TRILEPIDEA

NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

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

E-NEWSLETTER: NO 90. MAY 2011 Deadline for next issue: Wednesday 15 June 2011

Guest Message from a Council Member

Hi everyone…

Welcome to the May newsletter.

I've just returned from tramping the Matemateonga track in the Whanganui National Park - although the weather wasn't what we asked for, any opportunity given to me to 'rough it' in these wonderful places is hard to refuse. This area is one of the largest remaining areas of lowland forest remaining in the North Island—natural forest now covers only approximately 24% of New Zealand.

This year, 2011, has been declared the International Year of Forests by the United Nations General Assembly. It is to raise awareness on sustainable management, conservation and sustainable development of all types of forests. Make a difference by planting a tree. Keep an eye out for any local planting days. For those in the Auckland region mark in your calendar the Northern Regional Park planting days.

At the conference last year, I was interested in Colin Meurk's talk on recombinant ecosystems and a side visit to one on one of the field trips. It's great to see Paula Warren is having success at a Porirua 'wasteland' site.

Keep the photos coming in for our on-line library—we have reached 22,000 images, which is a great achievement, but we are always after more. Finally, subscriptions are due, follow the links for renewals.

Catch you all later.

Kerry Gillbanks
Auckland Council

In memory of Phil Knightbridge

Jose Watson with additional contributions from friends

Department of Conservation botanist and Plant Conservation Network member Phil Knightbridge died on Tuesday 26 April 2011. Many people knew Phil through his work in the department, in the community, as a family person and as a friend. Phil was a big part of the Department of Conservation family on the West Coast and close to 500 people gathered to say goodbye at his funeral.

Phil did a masters degree on the regeneration ecology of northern rata (*Metrosideros robusta*). He then worked as a science technician at Landcare Research and later shifted to become the conservancy botanist at the Department of Conservation in Hokitika in 1998. In 2007, Phil moved into a new role at the Department with more 'hands on' involvement – Team Leader of the Technical Support Monitoring Team.

Phil's support of the Plant Network manifested itself in several ways. Phil ran conference workshops and was instrumental in preparing the Network's business case for the establishment of a New

PLANT OF THE MONTH – *Uncinia strictissima*

Uncinia strictissima. Photo: John Barkla.

Plant of the month for May is *Uncinia strictissima*. This endemic sedge forms rush-like tufted clumps up to 700 mm tall with thin dark olive-green to red-green leaves.

In the North Island it is known only from the Central Volcanic Plateau. In the South Island it has an easterly distribution, being recorded from the Nelson Lakes, Canterbury, Otago and Southland, where it is found in lowland scrub, swamps, lake margins and in damp clearings in lowland forest.

It is easily cultivated, growing best in moist or damp ground in sun to part shade. It can be propagated from seed or by simply dividing up larger clumps into smaller individuals. Its common name 'hook sedge' is very apt; hair and clothing are quickly snagged by the hooked utricles (the flask-like structure enclosing the nut) that seem to persist on plants nearly all year through.

Uncinia strictissima is considered nationally endangered and has declined over large parts of its range. It is now very close to extinction in the North Island; threatened by habitat loss as a result of weed invasion and by animal browse.

The Network fact sheet for *Uncinia strictissima* can be found at: www.nzpcn.org.nz/flora_details.asp?ID=97

Zealand threatened plant seed bank. Phil also contributed data to the Network's national phenology recording system and provided many of his beautiful plant images to illustrate species pages on the Network's website. Phil was also a major contributor to the Department of Conservation's species recovery programme. He led species recovery groups, wrote reports and always willingly contributed his knowledge of plants to those who wished to learn.

Mistletoe recruitment in the Hope Valley, South Westland.

Tom Belton, who worked with Phil closely over the last 10 years, said "Phil was an outstanding colleague and friend. There are not enough words to fully describe what a good person he was". Liam Anderson, who worked with Phil in the monitoring team, said at the funeral, "When people talk about Phil, they all say he was always willing to share information and knowledge and in most situations this is correct but not all. When it came to the vegetable garden he was fiercely competitive and he never shared his expertise on how to grow a winning giant pumpkin. This competitive streak helped Phil to finally wrest the fiercely contested A & P Show Cup for overall winner in the vegetable section from Tom Belton."

