



**Dotterel Point - Pukehina, Biodiversity Management
Plan
Annual Report 2015/16**

Overview

This is the second year of operation of the Dotterel Point BMP and we have made good progress in most areas. The main feature is the spectacular dune development at the distal end. While we have not taken precise measurements, we estimate that several parts of the roped off area are at least 3 metres above mean high water springs. We made good progress elsewhere with and enlarged compost bin for iceplant and further treatment of the blackwood's - there is just one sprout left. The fence/wall along the top of the dune is doing its job and the dune front is revegetating well so that we hope to be able to remove the wall in the next 12 months.

The New Dune

The success of the dune is due to two factors, the success of the fence, and the amazing ability of *Spinifex Spinifex sericeus* and *Pingao Ficinia spiralis* to trap sand. While we have done some planting within the fenced area and at the end of the existing dune, the real growth has occurred entirely naturally. We have to reposition the fence on a fairly regular basis, and there has been a steady erosion on the inside close to the end of the high dune, this is caused largely by the growth of a flood-tide delta in the estuary which forces the water flow against the spit. Further east, the erosion is threatening to wash away two shrubby pohutukawas and a small Norfolk pine. The beneficial result of this erosion is that the harbourside beach is no longer suitable for quadbikes, so they have become less of an issue, and no longer look to use the gap between the end of the old dune and the fenced-off area.

Dotterel Point from Little Waihi showing the growth of the new dune





Dotterel Point, New Fence, September 2012 and June 30th 2015 below.





Dotterel Point July 1st 2016.

We have widened the fence so that it now encloses a larger area both on the ocean and harbour sides, but this does not impinge on its use for recreational purposes as the point itself is much wider, due we would surmise, at least in part to the amount of sand built up in the new dune.

Shorebird Monitoring

We had another good season for monitoring and our most successful season for New Zealand Dotterel with at least 8 birds fledging during the season. The point was visited 12 times, with an average of 17 birds observed, this would indicate 8 or 9 pairs, and an increase from the average of 15 observed in 2014/15. The first chick was seen on October 25th, and the last, just before fledging on February 21st. Seven fledged juveniles were recorded on February 21st. A greater frequency of monitoring visits would probably give us more precise information on fledging, but at present the once a fortnight visits do the job.

Variable oystercatcher also had an excellent year with at least 9 young fledged, compared with 5 in 2014/15. An average of 25 adult birds were observed during the season, an increase from the average of 20 observed in 2014/15.

While mammalian pests do not appear to be a major issue here, we did catch one weasel in May, we think this was responsible for a dead wrybill found earlier in the month. As in previous years, the birds have been well behaved and all nested within the fenced off area.

Dotterel Point, Pukehina - monitoring 2015-16

Date	NZD	NZD Brdg	Banded	VOC	VOC Brdg	RBG	PS	WFT	SIPO
Sep-13	12		10	28		18	1		
Sep-27	15		11	26		18			2
Oct-11	15		11	26		4			15
Oct-25	19	1 chk	11	23		5			
Nov-08	18	2 chk.	12	26	3 n				
Nov-22	16	7 chk	13	23	1 chk	9			
Dec-06	16	4/5 fldgd	11	29	7/8 chk				
Dec-20	18	1 chk 6 juv	10	25	9 fldgd	3		2	
Jan-05	31	6 fldg	12	23	6 chk 5fldgd			16	
Jan-24	22	4 juv	11	23	3 chk 6 juv	19		2+3juv	10
Feb-08	18	2 chk 5juv	9	25	9 juv	24		7	4
21-Feb	11	1 chk 7juv	10	26	8 juv	28			52
	211			303					
Averages	17			25					

Rabbits

We did our usual rabbit poisoning exercise in June, this also helps to keep the numbers of rats and mice down. There was a fairly severe infestation this year with two burrows at the distal end in the new dune area. As in previous years we use pindone laid on mats, but in order to protect the baits we use a flexible plastic cover to keep the rain off. This system worked well apart from one mat and cover being almost buried by sand following a strong blow.

Pest Plants

The major pest plant here is iceplant *Carpobrotus edulis*, During the year we made good use of teams from the Department of Corrections who filled our large 4m x2m x1.5m compost bin, and also made number of strategic piles along the harbour side. This will be removed in a final blitz in July and August, after which we hope that we will just need to maintain a watching brief. Our next target is *Dimorphotheca* which has become more prevalent and we are also concerned at the appearance of significant amounts of *montbretia* along the harbour margin.

The area close to the Surfclub is of concern, as while we made good progress in getting rid of the kikuyu grass in the *muehlenbeckia*, we now have a problem with *Oxalis pes-capra* which while it has very pretty yellow flowers, is hard to get rid of as it has a corm, and any herbicides tend to kill most of the surrounding plants as well. The Surfclub septic tank is due to be replaced later in the year, so we will hold back from any work in the area until that work is finished.

We have plans to remove the Norfolk pines, however WBOPDC are keen to do this on a gradual basis and we are discussing their gradual removal with them. We have continued to target tree lupin and purple groundsel, while we may never be rid of them, they occur infrequently.

Pukehina Surfclub

The Pukehina Surfclub have plans for a new enlarged building one feature of which will have an educational area on the ground floor adjacent to the car park. They have approached MOWS for our support on the project and for help in working out what displays would be good to have in that area. We are keen to work with them on this and assist where possible.

Plantings

While we had two working bees in 2015, only one, in August, was in the period covered by this report. Work was split into fence maintenance and planting. This was done in two areas, one inside the fence where we are looking to help the sand build in the wash-through areas close to the dune end, the other was back by the surfclub. In future we are likely to do a bit more back-dune planting, now that the iceplant is no longer a major problem.



Our new explanatory sign close to the Surfclub.

Ecological Baseline Monitoring.

This programme was started last year by our Scientific Officer, Moniqua Nelson-Tunley and is ongoing. The following is a very brief summary, full details are available in a separate report covering three of our four BMP sites.

Reptiles

Two surveys were held, in November and February with 27 and 33 individuals identified respectively. This indicates a fairly healthy population with more individuals found on the back dune than the fore-dune.

Invertebrates

The survey was started in April 2015, with a further survey done in December 2015, 59 species were identified. Details will be included in a separate report prepared by our Science Officer, Moniqua Nelson-Tunley. This is not an annual survey, but likely to be conducted every 4 or five years. A comparison will then be possible.

Vegetation

The data collected this year is for use as a baseline, and so has no particular significance on its own. As with reptiles and invertebrates, it will be subject to a separate report

Summary

Overall a very successful year with good breeding success for our two bird species, and evidence of an apparently healthy population of shore skink. We made good progress with the growth of the new dune and the removal of iceplant, but there are always new threats appearing, oxalis, montbretia and dimorphotheca being just three.

Our thanks to all our supporters and volunteers, we are particularly grateful to WBOPDC (Glenn Ayo) and BOPRC (Ryan Standen, Hamish Dean and Pim de Monchy) for their support and forbearance. We are also grateful to the Department of Corrections (Heather Johnson) as their teams are essential to getting some of our bigger jobs done. A special thank you also for Chris Ward of Coastcare, a real expert on dune plants, we look forward to working with him again next season.

Julian Fitter
Project Manager
27th October 2016.