TRILEPIDEA

NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

Please send news items or events to events@nzpcn.org.nz

Postal address: P.O. Box 16-102, Wellington, New Zealand

E-NEWSLETTER: NO 27. FEBRUARY 2006 Deadline for next issue: Day 13 March 2006

Message from the President

Reading the last Trilepidea reminds me to invite everyone once again to consider writing a brief article. A glance at the Newsletter would convince anyone that there are many exciting and extremely worthwhile projects being undertaken throughout the country. In the Newsletter, there are announcements about many projects, meetings, workshops being undertaken on plant conservation. However, there are far more projects out there that we don't know much about. So do please share your experiences and ideas. We are a Network and that means we need to keep Networking.

The first announcement has appeared for the AGM Conference 'Cheeseman Symposium and New Zealand Plant Conservation Network Conference 2006'. This takes place from 20 to 22 November in Auckland. It is being held in conjunction with the New Zealand Botanical Society, Auckland Museum, Auckland Botanical Society, Landcare Research and the University of Auckland. Do have a look at the information on the web site and do please make a note in your dairy.

Talking about the Network web pages. Did you know that the site receives half a million hits every month and that we have just passed seven million hits since the site was established? That is a very large number of visitors—about 16,000 every month. Proof indeed that the site is well used and also an indicator that the Network is by far the largest NGO for plant conservation in New Zealand.

I would love to hear from anyone about ideas for sponsors. Do please contact me if you have any suggestions as to who we might approach in regard to being a sponsor of the Network. A selling point for any sponsor is the Network web site. Can you think of any person, any company or any organisation that might be approached? I am working hard to find sponsors and I do need your help. I look forward very much to hearing from you.

Professor Ian Spellerberg, Lincoln University

Plant of the Month

Plant of the month for February is rimu or red pine (*Dacrydium cupressinum*). This is not a threatened plant although as a forest-type it has been greatly reduced through widespread logging. Very few intact examples of rimu-dominated forest remain in the North Island. It is a conifer which grows up to 60 m tall and flowers from December to March. It was voted Number 26 in the 2005 Vote for your Favourite Plant poll. The Network fact sheet may be found at the following link: http://www.nzpcn.org.nz/nz_threatenedplants/detail.asp?PlantID=2156

Dacrydium cupressinum, juvenile foliage. Photo: Jeremy Rolfe.

Subscriptions due for 05/06—final reminder

Subscriptions are due for 05/06. Please ensure you have paid by the end of February 2006 to ensure you continue to receive the monthly newsletter and maintain website access.

The narrow-leaved maire tree and its conservation

Martin Conway, Titoki Nurseries, Nelson

Many people who live around Brightwater, near Nelson, are familiar with the old maire tree that stands alone in a paddock near the Wai-iti Bridge. Not many however, will be aware that this tree, which has withstood browsing and trampling by sheep and cattle, a lowered water table and encroachment of the road, is one of only five narrow-leaved maire trees (*Nestegis montana)* remaining in the Tasman District. This was not always the case. Early settlers spoke of its value for fence posts and firewood and no doubt the clearing of the forest for farming also led to its decline.

Narrow-leaved maire, *Nestegis montana*. Photo: Martin Conway.

The narrow-leaved maire is very rare in the South Island. The Department of Conservation has recorded a small number growing near Kaikoura. There is an unsubstantiated report of the tree occurring in the Pelorus Valley near Havelock.

The remaining trees at Waimea have rarely flowered over the past twenty years and no seeds or seedlings have been recorded. In 2001 the owners of the old tree by the Wai-iti Bridge, Tony and Barbara Cameron, alerted Lawrie Metcalf, a well known local horticulturalist, to the heavy flowering that was taking place. It turned out that the tree was in fact a male and it then became critical to find a female tree for pollination to take place. Two other trees in a nearby protected bush remnant also proved to be males and in any case were too far away for wind blown pollination. As luck would have it the only other known tree (one more has since been discovered) growing on a scarp over 1 kilometre away, was not only in full flower but also a female. This presented both an opportunity and a challenge because there was no possibility of the pollen from the male tree blowing in the wind this far.

At this stage nature was given a helping hand. Martin Conway, with the help of Lawrie Metcalfe, cut male flowering branches from the old maire tree and tied them high up in the female tree in the hope that the pollen would fall down on the female flowers and pollination would take place. This turned out to be very successful. The seed did set, eventually ripened, and was collected in a net around the base of the tree.