The West Coast Conservancy has organised to plant a memorial grove of rata at Lake Mahinapua, a place near Hokitika where Phil would often go on family expeditions with his wife Sharon and their children Ruby (8) and Dylan (6). If you wish to make a contribution toward a tree, please contact Jane Marshall by e-mail: jmarshall@doc.govt.nz. An appeal fund has also been established for Sharon, Ruby and Dylan. The account to make donations to the Knightbridge Family Appeal is held at Westpac. The account number is 03-0850-0109993-000. Any donations will help support Phil's family in the future.

Network subscriptions now due

Subscriptions are now due for Private Individual, Unwaged and Student memberships for 2011. All members who joined before June 2010 have already received a reminder; those who joined in June 2010 will get their reminder soon and each month will then follow in due course.

In order to renew your membership on-line using our credit card facility, follow the link below:

- Membership renewal page

Login as requested by the pop-up and you will be taken to the renewal page. You can then renew your membership for one or two years.

If you have forgotten your password use the "Forgotten your Password?" link on the right hand side of the home page to be automatically sent your username and password.

Paying by cheque or by internet banking is still possible and a subscription renewal notice may be downloaded from the website:

- www.nzpcn.org.nz/publications/Subscription-NZPCN.pdf

This has the necessary details for payment by cheque or by internet banking. If you use internet banking, please make sure that your name appears on our statement and preferably send an e-mail to info@nzpcn.org.nz informing us that you have made such a payment.

If you have paid your subscription recently by cheque or by internet banking, please send an e-mail to info@nzpcn.org.nz giving the date the cheque was presented or the internet transfer was made. For membership enquiries, such as change of status, please e-mail the Network at: info@nzpcn.org.nz

A new species of endemic ngaio recognised for the Chatham Islands

Peter J. de Lange, Department of Conservation (pdelange@doc.govt.nz)

Ngaio (*Myoporum laetum*) is an important rongoa and taonga for many iwi. As many a tramper will appreciate, an infusion made from crushed leaves is an excellent way to soothe and treat grazes and infected wounds. I can personally vouch that burning sprigs of fresh foliage does, indeed, as old time Maori advised, repel even the most determined mosquitoes and sandflies! Also, in Maori mythology, it is a gnarled old ngaio tree that is said to have accompanied Rona on her involuntary trip to the moon. There can be little doubt that the humble ngaio has a special place in many people's hearts, not only because of its medicinal properties and role in Maori myths but also because it is a hardy, fast growing, drought tolerant tree that provides excellent shelter in coastal areas from strong winds. Ngaio is also popular with gardeners because it produces a profusion of purple-spotted white flowers almost throughout the year; these are followed by equally attractive quantities of purple or pink fruits. However, despite all these charms and uses it should be noted that all parts of the plant and especially the foliage are extremely toxic (Connor 1977).

Until recently, ngaio used to belong to the Myoporaceae, a small Southern Hemisphere family. However, this has recently been merged with the Scrophulariaceae (see APG III, 2009, and comments therein), itself a formerly large family in the New Zealand native flora but one which, due to molecular wizardry is now represented here only by indigenous *Myoporum* and a whole swag of otherwise wholly naturalised genera. *Myoporum* is species poor in New Zealand (the majority of species occur in Australia (Chinnock, 2007)). In the Flora of New Zealand series, Allan (1961) recognised only two species of *Myoporum* native to the islands, ngaio (*Myoporum laetum*) and *M. debile*. *Myoporum debile* has since been transferred to the wholly Australian genus *Eremophila* as *E. debilis*. It is no longer regarded as indigenous to New Zealand, with the few wild occurrences of this otherwise eastern Australian endemic now believed to have stemmed from either past deliberate plantings or failed naturalisations from these. Either way, whatever the explanation for these past occurrences, *Eremophila debilis* is not only extinct in the wild in New Zealand but also no longer considered part of our indigenous flora (Chinnock 2007).

In the 1980s, Bill Sykes added a second indigenous species of *Myoporum* to New Zealand, *M. kermadecense*, as an endemic of the Kermadec Islands (Sykes 1987). It is a very common tree in the coastal forest of Raoul Island and one of the few woody trees on Macauley Island. Chinnock (2007) relegated that species to the rank of subspecies within *M. rapense*, as subsp. *kermadecense*.

