

NOTES ON BREEDING OF VARIABLE OYSTERCATCHERS.

By D. H. Brathwaite, Napier.

During three visits to the Waikanae Estuary, in January and February, 1950, the writer and Messrs. F. E. Wilkin and J. S. Watson, of Wellington, observed the rearing of two young variable oystercatchers (*Haematopus reischeki*).

The parent birds differed in plumage, one being completely black and the other having a mottled abdomen and under wing coverts, and a narrow alar bar. This bird is shown in the bottom row of the accompanying sketch showing the field characteristics of *H. reischeki* and *H. finschi*. Minor differences in behaviour, as described below, suggested that the black bird was the male.

The parents were rarely close together, even when they were apparently unaware of our presence; this was particularly noticeable on the first two visits (January 7 and 11) when the chicks were still in down. On their being approached, the male was always the first to take wing, flying towards us and circling at a distance of about ten yards, piping continuously. Occasionally the female also did the same, particularly when we were near the chicks, but she mostly stayed on the ground, running around and occasionally sitting down. This latter behaviour puzzled us but a recent paper by Williamson (1950) suggests that it may have been a form of distraction display. This paper describes a form of distraction behaviour, known as "pseudo-sleeping," in which the birds stand, sometimes on one leg, with the bill tucked into the scapulars, as if asleep, but with the eyes open. Another form of distraction-behaviour observed by us seemed to be a form of "injury-feigning," in which the female bird flew round us, landed, and ran with a staggering gait, with wings raised above the back.

When unaware of human presence, the female kept close to the chicks and the male remained some distance off; the male was only once observed to actually approach a chick.

Both parents were very suspicious once they became aware of our presence, and even after we had concealed ourselves they refused to approach the chicks for up to thirty minutes. While they felt danger to be present both birds constantly uttered a piping "chillik-chillik" (sometimes a drawn-out "chille-e-ew") which seemed to be a signal to the chicks to remain concealed.

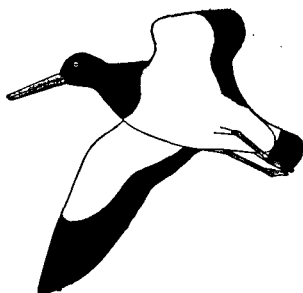
The birds were twice observed feeding, probing in the sand above high-water mark and in the shallow water's edge of the old river course, now a slow-flowing creek. It was also noticed that the male bird had a habit of sitting alongside a log or small piece of driftwood. As this was observed when we were concealed and the birds were unaware of our presence, the habit did not seem to have any relation to the sitting of the female, described above.

The downy chicks were brownish-grey in colour, almost perfectly matching the sand, with black markings and white under-parts. They were extremely difficult to find, and on January 7, although I located their approximate position before approaching, it took me about 45 minutes to find them. They lay motionless in the attitude illustrated by Falla (1939, Fig. 1) even when touched, although they struggled when picked up. One of them was replaced in its original position and "froze" again; the other was laid on its back for a photograph and, on being replaced, scuttled off across the sand at surprising speed until the male ran up and took charge of it. Although the chicks were never far apart, when "hiding" they were always separated sufficiently to necessitate searching for each individually.

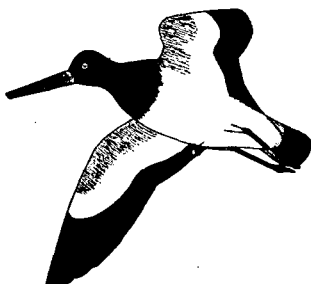
Although I was informed later that the chicks had actually hatched on January 1, I believe the date to have been at least ten days earlier. Not only did they appear markedly larger than those illustrated by Dr. Falla (1939, Fig. 2), but on January 2, when Mr. Wilkin and myself first saw them, there was no sign of an egg-tooth.