So far so good—but would be seed be viable and would it germinate? Two nurseries specialising in growing New Zealand native plants sowed the seed in 2002 and although germination was slow the strike was high and by 2005 several hundred seedlings are ready for planting out. In late winter 2005 more than 200 trees were distributed, free of charge, to the Department of Conservation, Tasman District Council and private landowners for planting in reserves, parks, QEII National Trust covenants, farms, and other sites within the Wai-iti Valley catchment.

The narrow-leaved maire tree restoration project is an example of practical conservation. It is ironic that although three of the five trees have legal protection, this alone has not prevented their steady decline. Rare plants can survive, or better increase, only if their habitats are well managed, and this requires protection from farm animals, control of animal and plant pests as well as replanting.

This is the first to be adopted by the Tasman Environmental Trust (a private conservation trust) under its programme to restore regionally rare plants to the Tasman District. To learn more about this initiative, contact Martin Conway, phone (03) 542 3712.

Funding round for Project Crimson closes 1 March 2006

Project Crimson has an annual funding round to support groups which are committed to the protection and enhancement of pohutukawa and rata trees. Our aim is to help get these projects started and then to watch them flourish with local support. Past applicants include public organisations, community groups, conservation groups, individuals on private land (with a public value), marae groups and even sporting groups.

Applications close **1 March this year**. Following that, a sub-committee comprising members of the Project Crimson Trust, meet to discuss who the successful applicants are. Projects must be able to demonstrate some public value, and must be focused on the protection of pohutukawa and rata. Funding can be sought for possum and pest control work, research, pohutukawa and rata trees, fencing, general maintenance, propagation materials, weed control and other activities related to the protection and enhancement of the trees.

Northern rata, *Metrosideros robusta*. Photo: Jeremy Rolfe.

Project Crimson works hard to spread the funding and ensure a good balance between pohutukawa and rata. People and/or organisations looking for support from Project Crimson should fill in the application form which can be found on www.projectcrimson.org.nz and send it before **1 March 2006**. For more information call Bridget on 027 224 7018 or email Jenny@projectcrimson.org.nz

Network Conference 2006

When: Monday 20 – Wednesday 22 November 2006 (including field trip)
Where: Conference Centre, University of Auckland

This years Network conference will be the Cheeseman Symposium 2006 – to celebrate the centenary of the publication of the first full flora treatment to be published by a resident New Zealand botanist, Thomas F. Cheeseman's *Manual of the New Zealand Flora* (1906). This will be held in conjunction with the New Zealand Botanical Society, Auckland Museum, Auckland Botanical Society, Landcare Research and the University of Auckland. See the Network website (under Conservation info>Events>Conference) for more details.

Plant lists now on-line

Katrina Spencer, Biodiversity Officer, Department of Conservation.

More than 250 vascular plant lists, mainly for sites in the Wellington and Wanganui regions, can now be downloaded from the Network website as PDF files. In due course the Network website will have an extensive store of plant lists from throughout New Zealand that people can freely access and download.

If you would like to contribute to this ever expanding database of plant lists please send a Word document or preferably a PDF of the plant list/s to Katrina Spencer (kspencer@doc.govt.nz). Please make sure that each plant list has a detailed description of the location, names of those who compiled the list, date of preparation and finally the size of the PDF file.

Poor Knights spleenwort on the Chatham Islands

In mid-February botanists Peter de Lange, John Sawyer and Amanda Baird discovered three populations of the Acutely Threatened/Nationally Endangered Poor Knights spleenwort (*Asplenium pauperequitum*) at Point Somes and north of Ocean Bay in the remote northwestern corner of Chatham (Rekohu) Island. The elusive fern, long believed endemic to the Poor Knights and Mokohinau islands located some 1280 km NNW of the Chatham Islands, was first recognised from the Chatham Island archipelago last May from fern specimens that had been collected by Mark Bellingham from the Forty-fours during February 2005.

Asplenium pauperequitum. Photos: John Sawyer.

"There is nothing singular about the Forty Fours from a geological, floral or faunal perspective" said Peter de Lange, "So we always suspected that Poor Knights spleenwort, should be on the other islands of the archipelago". De Lange who heads a team researching the taxonomic and conservation status of the Chatham Island *Lepidium oleraceum* complex, asked his co-workers, Wellington Department of Conservation (DOC) botanist John Sawyer and Chatham Island DOC Area Office botanist Amanda Baird to keep an eye out for the fern. "We always suspected it had to be elsewhere on the islands but that it had been overlooked, because it has a superficial similarity to shade-forms and juveniles of the very different Chatham Island endemic *A. chathamense*" said John Sawyer.

