# DUSKY MOORHEN ON LAKE HAYES

By MAIDA BARLOW

# **SUMMARY**

A bird seen on Lake Hayes from August to October, 1968, is described, discussed and identified.

# INTRODUCTION

On 11/8/68 a party of Southland ornithologists comprising R. R. Sutton, L. E. Henderson, Neil Henderson, O. J. Linscott and the writer saw an unusual bird on Lake Hayes. Good views were obtained from 120 yards with a 20 x telescope in fine, calm, sunny weather, and a detailed description was recorded. The area was visited again on 18/8/68 by the same party, excluding Neil Henderson and including R. F. Smith of Dunedin. This time a small boat was taken as well, and closer views and some photographs were obtained. On 20/8/68 R. R. Sutton went up again with the boat on which he erected a hide; using two anchors and an "endless chain," he was able to haul the boat in close to the lake shore vegetation without emerging from the hide, and he spent several hours watching the bird and taking more photographs.



[R. R. Sutton

Plate XXVII — Dusky Moorhen (Gallinula tenebrosa) on Lake Hayes.

### DESCRIPTION

The following description is compiled from field notes made on these three visits:

Habitat: Lake shore, with a mixed vegetation of raupo (Typha muelleri), dead and growing willows (Salix sp.) with a dense lake bottom growth of elodea (Anacharis canadensis).

Size: Smaller than Coot (Fulica sp.).

Shape and Posture: Differed from Coot in that it looked "lower in the water."

General Plumage: Entirely dusky, except lateral under-tail coverts; a brownish tinge on the back; close views in a good light revealed an iridescent greenish sheen on the upper surface.

Under-tail Coverts: Broad central dark strip, narrower towards vent; very obvious when bird swimming and viewed from the rear. An obvious white patch on either side; these patches extended to right under the tail, and were visible when bird was swimming; when viewed from the side these patches could still be seen and gave the impression that the whole under-tail coverts were white.

Shield: A narrow pear-shaped shield. Not more than half-aninch wide at widest part, and tapering to a narrow strip above the bill; not prominent.

Bill: Both bill and shield a dark horn colour with a reddish tinge. Bill paler at tip.

Eye: Not conspicuous.

Legs: Inconspicuous dullish grey.

Wariness: Cautious, but not as wary as Pukeko (Porphyrio melanotus).

General: Viewed from 120 yards with 20 x telescope. On later visits seen from 15 yards from hide in boat. On every visit the bird was located in the same stretch of lake shore, approximately 50 yards long, with vegetation as described. The bird shared the habitat with another Moorhen-like bird which is as yet unidentified. The two birds fed near each other, and sometimes together, but generally not in association with other birds except the occasional Scaup (Aythya novaeseelandiae), but at one time two Mallard ducks (Anas platyrhynchos) came in close and scavenged food which had been brought to the surface by the bird under discussion. At this time the closeness of the Mallards did not seem to disturb the bird. There were 61 Coots (Fulica atra) approximately 100 yards distant, out in the lake. When observers made a noisy approach through raupo, the Moorhens went to cover while other waterfowl and the nearby flock of Coots took to flight. Both reappeared after the disturbance, but went into cover again when approached by a female Mallard.

At no time was the bird under discussion seen to venture further than five yards from the lake-shore vegetation. It was under close observation for a total time of 28 daylight hours, over four days; during most of this time it was not apparently disturbed by the observers' activities, which were undertaken with circumspection.

Observation from the shore side of the reedbeds showed that the bird spent little time on land; when not feeding or swimming at the lake edge it would rest, perched under cover on dead willow branches low over the water. At no time did it perch far enough out from cover to allow close scrutiny of legs and feet.

