

ART. XXIV.—On the Species forming the Genus *Ocydromus*, a peculiar Group of *brevi-pennate* Rails. By WALTER L. BULLER, C.M.G., Sc.D., F.L.S.

[Read before the Wellington Philosophical Society, 12th January, 1878.]

ALTHOUGH as a group the limits of the genus *Ocydromus* are sufficiently well defined, considerable difficulty has been experienced in determining the species. Every naturalist who has studied the subject appears to have arrived at some different conclusion as to the number of constant forms; and where the variances as to size and plumage are so well maintained it is difficult to avoid drawing specific distinctions. If, however, it can be shown that all these extreme forms graduate in a series, or, in other words, run into one another, it becomes impossible to find any fixed aberrant characters. Without professing to be able yet to place the matter beyond all dispute, I venture to think that the series of specimens which I have the honour to exhibit this evening affords pretty strong evidence that several of the so-called species in the South Island must be united under the name of *Ocydromus australis*.

In my "Birds of New Zealand," I admitted only three well-ascertained species as inhabiting New Zealand—namely, *O. earli*, *O. australis*, and *O. fuscus*. I mentioned in the introduction to that work that, although Dr. Finsch recognized a fourth (*O. troglodytes*, Gmel.), I was unable to draw any specific line. Nevertheless, I pointed out very fully, in my account of the South Island wood-hen, the great variation both as to size and markings which that species exhibits, especially among birds from different localities.

Captain Hutton, in an article on the New Zealand Wood-hens, read before this Society* in September, 1873, agreed with Dr. Finsch in admitting *O. troglodytes*, and added two more species of his own under the names of *O. hectori* and *O. finschi*. He further described a "variety or immature" example of this last-named species, which he suggests may "possibly be identical with *Gallirallus brachypterus*, Lafr."

Dr. Finsch, in a paper† written the year following, professes to identify *Ocydromus troglodytes* with the *O. australis* of my text, page 170, but not the plate; of *O. hectori* he remarks, "I consider this a good species after having compared a typical specimen;" and of *O. finschi* he says that, having examined the type, he considers it a good species, although not without some suspicion that it may prove to be a variety of *O. fuscus*. He confuses *Ocydromus australis*, Sparrm., with the well-known *O. earli*; and with respect to the latter in Hutton's list, he makes the following singular statement:—"Dr. Buller, in his great work, unfortunately does not mention

* "Trans. N.Z. Inst.," VII., p. 110.

† "Trans. N.Z. Inst.," VII., p. 226.

the typical specimen of *O. earli*, Gray, and not having compared it myself, I am unable to make out whether the true *earli* is, indeed, the bright cinnamon-red bird as Captain Hutton and I believe, or whether it is the same as *O. australis*, figured under the name of *earli* by Dr. Buller.* Captain Hutton, on the other hand, writes me:—"I am sure that you are right about the identification of *O. earli*, and I don't understand how Finsch thinks otherwise."†

Baron A. von Hügel, who has lately been on a scientific tour through the colonies, writes thus in "The Ibis"‡:—"Of New Zealand things I have got a very fair collection—some 300 specimens already. *Ocydromus* I have, of course, gone in for, and have a lot of notes about it. I don't believe in more than three good species—*O. australis* (with endless varieties), *O. fuscus*, and *O. earli*. The last two are difficult to procure, although I shall doubtless get a series of the latter in the North Island; but of *O. australis* one could get a shipload in a very short time. I have got a splendid series, showing every age from embryo to adult, and varieties to perfection."

It will be seen, therefore, that the Baron, who comes to the subject with a totally unprejudiced mind, adopts my published division of the species in a very positive manner.

If, on further investigation, it should be found necessary to add a fourth species, this must be *Ocydromus brachypterus*, Lafresnaye; for Dr. Finsch, who appears to have examined the type specimen, affirms distinctly§ that it is the same as Hutton's *O. hectori*; and Captain Hutton himself admits that this is "very probable."|| This is of course the bird referred to at page 171 of my "Birds of New Zealand" in the following passage:—"Dr. Hector informs me that on all the high mountains of the Otago province he met with a 'cream-coloured variety,' conspicuously marked and very readily distinguishable from the common bird. Mr. Buchanan confirms this observation, and states that on the Black Peak, at an elevation of 6,000 feet, he found this light-coloured variety very abundant, but none of the other birds; the former indeed were so numerous as to prevent his getting any sleep."

It seems unfortunate that in obedience to the law of priority in nomenclature, we must sink a name, very fittingly bestowed, in favour of *brachypterus*, which expresses no distinguishing specific character, being equally appropriate to all the forms of *Ocydromus*.