The first discovery was made at Point Somes, the north western most extremity of the main Chatham (Rekohu) Island. De Lange discovered what he thought was the fern within minutes of looking. Sure enough, the plants grew intermingled with young A. chathamense. However, the distinctive jet-black wire like stipes and rhacis, simple, scarcely divided, thick and glossy deltoid fronds, and sporangia set well back from the pinnule apices readily set this fern apart from A. chathamense. About 30 plants and numerous prothalli were soon found at two sites near the Point. Plants were found only on horizontally bedded Chatham schist, in the darkest overhangs. Later on last week a further smaller population in the same type of habitat was located at an unnamed point north of Ocean Bay. De Lange, Sawyer and Baird now predict that the Poor Knights spleenwort might prove to be a locally common component of the cliff and crevice vegetation in suitable areas of the main Chatham Island. Resident botanist Amanda Baird is delighted with the finds. These discoveries are a considerable boon toward the conservation of what is still a seriously threatened fern. In its other recorded habitats the species is now believed extinct on the Mokohinau Islands, and it is not faring well on the Poor Knights Islands. These discoveries on the Chatham Islands—where nobody would have thought to look—heighten the possibility that this fern will be found elsewhere in similar rock habitats in New Zealand proper.

Community-based Native Plant Nursery being researched for Wanaka

The Sargood Bequest has recently contracted a project manager to investigate the potential of setting up a native plant nursery in Wanaka. The objectives of the trust are to; create a native plant nursery for reforestation, provide education and create a how to guide for other community groups wishing to do the same thing. All seeds will be locally sourced using core staff and volunteers from the local community. They want to ensure that all plants from the Nursery are appropriate for the local condition. Education is very important to the trust; they plan to include as many schools, polytechnics and universities in the project as possible.

Project Manager Gerald Davies said "we don't want to reinvent the wheel and are planning to work with as many other groups as possible to avoid this, we want this to be have a strong community presence". The projected being named Te Kákano which means the seed is in its very early stages and is looking for support from people in the industry who have done it before. "We have the plan of what we want to do and how, we are now trying to figure out how much it's all going to cost. If anyone could provide us with cost analysis figures or where to get them we'd be on our way" said Davies.

If you are able to assist with information, or would like to know more about this project, please contact Gerald Davies. Contact Gerald Davies: Te Kakano, PO Box 657 Wanaka, geralddavies@xtra.co.nz, +64 21 1850471

Can you help provide images of Dicot trees and shrubs for the website?

We are seeking images for the following plant species to plug gaps in the Network website fact sheets. If you can help, please send them through to the Network (info@nzpcn.org.nz) or to John Sawyer (jsawyer@doc.govt.nz).

The list of Dicot trees and shrubs for which images are required:

Alseuosmia banksii var. *linarifolia*
Brachyglottis bifistulosa
Coprosma pseudociliata
Dracophyllum longifolium var. *cockayneanum*
Dracophyllum longifolium var. septentrionale
Dracophyllum palustre
Dracophyllum pearsonii
Dracophyllum politum
Dracophyllum rosmarinifolium
Dracophyllum townsonii
Dracophyllum urvilleanum
Gaultheria rupestris
Hebe angustissima
Hebe benthamii
Hebe brachysiphon
Hebe cockayneana
Hebe colensoi
Hebe corriganii
Hebe crenulata
Hebe divaricata
Hebe leiophylla
Hebe macrantha var. *brachyphylla*
Hebe mooreae
Hebe murrellii
Hebe paludosa
Hebe recurva
Hebe rupicola
Hebe stenophylla var. *oliveri*
Hebe stricta var. *lata*
Hebe strictissima
Hebe truncatula
Helichrysum selago var. *acutum*
Heliohebe hulkeana subsp. *evestita*
Heliohebe pentasepala
Homalanthus polyandrus
Olearia colensoi var. *argentea*
Olearia lyallii
Olearia oporina
Olearia polita
Pimelea concinna
Pimelea crosby-smithiana
Pimelea poppelwellii
Pimelea sericeovillosa
Pimelea urvilleana
Pomaderris amoena
Solanum aviculare f. *aviculare*
Sprengelia incarnata

Threatened plant calendar for sale

MWH - New Zealand have recently published a beautiful threatened plant calendar for 2006. This was prepared in conjunction with the Network. MWH is supporting the New Zealand Plant Conservation Network in 2006 in its aims to encourage regional threatened native planting initiatives within local communities. As a staff-owned engineering and environmental consultancy much of their work involves the restoration or mitigation of planting as part of infrastructure development. This means that many areas of their business can play a part in encouraging the planting of threatened species. Copies of the calendar are available for sale from the Network price $5 incl. postage. Email the Network at info@nzpcn.org.nz and post cheques to P.O. Box 16-102, Wellington.