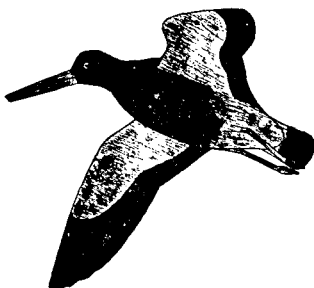
Haematopus finschi



Haematopus reischeki
(Pied Phase)



Haematopus reischeki
(Mottled Phase)



On the third visit (Feb. 11) the young birds were found to be fully fledged and flying. Both had much more white on the underparts than the female parent, and are illustrated in the middle row of the sketch. It will be noticed that, although the amount of white on the abdomen and breast approaches that found on *H. finschi*, the white on the back is confined to the rump, and the alar bar is little wider than that of the parent.

The plumage phases exhibited by the young birds is of interest as Falla (loc. cit.) describes the young of parents similar to the above, namely, a black male and a mottled female. In the one case, one chick had uniformly dark down and the other was white ventrally, in the other the fledged young were respectively all black and normal pied.

REFERENCES.

- Falla, R. A.—Records of the Canterbury Museum, Vol. IV., pp. 259-266. New Zealand Oystercatchers.
- Williamson, K.—British Birds, Vol. XLIII., pp. 1-4. The Pseudo-sleeping Attitude of the Oystercatcher.

NESTING OF NEW ZEALAND DOTTEREL.

By H. R. McKenzie, Clevedon.

The New Zealand dotterel (*Pluviorhynchus obscurus*) has only recently domiciled itself at Mataitai, a little to the east of the Wairoa (Clevedon) River mouth, in the Clevedon district. The first record was an isolated one of a single bird seen on April 19, 1942. No more appeared until 1948 and 1949, when a pair nested each year.

The 1948 nesting was not observed closely enough to obtain exact incubation and hatching-to-flying records, but notes referring to this year's nesting are:—

- 4/12/48.—One pair with empty nest. Female quite pale.
 5/12/48.—Bird sitting on nest. Seen from road by telescope at 350 yards.
 9/12/48.—Two eggs.
 6/1/49.—Seen from road sitting high on nest as if brooding chicks.
 9/1/49.—One tiny chick running and a dead one two feet from nest.

This evidence, though scanty, indicates a lengthy incubation period. The surviving chick was reared. This family, and a fourth bird, stayed right through to the spring of 1949.

The 1949 Nesting.

- 14/8/49.—Two very well coloured birds, fussing, several sham nests.
 21/8/49.—Two red birds. All interest in nesting lost for time being. Two pale birds present.
 11/9/49.—Three red and four pale birds. Nest, 2 eggs, found by member L. H. Munro.
 14/9/49.—Nest now three eggs.
 18/9/49.—Six or seven birds. The other pale ones now colouring rapidly. The hen flew from the nest and chased a whimbrel (*Numenius phaeopus variegatus*); one of two walking nearby.
 9/10/49.—Mr. H. A. Kemp, a resident, visited the nest daily from this date until the eggs were hatched.
 13/10/49.—6 p.m., one egg chipped.
 14/10/49.—10 a.m., two chicks had hatched.
 15/10/49.—7 a.m., third egg hatched. Chick very weak, apparently dying.
 23/10/49.—Four adults with two fine chicks out on tideflat.
 15/11/49.—Four adults and two chicks. The chicks now almost full-grown and well apart from adults. One was chased by Mr. M. Thorn, but it could not fly though now 31 days old.
 19/11/49.—One chick missing. Not seen again. One found about 200 yards from adults. When chased it fluttered just clear of the ground for about 10 yards. It hid in *salicornia* and allowed itself to be picked up.
 24/11/49.—The chick flew several times, low and straight, from 30 to 100 yards. Obviously it was not its first day for flying. I am assuming that it first flew on the 21/11/49. This is not quite satisfactory but cannot be far wrong.

The incubation period for the 1949 nest has thus been fairly well recorded, although it is unfortunate that the exact date on which incubation commenced was not ascertained. It is hoped to observe the birds again this year, but I suggest that it is reasonably safe to assume that the third egg was laid on 12/9/49 and that incubation would begin immediately on this date. Taking the hatching date as 14/10/49 the incubation period would thus be 32 days. If incubation began when two eggs had been laid, as is very probable with this species, the period would be 33 days.