

Backdune Restoration

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Community Environment Fund



Photo: J. Dahm

The southernmost naturally occurring extensive stands of spinifex in New Zealand are found along the fore-dunes of Clifford Bay, Marlborough.

Backdune species including wiwi, nagio, pohuehue, sand carex and tauhinu are present on semi-stable sites landward of the spinifex dune.

The rare native coastal tree broom, *Chordospartium muritai* also occurs on the colluvial fans below the coastal cliffs.

Review of Southern backdune sites highlights the need for continued effective rabbit control

Some of the larger and/or less populated dune systems of the South Island are being severely affected by rabbit browse on native plants – both natural and planted stands.

This is a common issue through much of the country and is proving to be one of the most important management requirements for successful dune restoration.

Rabbit control on dune environments is challenging due to, for example:

- the limitations of some of the existing control methods for use in sandy environments;
- the use of toxins or other methods (e.g. shooting) in high use/ built-up environments;
- lack of accessible information about impacts on non-target species in coastal areas;
- the cost of continued control;
- a lack of new control options coming onto the market.

The successful rabbit control programs we have seen are those that combine a number of methods including plant protectors, repellents, and particularly, the use of pindone rabbit poison.



Plant protectors are being used widely throughout the country. At Te Kohaka o Tuhaitara Coastal Park (above) the plant protectors have been essential in the establishment of a range of coastal backdunes shrubs and trees.
Image M. Bergin

Methods being used or trialed around the country for pindone application in sand dune areas include: broadcasting pindone laced cereal pellets or carrot bait in dunes; using cereal pellets in bait stations; applying bait on to 'bait mats' - permeable pieces of wind-break cloth that make bait removal fast and effective.

Best practice rabbit control on dunelands...

We are hoping to undertake a project to specifically investigate best practice rabbit control options & case studies for dune environments this year. If you are interested in supporting this project or seeing the outcomes, please contact us.

Dunes Trust Conference March 2013

Thank you to everyone who attended, sponsored, contributed and/or spoke at our recent Dunes Trust conference in Nelson. Because of you all – it was a fantastic event!

We will be posting many of the presentations and notes about the fieldtrips and Regional Round-up activities on our website over the next couple of weeks.

In the meantime, check out our [Facebook](#) page for a range of photographs.

Profile your coastal projects or Coastcare activities to help increase knowledge about dune restoration....

One of aims of the Dunes Trust is to share knowledge about dune restoration throughout the community of interest around the country. Please email your local dunes related news items, any case studies or newsletters you have of activities in your area.

You could also encourage your local Coastcare groups to send in their profile information and we will create a webpage for them alongside other groups around the country.

For more information email: info@dunestrust.org.nz

Community-based monitoring at Kawhia

In 2010 the Onepu Charitable Trust Work Scheme in collaboration with Environment Waikato set up four trial planting sites to assess establishment and early performance of a range of coastal backdune native vegetation along the harbour margin near the Maketu Marae. See map (left).

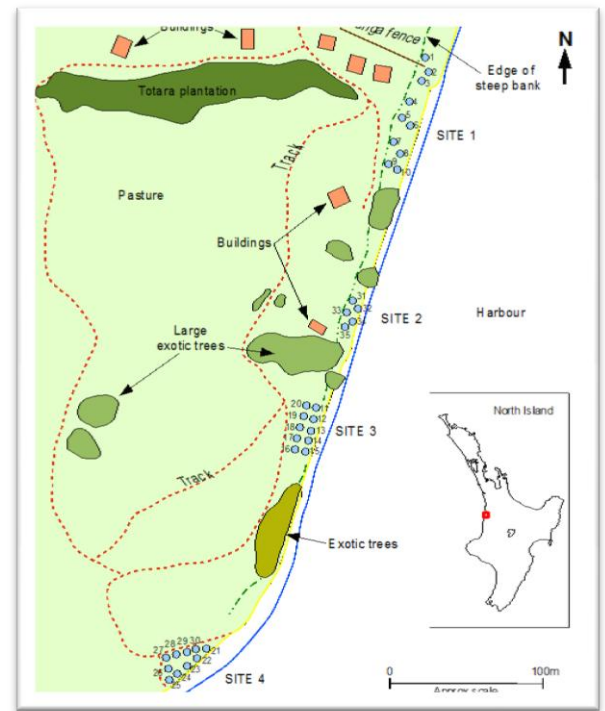
Thirty five plots were planted across the four trial sites with a range of backdune native woody shrub and ground cover hardwood species within these densely vegetated backdune/harbour margin sites. The sites were monitored regularly for the first two years.

Working alongside the Onepu Charitable Trust and Waikato Regional Council the backdunes team recently monitored the sites as part of the community-based monitoring aspect of the backdunes project.

Our interim results show that:

- Dense weed cover on Site 1 has resulted in loss of at least half of the planted backdune species three years since planting. Most successful species were akeake, karo and taupata some of which were over 1 m high.
- Of the four sites planted, Site 2 had very poor survival of all species initially and three years after planting during the February 2013 assessment there, all plants had been lost due to erosion and exposure.
- Site 3 has had the best performance of backdune native species with 75% survival of most species including akeake, karo, karamu, manuka and pohutukawa.
- The most exposed Site 4 had less than 20% survival, the only surviving species karo and akeake. As with other sites, akeake was severely wind shorn. Re-growth of exotic grass especially kikuyu was a feature of the three main planting sites, despite early weed control by the local community.

The results from these plantings at Kawhia, including feedback from Project Partners Environment Waikato and the local iwi, are being included in several articles for the Dunes Trust Handbook as part of the backdunes project highlighting key species and methods for restoration of coastal backdunes.



The terrace of Site 3 (above) with best performing planted backdune natives as a result of increased shelter. The best species (pictured above in the dense pasture grass) include akeake (*Dodonaea viscosa*), manuka (*Leptospermum scoparium*) and karamu (*Coprosma robusta*) showing good height and spread growth and high plant/health vigour scores.

Photo: M. Bergin

Dunes Trust Backdune Project Contacts

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The Dunes Trust thanks the following partner organisations for their funding and ongoing involvement in the Backdune Project.



Department of Conservation
 Te Papa Atawhai



Living Legends
 Where the field meets the forest



