

Photography in the Swamps: The Black-fronted Dotterel

By C. E. BRYANT, Melbourne, Vic.

The Black-fronted Dotterel must be one of the most familiar of swamp or riverside birds—even to casual observers of life around those areas. It is not always known by its proper name, however, and, to a number of local names, I have recently heard added those of mud-plover and creek-tit. This last, of which I was advised by Mr. P. A. Bourke, of Gilgandra, N.S.W., is an unfortunate one in its suggestion of connection with a passerine form. But creeks and mud are in order, for along the muddy banks of streams or water-holes is the bird's habitat. It is essentially a fresh-water bird as compared with the Red-capped species which frequents the sea-shores. It is really the latter bird that is somewhat confined in habitat, however, for the Black-fronted Dotterel is very general in distribution and only stops short of actually nesting on the beaches. Jones records (*Emu*, vol. XXVII, p. 277) both species nesting together, and each feigning injury to draw the other bird away from its eggs.

The Black-fronted Dotterel breeds from September to early January, with the maximum breeding in November and December. Cayley (*What Bird is That?*) states that in the north breeding takes place during what are autumn and winter months. Such breeding, when it occurs, is probably, however, influenced by rains, and Cayley's statement is evidently based on seasonal records included in Mathews' *Birds of Australia*. Three eggs are the usual and almost invariable clutch.

Cayley and others include Tasmania in the range of the species without qualification, but apparently it is rare, or merely accidental, there, as recorded by Campbell, Littler and others.

Dotterel eggs in relation to the site chosen for depositing them have always been a subject for comment, as they are often difficult to find because they become assimilated so well with the surroundings. The dried mud of stream or pond-side is a favourite locality, but often the eggs are laid on short-grassed paddocks. Rarely is there any nearby cover, the birds requiring a wide and uninterrupted view which enables them to see approaching danger and leave the eggs. A few years ago, however, I was shown a clutch of eggs in grass some inches in height, which the bird approached much more by direct flight than is usual, evidently on account of the situation. There are records of Dotterels "nesting" on railway tracks and roads, whilst one bird chose the unusual site of accumulated debris in the guttering of the roof of a shed. Certainly comfort is not



Black-fronted Dotterel at its eggs.

Photo. by C. E. Bryant.

taken into consideration. In December, 1940, a "nest" was shown to me in a municipal dump of the rough materials excavated for road-making purposes.

The materials referred to were being used as filling in an area immediately adjoining a sports ground, and throughout the week-ends, at least, the Dotterel was kept continuously away from its eggs by nearby players and spectators. Even in the last stages of incubation that aspect appeared to be of no consequence, as despite the eggs' being left unattended so long, the young hatched safely.

The young are nidifugous, and, drying out extremely quickly, are able to run speedily and well within a few hours of hatching. Suddenly they will squat and remain motionless, when they become even more difficult to find than eggs. Numerous accounts and photos. illustrating the concealment pattern of young Dotterels have been published.

Continual accounts of how long a bird-photographer sat cramped in a hide awaiting his victims must pall, so I will make no reference to my "exploits." There appears a good deal of individuality with Black-fronted Dotterels, some returning readily to face the camera, but most being very suspicious and wont to become agitated easily even after settling down. Minor observations that I have made whilst watching the species from a hide are that both birds brood, although one bird usually does by far the most sitting; that the male often becomes very persuasive in endeavouring to drive the hen back to the eggs; that there is sometimes a noticeable disparity in size between a pair of birds; and that the species uses the feet, more often than the bill, to roll the eggs into a changed position. That may account for eggs often being covered with mud. Jackson (*Cat. Ool. Coll.*, p.35) says that he had known of birds deliberately rolling their eggs in mud to extend the camouflage and protect the eggs from observation. I have noticed that Dotterels enter into the water on very hot days even to the extent of wetting the plumage, but, although I believe it may often be the case, I cannot say, from my observations, that such an action is always preliminary to cooling the exposed eggs, as has been recorded. The birds "bathe," on some occasions apparently for their own convenience and comfort only.

The sexes are generally similar, although there is sometimes the slight size difference above referred to, and slightly less black on the breast of the hen. With young birds the band of black is somewhat tardy in forming, although otherwise black markings appear early in the chicks' growth.

Finally, although swamps may not be said to be the exclusive haunt of the species, there is certainly sufficient in its economy to justify the association, and few swamps exist where the curved and graceful flight, the speedy running, the queer bobbing motions, the exaggerated injury-

feigning, and the characteristic call of this Dotterel may not be seen and heard. Particular birds seem to be very local and are often confined to small water-holes and dams.

Birds of the Poor Knights

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I propose in this paper to give an account of the present status of the avifauna of the Poor Knights, from observations made during a visit to the islands in November, 1940. A party, consisting of Major R. A. Wilson, Messrs. Graham Turbott and Peter Bull, and myself, were enabled, through the courtesy of the Lands and Survey Department, to camp, from November 24 to December 2, on Aorangi, the southern island of the group. I am unaware of any previous complete account of the birds, so that comparison with past conditions is not possible, although, on account of the past history of the islands, that would be most interesting.

The Poor Knights lie about 15 miles off the coast at North Auckland, New Zealand. The group consists of two main islands separated by a gap of a quarter of a mile—Tawhiti-Rahi (318 acres) to the north, and Aorangi (163 acres) to the south—together with several smaller rocky islets a few acres in area. The present paper is concerned solely with Aorangi, which is of rhyolitic formation roughly a mile long by half a mile wide. More-or-less vertical cliffs, ranging from several hundred feet in height on the west and south to 15 or 20 feet on parts of the north side, descend sheer to deep water on all sides, the main part of the island being a rough, high plateau, with a broad open valley descending to the north almost to sea level. The island is completely covered with a maritime type of forest and scrub similar to that of the Chickens Islands. There is no swampy or moist ground on the island, the only water (at the time of our visit) being seepage into rock pools on the foreshore.

In pre-European days the Maoris occupied the island in fair numbers and remains of such occupation are still to be seen, in the open valley to the north-east, in the form of walled terraces, now, of course, completely overgrown and in many cases collapsed. The Maori occupation came to an end about 1820, after the massacre of the owners by a raiding party from the mainland. The *New Zealand Journal of Science and Technology*, vol. 8, contains a full description of the islands and a history of the Maori occupation, by Fraser. Since the massacre of the Maori inhabitants the islands have remained uninhabited, but pigs were left behind and soon became very plentiful, over-running the island and taking heavy toll of the burrowing petrels and of the tuatara lizard. The large land snail (*Placostylus hongii*) was com-