The Changes in Colour of the Bill of the Black Moor-Hen (Gallinula tenebrosa).

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IN *Novitates Zoologicæ*, vol. xxv., No. 1, p. 1 (1918), Miss Frances Pitt gives an account of the colour changes of the beak and shield of the young English Moor-Hen (*Gallinula chloropus*), accompanied by a plate of coloured drawings of the heads of live specimens at different ages. The most interesting feature of the changes detailed is that when first hatched the young English Moor-Hen has a bright red shield on the forehead, the upper part of the beak being the same colour. This red patch dwindles in size until it is entirely lost when the bird is seven weeks old. The complete disappearance of all colour coincides with the growth of the feathers, so that while the bird is in its immature plumage its bill is dull greenish-grey in colour. Some months later, during the autumn or winter succeeding its birth, the young Moor-Hen acquires the adult plumage and the frontal shield and bill re-acquire their bright red colour. Subsequently this colour does not vary in brilliancy even during the moult.

I believe that the Australian Black Moor-Hen (*Gallinula tenebrosa*) undergoes similar if not identical changes. Curiously enough, the matter had been brought to my notice by Mr. J. Higham only a few days before the arrival of the part of the *Novitates* containing Miss Pitt's article, and I am indebted to him and to Mr. T. Carter for allowing me to examine two specimens of young Black Moor-Hens obtained by them at the Warren River, Western Australia, on 28th March, 1919.

It is no doubt well known to most Australian ornithologists that the young Black Moor-Hen as a chick has a bright red frontal shield. This presumably remains, as in the English Moor-Hen, until the down is replaced by feathers. The young bird in immature plumage is, as described by Mathews ("Birds of Australia," vol. i., p. 232), similar in general colour to the adult, though perhaps rather browner on the back; the under surface is paler, and the feathers on the chin and lower abdomen have white tips. A line round the bend of the wing and the outer edge of the first primary are white. Mathews and, as far as I can discover, all previous authorities have failed to record the fact that, just as is the case in the English Moor-Hen, the bird while in this immature plumage has no red on the beak. Mr. Carter's notes on the labels of the two specimens referred to above, from the Warren River, read:—

♀.—Bill mottled green and black (lower base green), frontal plate black.

♂.—Bill mottled green and horn.

Field notes as to the length of time during which this immature plumage lasts would be of interest.

I do not know whether the legs and feet undergo similar changes, but, whereas the adult Black Moor-Hen has green legs with bright red coloration on the joints, the immature birds collected by Mr. Carter had feet and legs described in the male as olive-green and in the female as grass-green. What colour are the legs of the chicks? I would suggest that some of *The Emu*'s coloured plates be devoted to hitherto unfigured nestlings of some of our common species, which would probably be of more value to members of the R.A.O.U. than pictures of rare birds from North Queensland and Northern Territory, which they are never likely to see.

Notes from Western Australia.

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1. **Grey-headed Mollymawk** (*Diomedea chrysostoma*).—A specimen of this bird was picked up on the beach at Fremantle in June, 1917, by Mr. F. L. Stronach, and is now in the Western Australian Museum. This is, as far as I can ascertain, the first definite record of the species from Western Australia, though the seas of this State have been included in its range in most lists of Australian birds, presumably on theoretical grounds. The name of Grey-headed Mollymawk, or Albatross, seems to me much more satisfactory than Flat-billed or Culminated as a vernacular for this species, since its grey head differentiates it from all the other Australian species, whilst the bill is closely similar to that of the Yellow-nosed Albatross, and the differences which exist can only be recognized on careful comparison.

2. **White Egret** (*Herodias alba syrmatophora*).—This bird is recorded in all the books as occurring throughout Australia and Tasmania, but it is certainly very uncommon in the south-west, and the only definite record of its occurrence here which I can discover is the entry in Ramsay's "Tabular List," indicating that a specimen from Western Australia was in the Australian Museum in 1888. (Ramsay's list is, however, not always reliable.) There were no specimens from the south-west in the Western Australian Museum collection until recently. In February, 1917, one was received from Bremer Bay, on the south coast, about 100 miles east of Albany, where it was shot by Mr. R. Wellstead. In March, 1919, two male birds out of a small flock were shot on Herdsman's Lake, near Perth, and are also now in the Museum. I am informed that in April, 1919, another party visited Herdsman's Lake, where I hope they were not molested.

Quite a number of water-fowl which are common in south-east Australia are rarely, if ever, met with in the south-west. It is possible that some of these are only now finding their way down occasionally from further north. As an instance, I may mention that the White Ibis has not yet been recorded from this State except in the extreme north (though many books give its