## OSNZ/Birding Wanganui

## Field Trip Report: Moana Roa and Rangitikei R estuary, 13 September 2008

On Saturday 13 September 2008, four members of Birding Wanganui (Jocelyn and Ian Bell, Esther Williams, and Peter Frost) joined 14 members of Manawatu Forest & Bird on a field trip to Moana Roa and the Rangitikei R estuary. The main object of the trip was to see the Banded Dotterel that nest here (Figure 1). The area is accessed from the car park at the end of Parewanui Rd on the northern side of the Rangitikei River.

Unlike the area further north, where the high dunes start close to the sea, Moana Roa has a series of low dunes and a saltmarsh flat between the older high dunes and the sea (Figure 2). This zone varies in width from about 250 m opposite the car park, to almost 500 m near the estuary 2 km away. The whole area south of the main track from the car park to the beach covers about 63 ha, of which 21 ha are saltmarsh and drainage channels. The low dunes are interspersed with irregularly-shaped pebble- and shell-filled hollows ("pebble slacks"), ranging from about 10 m² to more than 2000 m². The larger pebble-filled depressions are located mostly in the northern section, closer to the car park. Those further south are smaller and appeared to be encroached by marram and other dune grasses or, close to the river, filled with silt and supporting saltmarsh plant communities. The inland high dunes are largely covered with pine (part of Santoft Forest).







Figure 2: View across Moana Roa from Parewanui Rd car park.

Most of the Banded Dotterel were concentrated in the northern section. After everyone had left in the early afternoon, I counted 34 birds spread out over the saltmarsh and adjacent pebble slacks. At least one other pair was also present, closer to the Rangitikei R, but was not counted at this time as these birds were nesting (see below). Earlier tallies, made when the whole F & B group walked down to the estuary and back, gave 15 and 22 birds respectively.

Only one nest was found, largely accidently, when I walked over to a bird standing on a small mound of sand. As it ran off, I stopped, looked around and saw a nest with two eggs directly in front of me (Figure 2, 3). The nest was a simple scrape partly filled with broken seashells. It was situated close to a set of vehicle tyre tracks, showing how potentially

vulnerable the nests can be to off-road vehicles. Many of the pebble slacks at Moana Roa had been driven over, though how long ago is difficult to determine. Clearly, not everyone who drives on to these dunes is heading simply to the beach or estuary.



Figure 3. Banded Dotterel nest site in a pebble slack. Note the vehicle tyre tracks.



Figure 4. Banded Dotterel nest with two eggs.

A brief check on this nest later showed that the bird was not incubating but simply standing by, on guard. Banded Dotterel only start incubating after the second or third egg has been laid (Heather and Robertson, 2005, The Field Guide to the Birds of New Zealand, 3<sup>rd</sup> edition. Viking, Auckland, NZ). Apart from calling 'pit' loudly at my presence, accompanied by some running back and forward, the bird was relatively undemonstrative. I did not see its partner. From my observations later in the day, I suspect that other birds had not yet started to nest or only were only at an early, pre-incubation, stage of their nesting cycle. No other pair showed the same concern at my presence or remained in the area when we moved through. By mid afternoon, almost all birds were out on the salt marsh, feeding.

Other interesting animal and plant species seen on these dunes included skylark (at least 6 males in full aerial display), redpoll (a flock of 7 feeding on the salt marsh), startling (flock of ~25 birds, also on the saltmarsh), katipo spider (*Lactrodectus katipo*), shore bindweed or nihinihi (*Calystegia soldanella*), pingao (*Desmoschoenus spiralis*), and silvery sand grass (*Spinifex sericeus*). No doubt there are others. Marram grass (*Ammophila arenaria*) is widespread, having been planted to stabilise the dunes. Other invasive alien plants noted were scattered clumps of gorse (*Ulex europaeus*) and golden wattle (*Acacia sophora*) on the low dunes, and ice plant (*Carpobrotus edulis*), pink ragwort (*Senecio glastifolius*) and very large clumps of golden wattle established on the high dunes.

It is interesting to consider the balance between wind erosion and dune stabilisation needed to maintain the pebble slacks. Some blow-out of the dune hollows is needed to keep the pebble slacks free of sand, or to expose new ones. Too much instability could result in the slacks becoming covered with sand. Conversely, completely vegetated dunes could result in reduced wind scour as the erosive force of the wind is dampened by the plants. This could result in the gradual invasion of the periphery of the slacks by plants, which in

turn trap whatever sand is moving around and, in time, also covering the slacks. This may be happening nearer the estuary, where the combination of finer sediments (some of which are probably flood deposits), greater wetness, and possibly more vigorous plant growth seems to be resulting in smaller slacks. If Moana Roa is an important Banded Dotterel breeding site, as the numbers of birds here would seem to indicate, then in addition to monitoring the birds, some monitoring of the dunes, pebble slacks, and vegetation is also needed, to track their dynamics through time.

Finally, the following birds were noted at the Rangitikei R estuary and mouth just after midday:

Black Shag	1
Royal Spoonbill	9
Spurwing Plover	11
Wrybill	1
Black-backed Gull	203
Red-billed Gull	38
Caspian Tern	3
White-fronted Tern	1

Over 75% of the Black-backed Gulls and most of the Red-billed Gulls were immature. Breeding adults of both species are at their nesting colonies at this time of year.

Many thanks to Vivienne McGlynn (DOC, Palmerston North) for leading this field trip and for welcoming the Wanganui contingent.

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