In December 2007, on a visit to the Chatham Islands, Peter Heenan happened to observe some *Myoporum* seedlings being grown for the Mangere Island restoration project by Bridget Gibb, Department of Conservation, Chatham Islands Area Office at Te One. Puzzled by the lighter green foliage and scarcely evident secretory cavities of the leaves, Peter begged a few plants for further study in New Zealand. From these plants he became convinced that the Chatham Islands had a new species of ngaio. Later, in May 2008, Peter and I returned to the Chatham Islands and, in the course of other duties, undertook a careful investigation of ngaio on the islands. We soon realised that there were indeed two distinct races, one matching New Zealand ngaio (*M. laetum*), which we saw only on Chatham Island, and there only in sites where it was being cultivated as wind breaks or in places where there had formerly been houses; the other we saw only on Pitt and the adjacent outlying islands. That race matched the plants being cultivated by Bridget Gibb for the Mangere Island restoration project. On an especially cold night at Caravan Bush, being unable to sleep, Peter and I did what any sensible botanist would do, had a healthy argument about the pros and cons of recognising a new species of ngaio! After all, we both knew that ngaio is notoriously variable in New Zealand and that other attempts to segregate parts of that variation with formal names had met with considerable resistance. So we felt it absolutely essential that we considered all scenarios before proposing another new species. Therefore, between 2008 and 2010, we undertook a careful evaluation of the variation exhibited by ngaio (and also the Kermadec ngaio) throughout New Zealand. In particular, Peter Heenan undertook a painstaking analysis of the size and numbers of secretory cavities of leaves sent to him by me and other botanists we'd contacted for this task, from ngaio populations throughout New Zealand. Along the way we examined growth habit, bark texture, flower sizes and coloration, we also analysed DNA sequence data (Heenan et al. 2010) and looked at chromosomes. Finally, we concluded that the Chathams did indeed have two species, one matched the New Zealand ngaio, and was probably not native to the islands; the other represented a distinct element endemic to the islands. This endemic was sufficiently distinct to merit recognition as a new species.

Shell akeake / Chatham Island ngaio forest on Pitt Island. Photo: Amanda Baird.

Chatham Island ngaio (*Myoporum semotum*) trunk and branches. Pitt Island. Photo: Amanda Baird.

Our conclusions have just been published in the *New Zealand Journal of Botany* (Heenan & de Lange 2011) where the new Chatham Islands ngaio is described as *Myoporum semotum*. The new species is distinguished from *Myoporum laetum* by its smoother bark; usually wider leaves; by the leaf secretory cavities being obscure, smaller and denser; by the midrib, petioles and branchlets being smooth and lacking prominent protruding tubercules; and also by the slightly larger flowers. The

name "*semotum*" meaning "distant, far removed" refers to this species' geographic isolation from the New Zealand ngaio (*M. laetum*). Even more pleasing is that the world expert on the genus, Bob Chinnock, is delighted by the discovery and fully convinced of the species' distinctiveness. It's nice to know that our cautious approach to the Chatham Island *Myoporum* "problem" has paid off.

Chatham Island ngaio (*Myoporum semotum*) foliage. Pitt Island. Photo: Naomi Goomes.

Chatham Island ngaio (*Myoporum semotum*) flowers. November, Pitt Island. Photo: Peter J. de Lange.

As far as we can tell, *Myoporum semotum* is naturally endemic to Pitt Island and the smaller islands that surround it. We have seen and/or collected material from Rabbit, Mangere and South-East Islands and seen images of it from Little Mangere. The new species is inexplicably absent from Chatham Island from where we have only seen New Zealand ngaio and that only from sites suggesting that it is not native to the islands. The formal recognition of *M. semotum* brings to 37 the total number of endemic ferns and flowering plants now known only from the Chatham Islands. It is noteworthy that the new species is also a rather large tree, demonstrating that new species need not be obscure little herbs and grasses, and that all it takes is a critical eye to find something new on the Chathams. The last such discovery, also first recognised by Peter Heenan, was *Olearia telmatica* (Heenan et al. 2008), although there, of course, Chatham Islanders had long recognised its distinctiveness. This makes *M. semotum* all the more noteworthy, because it seems no one had previously remarked on the possibility of ngaio plants on the Chathams being potentially distinct from New Zealand ones.

Not surprisingly for a new species on the Chatham Islands, *Myoporum semotum* is also a threatened species. Heenan & de Lange (2011) conclude that it merits a conservation listing of "Threatened/ Nationally Vulnerable". In their paper, they note that the species is in decline on Pitt Island due to habitat deterioration in such places as Waipaua Scenic Reserve. The species is, however, secure in the Nature Reserves of Mangere and South-East Islands, though it is hardly common there. Recently, Department of Conservation staff have found some reasonable sized populations near Hakepa Hill (known also as "Walkemup") and these may be included within a new covenant being set up by the conservation minded Pitt islanders. More worrying by far, though, is the risk of hybridisation with New Zealand ngaio. Ngaio species hybridise readily in New Zealand, where the Tasmanian ngaio (or more correctly boobialla) *M. insulare* has been widely planted and, as a result, has formed extensive hybrid swarms with New Zealand ngaio such that in some places it is now impossible to obtain pure *M. laetum* plants for restoration plantings and the nursery trade.