Hebe computer workshop – Wellington

Mike Bayly and Alison Kellow will be demonstrating their computer-based identification key to Hebe on March 12th (Sunday) 2006. This workshop will be conducted within the Kirk Building at Victoria University, in two sessions: morning, 10 a.m.–noon; afternoon, 1–3 p.m.

Computers, microscopes, and specimens of *Hebe* will be provided. Please feel free to bring along your own specimens of Hebe to identify, but note that the key is for wild-collected *Hebe* and not garden cultivars. Places are limited, so please book with Leon Perrie (Email: leonp@tepapa.govt.nz, Telephone: 04 381 7261).

Plants as Infrastructure – Royal New Zealand Institute of Horticulture Conference, 24–25 March, 2006

You are invited to attend a conference at Unitec, Mt Albert, Auckland, 24–25 March, 2006. *Unitec New Zealand*, Auckland local government, the *Royal New Zealand Institute of Horticulture* and the *New Zealand Institute of Landscape Architects* are coming together to consider the vital topics of plants as infrastructure in our cities. The conference will showcase several green infrastructure projects, with a focus on matching theory with innovation best practice.

Providing 'green infrastructure' systems to fulfill both biological functions and cultural values is an important goal of the discipline groups invited to this conference. The conference is being held at Unitec and will focus on issues of interest to greenspace managers, landcare groups, planners, landscape professionals, horticulturists, ecologists, students, educators and local body politicians. Presenters will explore the issues from a range of scales, from broad international perspective from our keynote speaker Professor Joan Nassauer down to specific technical subject areas of rooftop gardens, stream-side plant trials. There will be examples of a broad range of projects in Auckland, such as large scale projects designed by Peter Walker, a wetland system at Waiatarua, and also a focus on providing successful interdisciplinary teams to manage successful projects.

The conference is on Friday 24 and Saturday 25 March at Unitec New Zealand, Carrington Rd, Mount Albert. Please see our website for more details and a conference registration form: www.rnzih.org.nz. Conference enquiries to Penny Cliffin: pcliffin@unitec.ac.nz

Upcoming events

If you have important events or news that you would like publicised via this newsletter please email the Network (events@nzpcn.org.nz):

Botanical Society of Otago; Field trip to Guilds Hill near Seacliff, Warrington.

Sunday 26 February, 2006. Start time: 9:30 AM. Seacliff Scenic Reserve comprises three discrete indigenous forest remnants near the Truby King Reserve. One of these, Guilds Hill, has a distinctive coastal forest element that includes the uncommon fragrant tree daisy, fierce lancewood and at least two species of mistletoe, one of which is hemi-parasitic on the other! The hill top provides a great view to the south and a lunch spot. Come along and give your views on management options. Leave Botany car park at 9.30 am Sunday and return early to mid afternoon. Bring lunch and be prepared for untracked walking and muddy conditions. Contact John Barkla, phone: (03) 476 3686.

Botanical Society of Otago: Start of semester FREE BBQ. Friday 3rd March, 2006.

Start time: 12:00 PM. Yes, there is such a thing as a free lunch! A BBQ to welcome new botany/ ecology students and new BSO members. At the front lawn, Botany House Annex, Great King Street (across the road from the main Botany building). Sausage sandwiches and drinks provided free by the Botanical Society of Otago. All BSO members welcome! Contact David Orlovich, phone: (03) 479 9060.

Wellington Botanical Society: Field trip Saturday 4 March – Makara Foreshore Reserve

This small reserve of coastal sand-and-gravel huggers has been the focus of two BotSoc study visits in 1995 and 2001. It's time for us to revisit it. We will recheck our transect lines to see how the native plants have fared over the last five years. Weeds are a constant problem in this small reserve, so we will also be investigating whether control methods are holding them at bay. Bring all the usual gear, plus pen/pencil and a clipboard (optional). MEET: 9 a.m. just east of Karori Park bus terminal to share / organise transport or 9.30 a.m. at Makara Beach. LEADER: Dr Maggy Wassilieff, Ph 383 6100. Deputy leader Barbara Mitcalfe 475 7149. Email: zl2afp@internet.co.nz.

