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 fullgrown 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.

The hatching-to-flying period is not quite definite but can be no more than one day out. This is 38 days.

I have not been able to obtain comparisons, as there seems to be no other detailed account of the breeding period of this bird.

From 15/11/49 to 27/12/49 the chick was nearly always found at a distance from the parents. It would keep very quiet while the parents fussed about an area where there was nothing to guard at all. This ruse is very effective and succeeded often.

The laying date for the 1949 nest should, I think, be the earliest record for the species. The first egg would be laid on either September 9 or 10.

I have specially to thank Mr. H. A. Kemp for his splendid work in traversing the mudflat for so many days and successfully observing the hatching. Also I thank members F. Murray, L. H. Munro, W. W. Renouf and D. E. Alexander for their assistance; also Mr. M. Thorn, who did some fine running in the later stages when testing the flying ability of the chick.

BREEDING PERSISTENCE IN BANDED DOTTEREL.

By E. W. de Lisle, Kaiaua.

I was shown the nest of a banded dotterel on October 12, 1947, close to my home at Kaiaua on the western shore of the Firth of Thames. The single egg was apparently newly laid because two others were later added. So tame were the birds that the female returned and sat on the nest only 27 yards in front of an occupied car. The male then put her off and sat on it himself. The nest was made in some loose shingle which at high tide had washed over into the short grass above the beach. Some beach cottages, occupied at weekends and on holidays, stood only 20 yards away, while cars and trucks frequently passed between the nest and the buildings.

In this situation there seemed little hope of success for this breeding pair. However, I resolved to assist them and I had a busy time keeping their area clear of picnic parties, playing children and frolicking dogs. Twice the nest was actually straddled by cars. The people occupying the beach cottages became keenly interested and assisted readily.

About two weeks had passed when a party of "Maori" horses came into the area. Two stallions fought, after which the victor chose the patch of shingle for a roll. In preparation for this he pawed the ground in the usual manner. I arrived breathlessly on the scene at this juncture and found that he had pawed the nest right away. I found one egg between two and three feet away and another between four and five feet away from the nest site. The third one I could not find. By a small thistle which had stood besides the nest I built up the shingle again and made a new nest in which I placed the eggs. I took the greatest pains to make the nest the same as the original and thought I had done it well.

The female quickly came up to the "nest" and looked at it critically. She dropped down into it and first with her bill and then with her breast pushed the eggs up onto the edge. She then filled in the nest somewhat, replaced the eggs with her bill and sat on them with apparent satisfaction. I had a full and clear view of this operation, using powerful binoculars from a short distance.

This incident greatly increased our sympathy and admiration for these lovely little birds and it was a great joy and relief when the eggs hatched, one on November 12, and the other on November 13. The fond parents moved with the tiny chicks to a safer area where I saw them frequently as they grew up. The devotion of these parents surely deserved this success.