The same is also likely to happen on the Chatham Islands, though so far, more by accident than design, a very conservative planting regime on Mangere Island has avoided mixing up Chatham Island sourced *M. laetum* with Pitt Island *M. semotum*. While that's good news, it is very important that people make sure that *M. laetum* does not reach Pitt Island. In 2008, a survey of Pitt Island

gardens by Heenan, me and Pitt Islanders did not find any *M. laetum* in cultivation on the island. While that's good news, *M. laetum* is widely cultivated as a shelter belt tree on Chatham Island. As there is no doubt that if *M. semotum* and *M. laetum* were planted together they will hybridise, it's really important that *M. laetum* is kept from reaching Pitt Island. The good news is that *M. semotum*, as a true Chatham Islander, is well suited to the islands' climate and so is just as good, if not better, a plant to use for shelter belts. We also like to think it's more attractive than *M. laetum*—but then we are biased! Perhaps islanders may wish to consider planting only their endemic ngaio instead of the New Zealand one, and—even better—replacing existing *M. laetum* shelter belts and plantings with *M. semotum*.

Acknowledgements

I'd like to thank the staff of the Chatham Island area office, in particular Bridget Gibb and Amanda Baird, for their support of the plant research being undertaken by me and Peter Heenan on the Chatham Islands and, along with Brian Rance, their help in providing live plants, herbarium specimens and images of *Myoporum semotum*. I also thank Bob Chinnock for his interest in this species, assistance and constructive comments on the paper describing this species from which this note is derived. As always, I remain grateful to the Chatham Island people, and in this particular case the Pitt Islanders for their hospitality and for granting permission to access their land and collect plant specimens.

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Department of Conservation faces cuts in organisation-wide review

Jobs are to be shed from the Department of Conservation in the largest shake up of the organisation since it was formed in 1987. Al Morrison, the Department's Director-General, told staff that wherever possible support services would be shared and that the changes would be implemented before Christmas. Mr Morrison was unable to confirm how many jobs would be lost. All technical staff and scientists will be affected by the review as well as planners, policy-makers, statutory land managers and community awareness staff. Front-line staff will be least affected to ensure conservation activities at the coal face are maintained.

Al Morrison acknowledged the department was facing a budget shortfall as costs increase. He acknowledged that the existing structure had served the department well for many years but that it could no longer afford to maintain the current level of support services. Several design groups will be formed in May to develop a new, more efficient, support structure for the organisation.

Rare plants found in a Porirua wasteland

Robyn Smith, Greater Wellington (Robyn.Smith@gw.govt.nz)

Paula Warren working on the revegetation site. Photos: Robyn Smith.

Paula Warren, a policy analyst with the Department of Conservation head office in Wellington, is a person who practises what she preaches. Paula has been planting native coastal species on a wasteland that was created in the 1960s to early 1970s by dumping spoil from various Crown "development " projects in the Porirua catchment on the shore of Porirua Harbour beside Paremata railway station. Paula has a task that no-one would envy; this area is rabbit paradise evidenced by the huge amounts of rabbit poo and almost the entire area is covered in weeds. Pampas grass, gorse, pohutukawa, lupin, broom and the odd taupata are the only plants that have established beyond the reach of the rabbits; exotic grasses cover most of the rest of this area.

Paula asked Tim Park, Biodiversity Restoration Advisor with Greater Wellington Regional Council, to come out and have a look at her work. During this visit, Tim noticed a tiny plant growing in an area where rabbits have done their best to annihilate every plant they can find. This area ponds rainwater and drains only slowly away over a period of a few days to weeks depending on the amount of rain at any time.

Leptinella maniototo and *Crassula peduncularis* site near Paremata railway station (on left).

Leptinella maniototo, in cultivation.

