

Disturbing dotterels – problems in the North Island

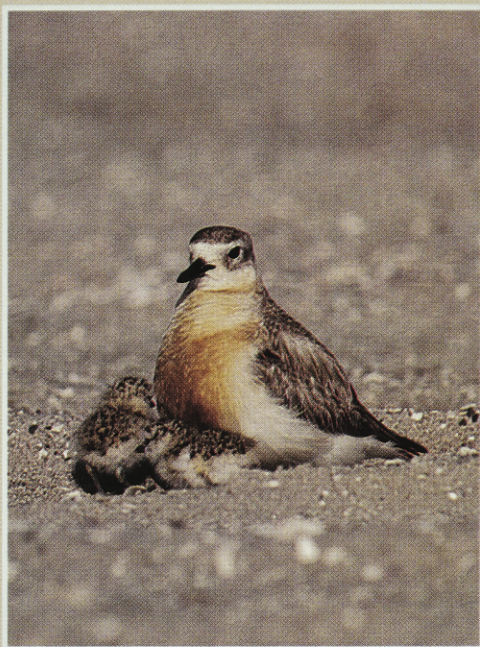
by ANDREW CUMMING, PETER JENKINS, and JOHN HAY

WATCHING NEW Zealand dotterels trying to nest on a popular bathing beach is like watching a hedgehog trying to cross a busy road.

Success is not expected.

At Ohui beach, Coromandel Peninsula, four pairs of this threatened dotterel were doing their best to breed on the flat open sand adjacent to the creek mouth. They weren't having much luck. Seen from a hide in the sand dunes, group after group of beachcombers, picnickers, fishers and swimmers strolled, drove or ran through the dotterel nesting area. Each disturbance drew the same response from the birds.

The incubating dotterel surreptitiously left the nest, then with legs winding frantically, raced across the sand in front of the oncoming people, attempting to lead



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The nests of the northern dotterel populations are often no more than a depression in the sand lined with bits of grass or shell.

them away from the nest. The beachgoers glanced at the bird, now doing its broken-wing and rodent-run displays, but continued past its nest, an unnoticed scrape in the sand containing three well-camouflaged eggs. The dotterel continued to run in front of the people until they were 100 metres or so further along the beach. With the danger gone, the bird was then able, finally, to return to its nest and its delicate eggs. This time no apparent damage had been done. But next time an incautious foot, an accompanying dog or the wheel of a trailbike could spell disaster for those same eggs.

SUCH HUMAN disturbance during breeding may be the most serious problem currently facing the northern populations of this endemic plover. Like most adult shorebirds, adult dotterels appear to suffer little predation because they roost and nest in the open where most approaching threats can be seen and avoided. However, threats that cannot be seen, such as fishing set nets and shotgun pellets, can take their toll. Two adult dotterels recently died at Waipu after becoming entangled in a stray fishing net.

Although dotterels are vulnerable to deliberate hunting, the major human impacts in recent times are reduction of nesting habitat and disturbance during breeding. Northern populations of dotterels prefer to nest on sandy beaches in open areas where vegetation is low and sparse. Such areas are often formed by the erosion of mobile sand dunes or are areas at the mouths of streams and estuaries subject to periodic flooding during high tides and storms. Thus the typically open tips of sandspits and the verges of stream mouths are the sites favoured by nesting dotterels.

Erosion of mobile dunes is also caused by the wind, which may form open areas within the dunes and blowouts in the foredune. Again, these areas are preferred nesting sites.

Regrettably, the mobile dunes at most New Zealand beaches are far from pristine. Visiting the beach is one of the most popular New Zealand recreations. Consequently many dune areas have been developed or at least modified. Holiday homes and resorts have sprung up along the coastline, particularly since the 1950s and 60s. Dunes have been stabilised with introduced marram grass to protect coastal

Minding the dotterels

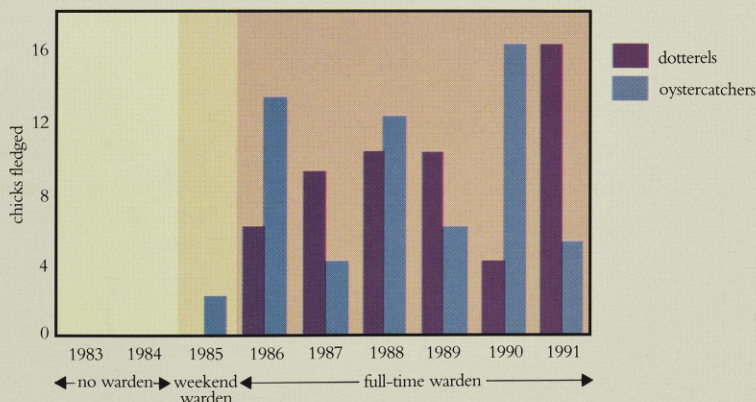
DOTTEREL breeding areas are very vulnerable to human disturbance but they are also relatively easy to protect. The first breeding area to be protected with a fence and a warden was in 1985 at Opoutere on the Coromandel Peninsula (see *Forest & Bird* August 1989). The protection was financed by the Waikato branch of Forest and Bird.

Protection schemes have also been successful at Waipu Spit and Ruakaka, and Forest and Bird field officers Ann and Basil Graeme and Fiona Edwards have taken the protection methods to additional beaches such as Ohope, Maketu and Omaha sandspits often

getting local schools and members of the community involved. Protection can be organised in different ways: by demarcating nesting areas with string or wire, posting educational signs, marking access paths or providing a warden to keep people and vehicles away.

The area from which people are excluded need not be extensive nor the period prolonged. The birds do not require the whole beach to themselves and the colonies need be protected only during the breeding season. The schemes also help to educate visitors about the dotterels.

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The success of protection areas for shore breeders can be seen in this table showing the numbers of New Zealand dotterels and variable oystercatchers fledged at Opoutere 1983-1991. The two species regularly nest side by side.