

# CDVN Newsletter No 9, May 2002

Welcome to all new members of the Network. May again and no doubt many of you will be preparing for another busy planting season out on the dunes. Our No. 9 newsletter is full of interesting coastal dune vegetation information from around the country and very relevant related topics, such as ecosourcing - many thanks to all our contributors.

The last CDVN Coordinating Committee Meeting was held at the beginning of the month and I will touch briefly on some items arising from this meeting that are not mentioned by our Chairman, Harley Spence or elsewhere in the newsletter content.

As many of you already know, I am expecting a baby around the end of August. This means I will be temporarily departing Forest Research on maternity leave from that time until the end of January 2003. I will return in my position as the CDVN Coordinator on a part-time basis after that. In my absence, an internal replacement has been organised. Elizabeth Miller is a botanist at Forest Research whose main position is assisting in the herbarium. Elizabeth is familiar with the CDVN, brings a wealth of knowledge on plants and has assisted in research trials for a number of years. My duties will be divided between Elizabeth, Greg Steward and David Bergin.

Another item arising is that Landcare Research intends to join the Network as members in the new financial year. This will provide new opportunities for the Network and we will most certainly welcome the added contributions that networking with Landcare will bring. This strengthens the strong network relationship between coastal managers, researchers and community.

Whilst on networking, I presented a paper co-authored by David Bergin and myself for the New Zealand Association of Environmental Education Conference held in January, 2002. This paper deals mainly with the development and success of the CDVN and other networks within the indigenous plant species research programme at Forest Research. It also covers the role of science networks in environmental education. This paper has been positively received by the Association and the next edition of the NZAEE newsletter will include an article on the CDVN based on the conference paper. The paper and newsletter can be viewed at <a href="https://www.nzaee.org.nz">www.nzaee.org.nz</a>.

Hope to see many of you at next year's conference in Dunedin and enjoy the rest of 2002.

Diana Gainsford, CDVN Coordinator



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#### Greetings everyone

First of all I would like to thank those involved in the organising and hosting of the Coastal Dune Vegetation Network Annual Seminar last month. There was a lot of positive discussion during the event and overall that the event was a tremendous success. Well done to the horizons.mw staff and the crew from Massey University.

At the Palmerston North AGM I asked for ideas on an issue crucial to the future of the CDVN. Is it still important for the CDVN to maintain its duel focus of both an ideas sharing network AND a generator of new science? The discussion that followed was strongly in favour of maintaining our direct links with researchers in identifying and executing new scientific trials to back management actions.

There will be an increasing focus on biodiversity issues over the next few years - a "National Policy Statement on Biodiversity" is currently being written in Wellington. There may be new opportunities for increasing the funding pool available to the CDVN arising from this process. However, there are existing funding sources that the CDVN has not considered in the past. Over the next few months the financial members will decide on the most suitable approach for enhancing the CDVN's ability to remain an effective generator and disseminator of information about New Zealand's Coastal Dune Vegetation. If you have any thoughts or suggestions in relation to this issue please contact the Network managers.

The next CDVN conference is to be held in Dunedin, my feeling is that it will be one not to be missed!

Regards

Harley Spence, CDVN Chair

# Snippets from the CDVN Conference 2002 – Palmerston North...

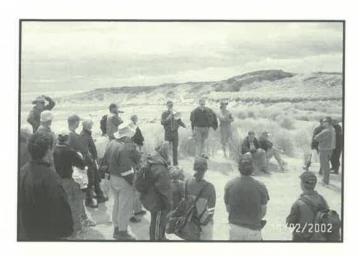
The February, 2002 CDVN Conference received a lot of positive feedback including words such as valuable, stimulating, inspiring, well-run and interesting.

#### Many thanks to:

- the hosts horizons.mw and much assistance from Patrick Hesp (Massey University), Pat McCarthy (Ernslaw One Ltd) and Grant Douglas (AgResearch Ltd)
- the sponsors horizons.mw, Environment Canterbury, NZ Coastal Society, Manawatu District Council, and Agpro NZ Ltd
- the many excellent speakers and contributors

A small profit was made for the CDVN and this money will be used for research in the region administered by conference hosts horizons.mw. Specifically, it has been earmarked for a small trial at Waitarere looking at different sand fencing materials and their porosity.

# Field day photos



Visit to the parabolic dunes between Foxton Beach and Tangimoana.

Patrick Hesp provided information on the dynamics of parabolic dunes.



Paki Paki Bush - a remnant dune forest

# **CDVN Annual Awards**

As mentioned in November 2001 Newsletter, **New Plymouth District Council** was the inaugural recipient of the **CDVN Best Coastal Project Award.** This was sponsored by **Naturally Native New Zealand Plants Ltd** and was presented on the last day of the CDVN Conference in Palmerston North.