* "Trans. N.Z. Inst.," VII., p. 231. † *Ib.*, IX., p. 330.

‡ "The Ibis," July, 1875, p. 393. § "Trans. N.Z. Inst.," VIII., p. 202.

|| "Trans. N.Z. Inst.," IX., p. 330.

OCYDROMUS EARLI, *Gray.*

This is the North Island species, very distinct in character from the others and exhibiting only a slight degree of individual variation. It is admirably figured by Keulemans, and a full description of it, in all stages, is given in my "Birds of New Zealand" (pp. 165, 166).

OCYDROMUS AUSTRALIS, *Sparrrm.*

This species has never been met with in the North Island as an indigenous bird, although of late years it has been successfully acclimatized by Sir George Grey at Kawau.

The tendency of this bird to vary, in a very remarkable degree, has occasioned much difficulty in discriminating the form.

In my published account of *O. australis** I made the following observations on this point:—"Examples from different localities exhibit so much variety in size and plumage as to suggest the existence of another closely allied species. Mr. Potts says that when he was 'camping in one of the gorges of the Rangitata a very striking variety used to visit his tent constantly; the individuals of either sex were above the average size; the general colour of the plumage light greyish-brown, the feathers barred or marked with shades of dark brown; the rump, and in some instances the tips of the primaries, rich chestnut; throat and cheeks grey.' * * * * My brother, Mr. John Buller, assures me that he invariably found the alpine bird considerably larger than those inhabiting the plains and of a much lighter colour. A specimen brought by Mr. Henry Travers from the interior of the Marlborough province has the general plumage of a yellowish-buff colour, very obscurely marked and spotted with brown; and among those obtained by Sir George Grey in the Otago hills for the purpose of stocking the Kawau Island, I observed that one (apparently a young bird) had similar plumage, although it was more distinctly banded on the sides and flanks. Sir George Grey informed me that these birds were taken by himself at an elevation of 6,000 feet, where they were found concealed under the tussocks or hiding among the loose rocks, the assistance of a dog being required to dislodge them." I further described a specimen in my own collection in which the whole of the upper surface is light fulvous shaded with brown, each feather having a sub-terminal spot of that colour; the primaries and secondaries are dark rufous-brown barred with black, and the soft overlapping feathers are fulvous, stained more or less with rufous and barred with black in their middle portion, margined and spotted towards the end with cream-yellow; the throat, fore-neck, and breast pale cinereous brown, mixed with fulvous on the crop; the lower parts dull

* "Birds of N.Z.," pp. 170-173.

cinereous brown, fasciated on the sides and flanks with narrow markings of fulvous.

After fully describing the ordinary plumage of the adult male, I stated that the female was smaller, with darker plumage and duller coloured legs; and that in immature birds the tints of the plumage generally are lighter, the transverse markings are less distinct, and the colours of the bill and legs are paler; the irides are dark brown; there is less rufous on the head and often considerably more of the cinereous grey colour on the breast and abdomen.

OCYDROMUS FUSCUS, *Dubus*.—Kelp-hen.

An apparently adult female specimen of this bird in the Canterbury Museum (obtained at Preservation Inlet) has the general plumage brownish-black; throat dark grey mixed with smoky-brown; the plumage of the fore-neck, lower hind-neck, and upper surface of wings presenting dull streaky marks of rufous, each feather being irregularly touched with this on each web; tail-feathers black; under coverts obscurely marked with rufous. On the under face of one of the primaries (an old feather which came out on being handled) there are obsolete rufous bars; and the scattered new feathers appearing on the upper surface of the body are almost entirely black; bill, bright reddish-brown at the base, horn-grey towards the tips of both mandibles; legs and feet reddish-brown.

It may be inferred from this state of plumage that the tendency of this species is to darken towards maturity. I have not yet had an opportunity of examining a first year's bird, but, judging by analogy, I think Captain Hutton is probably right in his conjecture that his "*O. finschi* is only the young of *O. fuscus*."*

Dr. Finsch himself † expressed the suspicion that one was a variety of the other.

OCYDROMUS SYLVESTRIS, *Sclater*.

This is a very distinct species inhabiting Lord Howe Island. There were two living examples in the Gardens of the Zoological Society when I last visited them in 1873.

OCYDROMUS LAFRESNAYANUS, *Verr. et Des Murs*.

This form is peculiar to New Caledonia. The Zoological Society received a live specimen from Dr. Geo. Bennett in June, 1869, and another from the same donor in May, 1873.

* "Trans. N.Z. Inst.," IX, p. 331.

† "Trans. N.Z. Inst.," VII, p. 232.