.

Description: Adult male.—Head, occiput and mantle, sides of face and neck, vinaceous rufous; breast and sides of body and under tail coverts, ochraceous tawny; throat and abdomen white, tinged with buff; primaries brown; under surface of tail pale brown; a narrow edging of black above, below and in front of the eye; a black crescentic mark interrupted in the mid-line around the nape; a broader band of black bordering the mantle from side to side; the rest of the upper surface oil green; lower back, rump upper tail coverts and tail marine blue; iris dark brown; bill yellow with the terminal half of the culmen black; feet and legs yellow; claws brown.

Adult female.—Differs from the male in having a large black patch on the crown of the head, the black crescentic



Yellow-billed Kingfisher (*Syma torotoro*)
Upper: Female; Lower: Male

Neville W. Cayley, pinx.

mark of the nape much broader and with the same interruption in the mid-line, otherwise there is no difference in the plumage, nor in the colouring of the soft parts.

Measurements of an adult nesting pair collected on the Claudie River:—

Male: Length 198 mm., wing 77, culmen 35, tarsus 14, mid toe and claw 17.

Female: Length 195 mm., wing 76, culmen 38, tarsus 16, mid toe and claw 18.

Gould remarked of the genus *Syma*, "the serrated edges of the mandibles indicate that they feed on some peculiar food, and it would be interesting to know what special service the serrations are intended to perform." It at once occurs to students of bird life that other birds with serrated bills are mostly piscivorous, and that a Kingfisher would most likely need such a device for the same class of prey. The Australian members of the species, however, do not frequent creeks or mangroves, and an examination of the stomach contents by Mr. W. R. McLennan and myself disclosed an assortment of small lizards, beetles, grasshoppers, and butterflies. The Papuan members of *S. torotoro* are said to inhabit the mangroves, where fish would be the most likely prey.

The call is a mournful trilling whistle in an ascending scale, frequently repeated, and continual when the birds are nesting. It is ventriloquial in character and difficult to locate.

The birds are usually found in the tropical scrub or rain forest or in the edge of the open forest where it borders on the scrub, and it is here that they nest. The nesting hole is made in a termites' mound on a tree at a height varying from 10 feet to 50 feet. The burrow is usually 4 inches in length and $1\frac{1}{4}$ inches in diameter, with a nesting cavity 5 to 6 inches in diameter.

Three round, white eggs are the usual clutch. The birds are courageous in defence of their nests. Mr. W. R. McLennan made this note: "The birds attacked me and struck my hand four times, once drawing blood." It says much for the humanity of this ardent collector that he left the nest and its contents "to the plucky little beggars." On another occasion when I was with him, he was at a nest of this species and my note reads "the parent bird flew at him with a scream and looked very pretty in her anger as she sat on a near horizontal twig, with all the feathers of her head raised."

Specimens figured are from the Australian Museum Collection. They were collected by Thorpe in the Cape York district, North Queensland, in 1866. Male, No. O. 17817; Female, No. O. 17818.