The CDVN Best Coastal Community Group Award, sponsored by Taupo Native Plant Nursery was presented to Te Kaha Coast Care Group. Greg Jenks (Environment BOP) accepted this award on their behalf.

Back at Te Kaha, the award was presented at a ceremony held at the Te Whanau-a-Apanui School. The students of this school and other local people make up the Te Kaha Coast Care Group. This small community group has established an effective network over a 50km stretch of isolated coastline, and is dedicated to the revegetation of coastal dunes in the area.



Te Whanau-a-Apanui Area school students, each with their own laminated citation of the award. Local residents at rear - Elvis & Pat Rata (coast care group leader), school teacher, Josie & Phallo Haulangi.

Other invited guests at front - John Forbes, the Mayor of Opotiki; Mike Houghton from the Opotiki District Council; Rosemary Michie, who is a Regional Councillor and standing, Greg Jenks from the Environment Bay of Plenty.

# Advance Notice

# CDVN 6<sup>th</sup> Annual Meeting & Field Trips, 2003

The next Coastal Dune Vegetation Network Conference is to be held in Dunedin from Wednesday 12<sup>th</sup> to Saturday 15<sup>th</sup> February 2003. Our hosts will be the Pikao<sup>1</sup> Recovery Working Group which consists of representatives from the Department of Conservation. Yellow Eyed Penguin Trust, local District Councils, Otago Regional Council, University of Otago Geography Department, Mopanui Environmental & Ecological Society and the coastal Otago Runaka.

This will be a wonderful opportunity to see the unique nature of the Dunedin coastal area where pikao is considered to be an icon species for coastal biodiversity. The group is keen to facilitate greater community participation in restoration projects along this

The conference will provide the usual mix of both interesting technical sessions and field trips, and there are plans for the Saturday morning to be used for static displays and sessions open to the general public.

If you would like to contribute ideas or suggestions regarding the meeting format or would like any further information on the conference, please contact:

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diana.gainsford@forestresearch.co.nz greg.steward@forestresearch.co.nz

David Blair

dblairs@xtra.co.nz

<sup>1</sup>The difference in dialect between lwi of the North and South Island is significant. The Kai tahu use the word pikao to describe Desmoschoenus spiralis, while the North Island Iwi use the word pingao to describe this plant.

Details of the conference will be finalised in the coming few months. A more detailed agenda will be included in the October newsletter and a registration pack will follow in November:

# Other Upcoming Conferences

Coast to Coast 2002 - 'Source to Sea' Australia's National Coastal Conference

Venue: Tweed Heads, NSW

Date: 4-8 November

Web site: www.coastal.crc.org.au/coast2coast2002/

Coasts and Ports Australasian Conference 2003

Venue: Hyatt Hotel, Auckland

Date:

9-12 September

Web Site: www.coastsandports.co.nz

# **UPDATE ON RESEARCH TRIALS**

Update sheets will be distributed in July 2002 for the ongoing Difficult Sites trials:

- Oakura Beach, New Plymouth (FR360/2)
- Bethells Beach (Te Henga), Auckland (FR360/3)
- Christchurch trials (FR360/4)

#### Santoft Beach, Rangitikei (FR360/1)

This trial concluded with the April 2002 assessment. A full final report will be available in July.

Conclusions after 3 years are:

- Twice yearly application of urea encourages the spread of marram grass. Spinifex is less responsive than marram to fertiliser type, and time and frequency of application.
   Results endorse current operational fertiliser practice along the Santoft forest coastline by forestry company Ernslaw One Ltd.
- Alternate row planting of marram grass and spinifex is a viable option for introduction of spinifex. Both species are continuing to grow and spread across areas of bare sand.

Appropriate planting patterns of spinifex and marram grass were not determined in this trial and optimum planting strategies need to be developed further. Another trial will be established this winter at Santoft in two blowouts to be reshaped by Ernslaw One. Spinifex plants and marram grass sets will be provided by Ernslaw One and horizons mw. The two species will be interplanted at different spacings from the toe of the current foredune to 15 metres inland. The trial will examine species responses to sand movement and competition.

A workplan has been recently completed for the new CDVN research project, "Control of Rabbits and Hares". Workplans for "Restoration of Indigenous Plant Communities" and "Euphorbia glauca" are well underway.