Botanical Society of Otago: Fish, frustules, fungi, flowers and foliage. Wednesday 15 March, 2006

Start time: 5.20 p.m. A talk by Jennifer Bannister. An investigation into the biota of an Early Miocene maar lake and its surrounding forest. About 20 million years ago a volcanic eruption near Middlemarch, formed a crater in the schist that filled with water. This type of lake is known as a maar. Sediment gradually built up on the lake floor, mainly the valves (frustules) of diatoms, where over time a finely varved diatomite formed. A forest grew up around the lake and leaves, flowers and fruits fell or were blown into the lake, sank on to the sediment and were preserved. We are trying to identify the leaves from their cuticles to build up a picture of the type of vegetation that grew there. We already have a pollen list although this is incomplete. At the Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel. Use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Rm. 215, 2nd floor. Please be prompt as we have to hold the door open, and seats fill fast. Contact Allison Knight, phone: (03) 479 7577.

Wellington Botanical Society: Monday 20 March: Evening meeting: From plant depletion to restoration – from dune erosion to accretion: native dune-plant restoration experience

Dr Greg Jenks, Regional Coast Care coordinator, Environment Bay of Plenty. Simple restoration of native dune-plant populations has yielded many surprising benefits:

- opportunities for restoring many threatened coastal plant populations (e.g. *Euphorbia glauca*, *Pimelea arenaria*, *Lepidium oleraceum* etc.;
- improved landscape appeal for residents and beach visitors;
- restored habitat for native fauna, and most dramatically;
- frequent reversal of many coastal erosion problems.

The observed rapid improvements to dune function have opened the door to exploring the many clear benefits of extensive adoption of community-led restoration of native dune species. This talk will focus on the native plants and methods used to achieve success with our many project sites, and then look forward to the wise and affordable concept of dune restoration throughout New Zealand.

Plants as Infrastructure – Royal New Zealand Institute of Horticulture Conference, 24–25 March, 2006.

At Unitec,Mt Albert, Auckland, 24-25 March, 2006. 'Unitec, Auckland local government, the Royal New Zealand Institute of Horticulture and the New Zealand Institute of Landscape Architecture are coming together to consider the vital topic of plants as infrastructure in our cities. The conference will showcase several green infrastructure projects, with a focus on matching theory with innovative best practice. Topics will include: water, weeds, trees, teams, planning, design and management. See earlier article in Newsletter.

20th New Zealand fungal foray: Westport. 7–13 May 2006

The **20th New Zealand Fungal Foray**, and the inaugural meeting of the **Fungal Network of New Zealand** will be held at the Westport Field Station 7–13 May 2006. The Field Station is run by the University of Canterbury. We will have access to the teaching laboratory (with lecture room) and associated accommodation for 36 people in 9 bunkrooms. In addition we have booked the research laboratory with a suitable workroom and 3 additional double bedrooms.

See www.ffc.canterbury.ac.nz/westport.shtml. Please complete the registration form (copies of this form are available from http://www.funnz.org.nz) and mail by 31 March 2006 to: Paula Wilkie, Landcare Research, Private Bag 92170, Auckland, New Zealand.
For New Zealand participants please provide a deposit of NZ$50 per person: Cheques payable to '**Fungal Network of New Zealand**', or by Direct Payment of NZ$50 to the FUNNZ account: ASB acc. no. 12-3086-0214758-00. If paying by direct transfer, please ensure that your name and "Foray2006 registration" appears on the Payee's (recipient's) statement.

8th International Mycological Congress (IMC8)

Mycological Congresses are held in different parts of the world every 4 years, but never before in the Southern Hemisphere. Next year is our opportunity for several New Zealanders to participate in IMC8 at Cairns, Queensland, on 20–25 August 2006. For details of the programme, registration, associated workshops, etc, please see their website https://www.sapmea.asn.au/imc8

New Zealand mycology symposium

Following soon after IMC8 there will be a 2-day conference in Auckland to take stock of our knowledge of New Zealand fungi. This is still being planned and notification of its timing, programme, and location will be advised early 2006.