## LATER DEVELOPMENTS

On 9/10/68 R. R. Sutton visited the lake again. In the intervening seven weeks since his last visit the bird had undergone significant bill and shield development. It was found in exactly the same locality and although excellent views were not obtained, there was no doubt in the observer's mind that it was the same bird. The shield was much larger and appeared to be pale orange in colour. The size and shape of the shield appeared similar to that of Coot, but no on-the-spot comparison could be made. The pale colouring on the tip of the bill had extended noticeably further up the bill. As usual, good views of the legs were not obtained, but in the very clear water they appeared a greenish yellow.

#### DISCUSSION

The bird was identified as a Moorhen (Gallinula sp.) on three main counts:

- 1. Plumage: The following authorities indicate that white lateral under-tail coverts are usual in the genus Gallinula: Witherby et al. 1944; Peterson et al. 1964; Rand & Gilliard 1967.
- 2. Bill and shield shape and colour: Witherby et al. 1944 describes the bill and shield of the juvenile G. chloropus as "greenish brown"; furthermore, he says: "Colouring becomes like adult occasionally as early as October but usually between December and March." Mathews and Iredale 1921 record the bill of the juvenile male G. tenebrosa as "mottled green and horn"; and the juvenile female "mottled green and black (lower base green), frontal plate black." The Lake Hayes bird in August was showing a reddish tinge on the horn colour of both bill and shield, and the significant development shown by the October visit confirms that this was a sub-adult bird approaching maturity when first seen.

At no time were the legs seen in adequate light to demonstrate the presence or otherwise of a "garter."

3. Habits and habitat: Behaviour, as observed over 28 hours, fell in line with the secretive and un-gregarious habits of the genus. The bird remained for at least nine weeks in a limited area of habitat eminently suitable to this genus.

In the matter of species identification, the field is surprisingly limited. Peters 1934 shows that the genus *Gallinula* comprises only three species: *G. tenebrosa* (three sub-species, occurring in East Indies, New Guinea and Australia); *G. chloropus* (the type-species), fifteen sub-species occurring in Europe, Asia, East Indies, Philippines, Africa and America); and *G. angulata*, occurring only in Africa.

It would seem reasonable to discard the African and American forms, thus leaving the field of choice between G. tenebrosa and G. chloropus.

Of these, it is more possible that tenebrosa could occur as a straggler in New Zealand, than the northern species. A further factor is that Peterson et al. 1964 state that a white flank stripe is one of the diagnostic features of G. chloropus, in both juvenile and adult forms. The bird in question exhibited no such stripe.

Acting upon the suggestion of Mr. A. Blackburn, a photograph and description of the bird were sent to the Australian ornithologist Mr. K. A. Hindwood, who replied: "Your bird is undoubtedly tenebrosa. Possibly sub-adult, though I have found that in the autumn and winter the rich colours of the bill and frontal plate become much duller — that is, in adult birds. However, it would seem from your notes that your bird was at least sub-adult. Immature birds are greyish on the throat and blackish-brown otherwise, with dull greenish bills and darker frontal plates." Mr. Hindwood enclosed a photograph of an adult Dusky Moorhen, with the comment: "It may be of some help in 'confirming' your observation, but, really, no confirmation is needed."

#### CONCLUSION

The bird described is identified as belonging to the genus Gallinula; it is further identified as a sub-adult of the species tenebrosa; sub-specific identification is not attempted.

#### ACKNOWLEDGEMENTS

I wish to thank the following people for their assistance:

Dr. J. Murray Speirs, Professor of Zoology, Toronto University, who reported to R. R. Sutton the presence on Lake Hayes of the as yet unidentified bird mentioned above, and by drawing attention to the location aided the discovery of the secretive bird here described.

Dr. R. A. Falla, Wellington, who was consulted soon after the initial sighting of the bird, and made helpful suggestions.

Dr. R. F. Smith, Dunedin, who copied long extracts from

literature not available to me.

Mr. R. R. Sutton, Invercargill, who spent many hours studying the bird, and made his field-notes and photographs freely available.

Mr. A. Blackburn, Gisborne.

Mr. K. A. Hindwood, Lindfield, N.S.W.

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