Backdune Restoration

Partners Newsletter 1, July-August 2011







Thanks to you - our fantastic partners - and the Ministry for the Environment CEF Team, we have been able to kick off our backdune restoration project.

This newsletter will come out every two months to let you know about the project activities going on around the country and, in time, provide some indicative research results.

As you know, substantial information has accumulated over the past 1-2 decades for planting foredunes with native sand binders, however, success

with planting backdunes has been highly variable.

Whilst the key to planting coastal sand dunes is matching species to appropriate zones, identifying these zones can be very challenging. Limited information tells us that proximity to the coast and shelter are key factors in influencing survival and growth rates.

This three year backdune project is designed to tell us this and more, through site inspections, community monitoring and demonstration areas.

Community monitoring sites set up

Discussion with project partners and community groups over the past two months have identified the need for several levels of monitoring. These include:

- A method of determining baseline dune profile data and using belt transects;
- Using field based workshops to guide local community groups to undertake vegetation monitoring;
- Guidelines for comparing management techniques, such as weed control efforts;

- Monitoring the establishment of rare local native species;
- Monitoring the impact and effectiveness of restoration activities on natural regeneration.

We want your input into how best to develop and design guidelines for Coast Care groups to monitor their backdune restoration programmes. Community monitoring is already underway at Motiti Reserve (Papamoa) and the Maketu Spit. These are a first step towards developing user-friendly methods for local communities to monitor and learn from their restoration initiatives.



Community Environment Fund

"Sand dunes are one of the most compromised ecosystems in New Zealand.

The work of the Dunes Trust is helping reverse this trend." Hon. Dr. Nick Smith, June 2011



Hon. Dr Nick Smith and Counselor Barbara Donaldson (Greater Wellington) plant backdune species at Whitireia Park, to celebrate World Environment Day and annouce funding for the Dunes Trust Backdune Project. Photo: T Park



Backdune planting at Maketu Spit, July 2011. Photo: M Bergin

Backdune restoration review – recent site visits

Several sites in four regions have been inspected to date in a review of past and current backdune restoration activities.

Northland

Taipa; Waipu Cove; Ruakaka

Waikato

Tairua; Whiritoa; Whangamata; Onemana

Bay of Plenty

Maketu Spit; Papamoa

Demonstration Area: Maketu Spit, Bay of Plenty

Maketu Spit is our first
Demonstration Area. The Dunes
Trust is working with the Maketu
Ongatoro Wetland Group, the Bay
of Plenty Regional Council, Western
Bay of Plenty District Council and
the Department of Conservation.

Maketu Spit is over 4km long and is heavily modified from early clearance, grazing, vehicle use, animal pests and weed invasion. The vegetation at the Spit is typically a mix of marram, pohuehue, wiwi, exotic herb species, grass flats and pampas. There are virtually no native tree and shrub species.

Two sites are the focus of this Demonstration Area with an emphasis on restoration planting and intensive weed control. A 20-50 m wide transect has been demarcated at each site where native vegetation will dominate across the dune profile from the sea to the estuary.

Transect one (see image below) is an open site dissecting five zones from sea to estuary – the spinifex foredune, pohuehue, seaward shrub, landward shrub and tree, and wetland zones.

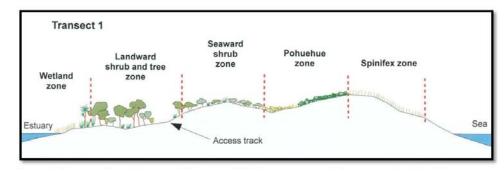
Transect two cuts through an area of wilding pines being used as a nurse crop to shelter native plantings.

Over 950 native backdune plants have been planted with the care group to date. Plants have been placed in groups to shelter each other and these are marked and mapped to ensure they can be relocated over time during monitoring and weed control.

Dune profile monitoring has also been established to determine correlation of plant species performance, whether planted or naturally regenerating, along with site characteristics.

Below: The five zones at Maketu Spit.

Image: M Bergin



Contacts

For information about reporting, newsletters, invoicing and partner involvement please contact:

Kirsten Crawford

Dune restoration Trust of New Zealand info@dunestrust.co.nz: 04 899 2337

www.dunestrust.org.nz

For technical information and to schedule field work please contact:

David and Michael Bergin

Davidbergin.erl@gmail.com: 027600 3017

Jim Dahm

Jdahm@xtra.co.nz: 0274718219

The Dunes Trust thanks the following partner organisations for their funding and ongoing involvement in the Backdune Project. We also appreciate the fantastic efforts of the community groups working on their local projects. We welcome other partners so please contact us.















Nga Tauru, Waitotara Te Kohaka o Tuhaitara