#### **Control of Rabbits and Hares**

A workplan is now available, entitled "Workplan for Collating Details on Successful Control Methods of Rabbits and Hares on Sand Dunes". This will be distributed to financial members along with this newsletter. A literature search has been completed and results from this are currently being collated. Data is being and will be obtained from two trials located at Ohope and Te Henga, Auckland respectively. The planting trial at Ohope of spinifex and pingao has been assessed for rabbit damage over an 18-month period. The trial will continue to be assessed for a further 12 months, now that rabbit control has been carried out using pindone. This trial is also looking at the relationship between the extent of rabbit browsing and non-sand binding vegetation at different densities. At Te Henga an extensive

rabbit control programme is underway this planting season involving the use of repellents, pindone poison and shooting. A trial will be installed this winter looking at the effectiveness of different repellents on different species ranging from the foredune through to backdune species. The effect of repellents on the health of these species will also be observed. The need for further trials will be dependent on outcomes from the literature survey and current trials described above. Planning and establishment of such trials will be subject to ongoing CDVN research priorities and allocation of resources. As backdune and Euphorbia glauca trials are installed some rabbit control trials may be included on the same sites to broaden knowledge on species and site influences.

#### **Restoration of Indigenous Plant Communities (Backdunes)**

For this project, "backdunes" are defined as the partially stabilised dune lying immediately landward of the sand-binding zone. This project aims to promote the growth and regeneration of locally indigenous species that will minimise the cost of planting and maintenance on these sites that are degraded.

Set-up treatments will include planting patterns, species mixtures, fertiliser treatments, and shelter and weed control. Results will build on outcomes from earlier trials, now 5 years old, on the Coromandel Peninsula, Awhitu Peninsula and along the Christchurch coast. These

backdune trials are currently being reassessed and will be completed winter 2002. Eight sites for backdune trials have been proposed:

- Te Henga, Auckland
- Oakura, New Plymouth\*
- Riversdale, Masterton\*
- Pukerua Bay, Wellington
- QE Park, Wellington\*
- Christchurch\*
- Matakana Island, Bay of Plenty
- another Bay of Plenty site\*

### Propagation and Establishment of Euphorbia glauca

Several sites are planned for establishment of this sand-binding species. These are identified above\*, where they will take place in conjunction with the backdune trials. The performance of this species on a range of sites from foredune to backdune areas will be

investigated. All known information on the historic and present distribution of Euphorbia glauca will be collated and guidelines produced on appropriate methods for establishment and long-term management of the species.

## **News from the Kapiti Coast**

The Waitohu Stream Care Group has a problem at Otaki Beach where sand blows through three gaps in the foredune. It then drifts over high marram grass-dominated dunes further inland and encroaches on the stream that runs behind them.

To fix this problem, an option they are now trying is placing driftwood across the gaps to capture the sand and then planting spinifex as the sand accumulates.

In the last two months Kapiti District Council has organised the placing of driftwood across the gaps. Nigel Clarke from Wellington Regional Council has organised the erection of rows of posts joined with tape to discourage bikes from going into the area.

The photos show how much sand has accumulated after the first series of winds. Existing spinifex plants at either side of the gaps can be treated with fertiliser to encourage formation of runners which will extend on to the accumulating sand. New plants will be placed across the gaps both in front of and behind the driftwood, where deposition is not too great. Pegs marking sand levels will be put in place to measure deposition rates.







# **Technical Bulletin Sales**

These continue to sell well with bulletin No.4, "Coastal Sand Dunes - Form and Function" proving popular with high school geography teachers. The bulletin has been advertised on a flier distributed to all schools associated with the Board of

Geography Teachers. The Waikato University Department of Geography, Geography Resource Centre has purchased a substantial number of bulletins to cover likely demands and to sell on our behalf. Money from sales will be used for reprinting this bulletin.

#### Remember

All four CDVN Technical Bulletins are available from Forest Research at a cost of \$16.65 each (GST, p & p inclusive).

Orders to:

Publications Forest Research

Private Bag 3020, Rotorua

publications@forestresearch.co.nz

07 343 5899

#### **CDVN Website**

The Forest Research web site recently underwent major changes. This in turn has affected the accessibility of the CDVN web site.

Our site is no longer located at <a href="www.forestresearch.co.nz/cdvn">www.forestresearch.co.nz/cdvn</a> but at <a href="www.forestresearch.com">www.forestresearch.co.nz/cdvn</a> but at

The CVDN pages can be found under Research → Cooperatives → CDVN or Research → Sustainable Forestry → CDVN

CDVN newsletters, meeting minutes, conference reports and general information including the mission and operation of the CDVN is still available. From July 2002 we will be able to regularly update news and references.

Hardcopies of all minutes, and workplans, update sheets and final reports on research trial are sent to all financial members. For other collaborative members these may be accessed on our website.

#### FROM AUCKLAND REGION COUNCIL

-Karen Baverstock

The Long Bay Restoration Project is being extended further south along the beach this year. The reshaping is taking place on 13<sup>th</sup> June and the planting day is on 22<sup>nd</sup> June at 10am.



