

BREEDING HABITS OF DOTTERELS.

By S. D. Potter, Auckland.

BANDED DOTTEREL (*Charadrius bicinctus*).

One pair and one youngster were recorded on McFarlane's Beach, Manakau Harbour, 28/12/35. Their habit of running several yards, then stopping dead and perhaps bobbing their heads, makes their movements appear to be jerky.

A nest—merely a slight depression in the shingle—was found on Muriwai Beach, 25/10/36. It appeared that some attempt had been made to arrange bits of shell around it. There were two newly-hatched chicks and one egg on the point of hatching. The chicks were a pale yellow speckled with dark brown and they remained absolutely motionless, stretched out on the ground at their parents' command.

When the nest was approached the parents became most demonstrative and gave up circling round on the wing or running about merely uttering a plaintive whistle (with a jerk of the head) to come within a yard or two of my feet, most painfully trailing a wing and calling as if in dire distress, in a frantic endeavour to lure me away and which I finally allowed them to do.

Six nests were found at Motaha, 6/10/37; each nest was merely a depression but several had pieces of shell or tiny pebbles arranged in it. Each nest was close to a "landmark"—a piece of drift wood or a clump of half-buried seaweed. Four nests contained three eggs and the others only two. As is usual all were deposited in the depressions with the narrow ends innermost. The many eggs I have examined has shown only three distinct variations in markings, and curiously enough all three appeared in these six nests, so it would seem that locality has little, if anything, to do with it. The variations referred to are: Stone in ground colour, buff in ground colour and the third bluish, all being well spotted with dark-brown and blackish-brown.

Although, of course, it is usual for these birds to herald one's approach, they are not very demonstrative until the eggs have hatched. As six pairs seemed a numerous quota for this short and very narrow strip of coastline I checked the distance between the nests and found that the nearest of any two to each other was 320 yards.

On 29/9/40 at Muriwai I watched a pair for a whole day and noted that the female only sat on the three eggs. The male, very handsome in his breeding plumage, was never very far away and immediately gabbled a lot of dire threats should another dotterel trespass on his domain and before giving chase fluffed out the feathers along his sides until he looked almost half as large again.

NEW ZEALAND DOTTEREL (*Pluviorhynchus obscurus*).

In the small bays in and near the Hokianga Harbour on 27/12/37, New Zealand dotterels were quite numerous and many had young birds on the wing. One nest with three eggs was found actually on the fringe of a large colony of white-fronted terns (*Sterna striata*). The nearest tern's nest was only four yards away.

At Mangawai Heads on 24/12/39, one nest containing two eggs was found. It was in open sand away from all vegetation and had a lining of fragments of shell neatly arranged at the bottom of the depression. The "hollow" which serves this dotterel as a nest is much deeper and more cup-shaped than that of the banded dotterel or any other bird nesting in similar surroundings. The female of this particular nest gave the best exhibitions of the broken wing trick I have seen.

The usual call of this dotterel is "twit" delivered with a "hiccup." Sometimes it is enlarged to "twit tu-u-u," the latter part being tremolo. When annoyed it utters a toy-spring-like noise of "whirp! whirp!"

Six pairs were seen at Pakiri on 28/10/40, but although in breeding plumage, only two were actually nesting, though a discarded egg was found.

Eight pairs were present at Mangawai Heads, 24/11/40. One pair had two youngsters on the wing. Of the others, only one pair had a nest and that contained one egg. The others had probably lost their nests as three washed-out eggs were found in different places.

CASPIAN TERN COLONY.

By Crawford S. Pennycook, Timaru.

Notes on the breeding of the Caspian tern (*Hydroprogna caspia*) at Washdyke Lagoon, Canterbury, are:—

Sept. 9, 1947.—About 20 Caspian terns were noticed standing on the western or lagoon slope of the shingle bank between the sea and the lagoon. On investigation I found many hollows in the sand, lined with small stones or small sticks, and a few feathers. Only one egg was found, about the size of a large hen egg, and fawn coloured, with brown spots and grey splotches.

Sept. 13.—Counted 25 birds and 9 eggs. Each nest containing eggs, had either three or two eggs.

Sept. 21.—Many more birds in the colony; 45 eggs, most nests now containing three eggs (a few with two).

Sept. 27.—40 Caspian terns and 64 eggs counted.

Oct. 4.—Found first chick in a nest with 1 egg. Counted 55 birds, 34 nests and 80 eggs. Bad weather prevented further observations till mid-November.

Nov. 15.—Noticed several eggs and one newly-hatched chick, while 20 to 30 half-grown chicks ran into the sea at my approach.

A new colony of Caspian terns was found on the shingle bank in August, 1948.

Aug. 31, 1948.—Counted 20 birds, but no eggs as yet, although there were several nests under construction.

Sept. 6.—Signs of high seas having swept over nests mentioned in August. Only two nests remain, both with three eggs. Also found two loose eggs, supposed to be washed out of nests by high seas. Other birds have gone further down the spit and started another colony. (Colony 2.) Counted 20 birds in this colony and six nests containing one and two eggs. Also about seven nests under construction.

Sept. 8.—Colony 1: No sign of colony or nests. Indications of high seas having covered nesting site. Colony not being resumed. Colony No. 2: No sign of original nests, these having been washed away in high seas, but new colony started on same site, four nests with one egg. Also several nests with no eggs; 20 birds counted and 50 white-fronted terns (*Sterna striata*) besides Caspian terns.

Sept. 10.—The site of the original colony still deserted but the second sitting at the second colony more successful, there being about 45 Caspian terns and 16 nests, eight with eggs and eight without. Only 10 white-fronted terns seen.

Sept. 11.—The number of Caspian terns reduced to 35 but 50 odd white-fronted terns were at rest on the shingle in the immediate neighbourhood.

Sept. 13.—Now only 25 Caspian terns and seven nests with eggs.

Sept. 15.—Fifteen Caspian terns and 7 nests, but several eggs found with the shell broken, a hole about one inch across having been made in one side of each egg.

Sept. 17.—Still 15 Caspian terns and seven nests.

Sept. 19.—Only four nests left, with two eggs in each. No sign of any broken shell about the nests.

Sept. 21.—All nests and eggs washed away by high seas. Saw one Caspian tern hovering over the site of the colony.

Sept. 23.—No sign of Caspian terns anywhere on beach or lagoon. Colony not resumed during the following fortnight's observations.