

The New Zealand Dotterel



A New Zealand dotterel and one of the few dotterel chicks which managed to hatch last season. It will still be tough and go as to whether this chick will make it to adulthood.

Photo: Brian Chudleigh

Fewer than 1300 New Zealand dotterels are left in the world, and their numbers have been slowly declining for the last 20 years. Probably the main reason why the population has suffered is the fact that its choice of breeding ground — a sandy beach with a nearby stream — is also popular with humans. Tauranga branch member Brian Chudleigh has been looking at the problems the dotterel and other shore birds are experiencing on our coasts.

Although we recognise the fact that wetlands and forests are diminishing, along with their inhabitants, only recently has attention begun to focus on what is being done to our sandy shoreline. My years of wandering the Bay of Plenty coastline watching and photographing birds has revealed an alarming lack of breeding success for the New Zealand dotterel, as well as problems for other birds.

In the North Island the dotterel is a bird of sandy, ocean beaches and estuaries, breeding mostly just above the tide where it lays three well camouflaged eggs in a shallow depression in the sand, or occasionally in gravel or short grass. Often it nests very late; around Tauranga Harbour it is rare to see eggs before late October and it is frequently November before the clutch is complete. The eggs take four weeks to hatch and during that period they must survive a multitude of human hazards.

Fishing, swimming, boating and surfing bring people on to the beaches as the weather begins to warm up in late spring. Few people notice the small brown birds running around on the sand and even fewer see the well disguised nests among the flotsam on the sand.

Like most birds which nest on the ground, the New Zealand dotterel leaves the nest when danger threatens. Even if people are as far away as 100 metres, they will keep a bird away from its eggs so that incubation cannot continue. Although the eggs may not be walked on, taken or washed away, they probably will not hatch in areas actively used by people. The eggs cool down or overheat while the adult is off the nest.

Motorcyclists and off-road vehicles are an added hazard to these specialist shorebirds. Some enlightened countries have banned such vehicles from anywhere but private property and certain roads set aside for the purpose. In New Zealand, only Mangonui County in the far north of Northland bans vehicles from many of its beaches where New Zealand dotterel breed. But generally what few restrictions exist seem not to be enforced and these vehicles are tearing up

the most isolated beaches, making breeding impossible for birds. Even isolated Matakana Island's long ocean beach is regularly carved up by vehicles.

A further contribution to the dotterel's woes is a massive increase in black-backed gull numbers. About 1000 pairs of gulls now nest on Matakana Island, usually further back from the edge of the tide. Predatory species that they are, they usually pick off most of the few dotterel chicks which do hatch. Banded dotterels have given up trying to nest on the northern end of Matakana Island, although New Zealand dotterels have not given up — however I have not seen a chick in years. Oystercatchers still succeed because they are more than a match for the gulls.



A dotterel nest, Matakana Island. What chance do our sandy coastline birds have against these odds? Photo: Brian Chudleigh

White-fronted terns nesting on Tauranga Harbour during the 1987-88 season were under siege from the black-backs. Half a dozen pairs of breeding gulls had all but wiped out all the chicks of 100 pairs of terns at my last visit. All I could find were two tern chicks.

Buildings close to the shoreline have put pressure on birds, and the fact that sand has been used dredged from the shores of Matakana Island is causing serious erosion. At one time the Sulphur Point reclamation was a fine man-made habitat for nesting birds, among them half a dozen pairs of New Zealand dotterels, but it is years since they have bred, thanks to the motorbikes and four-wheel drives which disturb them.

Finally, human attempts to halt erosion by planting marram grass have affected the dotterels adversely. Dotterels like to nest where they have 360 degrees visibility but the existence of marram has forced them into areas where their eggs are prone to being washed out in storms.

Why, if New Zealand dotterels are not dramatically declining in numbers, is there any reason to fear for their future? Quite simply, the reason why dotterel numbers have only declined slightly in 20 years is because it is a long-lived bird — one colour-banded bird was still alive last year and known to be more than 35 years old. It is thought they average about 20 years of age.

Unless some way can be found of improving their breeding success, we may find one day soon that the New Zealand dotterel's numbers drop alarmingly. 🦋

Success

For the past two summers Waikato Forest and Bird and the Department of Conservation have paid a warden to keep people, dogs and vehicles out of the Wharekawa Wildlife Reserve on Coromandel Peninsula. The warden redirects people and their dogs to other parts of the beach and a rope fence keeps vehicles and the more inquisitive people out. This small area has produced 15 dotterel and 19 oystercatcher fledglings in two years. In the years before this no chicks were successfully raised.

Failure

Omaha spit near Warkworth is typical of most dotterel nesting areas — plagued by off-road vehicles, dogs and high numbers of people during the nesting season. This site is also an important dotterel flocking site during the winter with 50-60 birds gathering there. Few eggs hatch and those chicks which are produced rarely survive the continual disturbance.