# **ECOSOURCING**

Many of us are familiar with the "local plants" aspect of ecosourcing but not so familiar with either the second of the key aspects outlined below or the practices that give integrity to the operation.

#### **Ecosourcing Definition:**

Practices (with regard to native plants used in gardening, horticulture, landscape design and revegetation) that conserve the diversity of nature (biodiversity) as it is expressed through genetic diversity in local native populations.

#### Ecosourcing has 2 key aspects:

- 1. using local native seed material for local plantings;
- 2. ensuring that diversity within local populations is represented when seed is collected (e.g. collecting from many individuals, collecting from wild populations, collecting from a variety of habitat areas, etc).

#### Integrity is then maintained through:

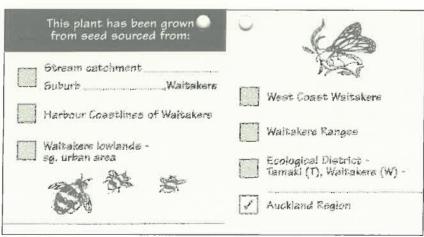
- careful management of batching and other production practices within the nursery or retail outlet so that information recorded during collection remains accurate and easily accessible;
- 4. passing of information to the customer through accurate labeling that enables informed and appropriate decisions to be made.

For comprehensive guidelines see the "Competence and Standards" section of the "Ecosourcing - Code of Practice and Ethics" publication (see below).

As well as leaflets and the publication Waitakere City Council provide labels to all garden centres or nurseries that currently stock ecosourced plants in and for the Waitakere area. The labels provide the following information:



Label Outside



Label Inside

# Ecosourcing native plants



129 page, A5 code of practice and ethics to guide collection of seedlings, propatation, labelling and selling of ecosourced native plants. (2001)



Waitakere City published this booklet on behalf of all the industry, scientific and community parties that contributed to development of the Ecosourcing Code of Practice.

The Code is intended for use by - nurseries, garden centres, seed collectors, liner growers, wholesale growers, landscapers, landscape architects, landowners, community groups, scientists, contract mangers, local authorities, government agencies, and all who plan, grow, plant, sell or distribute NZ native plants.

This publication costs \$13.00 and is available from:

Waitakere City Councilwww.waitakere.govt.nz
Fax 09 836 8024
or
Landscape Development, Waitakere City
Council
Private Bag 93109,
Henderson,
Waitakere City

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# News from the Bay of Plenty

**Mount Beach Replenishment** 

135,000 cu m of sand is dredged biennially from the Port of Tauranga harbour entrance. This year the sand will stay in the coastal system by being dropped quite near shore thus allowing the sand to gradually drift up and replenish Mount Maunganui's main beach. This accretion with new sand is a bonus to Coast Care groups who can then rapidly colonise the dunes with native plants for stability and repair human induced damage.

#### **Buffer Zones**

Greg Jenks - Regional Coast Care Co-ordinator, Environment Bay of Plenty

"These are corridors of land between the beach and the land behind, often modified by human development. The ideal buffer zone is a broad dune area with native vegetation, birds and animals. This is not only aesthetically pleasing, but also provides protection from erosion".

The BOP Coast Care Programme has just launched a campaign – "The Backyard Buffers" to educate people about this zone.

Pamphlets have been delivered to all residents adjacent to buffer zones in the Eastern Bay of Plenty informing them that these vital strips can be destroyed or damaged by:

- planting with exotic plants
- levelling dunes to put in lawns and gardens
- · creating excessive private beach accessways
- placing hard structures in the coastal reserve such as concrete or rocks
- dumping garden rubbish, which can introduce invasive weeds

# The Wonder Plant

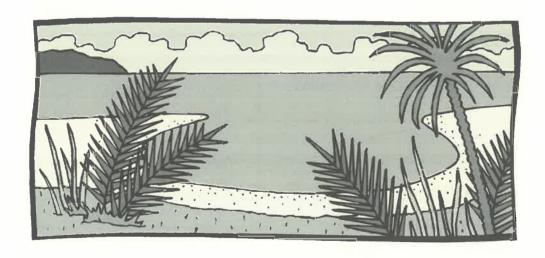
In 1995, Ruth Gadgil measured a spinifex runner at Ninety Mile Beach that had extended 8 metres into a sand blowout.

In 2000, David Bergin reported spinifex extension growth of 17 metres in one season at Bethels Beach.

At our May 2002 Committee Meeting, Chris Ferkins mentioned that he had measured a 23 metre spinifex runner at Cape Karikari.

Can we confidently predict 30 metres by 2005??

(Triffids watch out).



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