Tim brought a sample of the plant back to the office where eventually I identified it as *Leptinella maniototo*. Its identity was quite a surprise because it was not normally found in this area. Identification of the plant was confirmed by Peter de Lange, Department of Conservation. NZPCN records show that this plant occurs mainly east of the Southern Alps from southern Marlborough to Central Otago and Lake Te Anau and the only site in the North Island is at Lake Wairarapa where it is now thought to be extinct. Peter de Lange considers that this plant, like many tiny plants that live in ephemeral wetlands, is extremely susceptible to being out-competed by taller and more aggressive introduced grasses and flat weeds that are now spreading throughout much of its habitat. Indeed this plant has for company an introduced and widely-spread weed, buck's horn plantain.

Once named and realising that this was a find of significance, botanists from Te Papa, Leon Perrie and Ant Kusabs, joined Tim and I in another site visit. Whilst looking closely at the *Leptinella,* we noticed another tiny plant with a red hue and identified it immediately as *Crassula* but none of

us was keen to attach a species name to it. It wasn't until a sample I grew in my garden flowered and produced seed that it could be confirmed as *Crassula peduncularis*. Interestingly, when grown away from the influence of salt, the *Crassula* greens up. This species is nationally critical and the closest population is the Pencarrow lakes area.

Crassula peduncularis showing elongated pedicel, in cultivation. Photos: Robyn Smith.

Crassula peduncularis retreating.

E-mail exchanges with Pat Enright, Peter de Lange, Tim Park, Colin Ogle and I followed about whether these species occurred naturally at this site or had been introduced. Peter suggested I look at the nearest bowling club lawns to see if these species are present because ducks have been known to transfer them. I did find *Leptinella maniototo* at the nearest bowling green in Titahi Bay but could not find any evidence of the *Crassula*. This may be because it has usually disappeared by late spring since it is an annual, although at the Paremata site it was starting to die away only in late April.

Other theories on its presence are transportation via boots, tyres of 4WDs or an old deliberate planting. However these species have found their way to this site, it is evident that they are thriving with the population spread over several areas within the site covering around 40 square metres. Now the discussion will focus on whether this site be managed to allow this population to continue. Herbarium specimens are held at Te Papa.

Kermadec Biodiversity 2011 Expedition on its way

A major investigation of the Kermadec Islands is now underway. The expedition titled Kermadec Biodiversity 2011, led by Auckland Museum Curator of Marine Vertebrates Dr Tom Trnski, seeks to document for the first time the marine life of the Kermadec Islands group. The islands are located roughly halfway between New Zealand and Tonga and represent the northern most extension of geopolitical New Zealand. The islands, all volcanic, owe their origin to on-going sub-duction between the Pacific and Indo-Australian Plate.

Two of the islands, Raoul and Curtis, are active volcanoes and all of the islands are frequently rocked by earthquakes. The expedition members include 10 scientists from New Zealand and 3 from Australia (11 marine biologists, one botanist and one invertebrate scientist), a science journalist and film maker. It is hoped to make landings on all the islands, islets and rock stacks in the group, some of which have not been explored by biologists since the late 1960s. Expedition botanist, Dr Peter J. de Lange, will be specialising in lichens, bryophytes and seaweeds, as well as looking for new vascular plant records from the islands, including a new species of *Lepidium* he is in the process of formally describing. Department of Conservation Invertebrate Scientist, Dr Warren Chinn, will be collecting invertebrates from all of the islands, many of which have never been explored before for invertebrates. Other team members will be investigating sharks, black spotted grouper populations, fish communities and marine invertebrates.

The expedition can be followed on a special website where the public can check in on the team daily, ask them questions and find out what progress has been made during each day's survey. The information gained will be of tremendous benefit to the Department of Conservation that is seeking to have the islands declared a World Heritage site. Follow this link to the website:

- Kermadec Island Biodiversity Expedition - 2011

Plant a tree – tell the world about it – celebrate International Year of Forests!

Join the international celebration of International Year of Forests by planting a tree on 20–22 May and help create a 'green wave' of tree planting around the world. The Green Wave is a multi-year global initiative organised by the United Nations and contributes to the Plant for the Planet Billion Tree Campaign.

Schools and communities around the world will be planting locally important trees on, or in the days leading up to, May 22, International Day of Biodiversity. Tree planters will then post a symbolic tree on an online map of the world on the Green Wave website (www.greenwave.cbd.int/en/home), showing where their tree has been planted. The 'tree symbol' will be a hotlink to photos and stories about the tree and planting activity.

The tree, photos and stories go live online at 20:20 on Sunday 22 May. Each hour, beginning at 20:20 local time, new trees will appear on the map, starting in the Pacific and Asia, then across Europe and Africa and over the ocean to America – creating a virtual 'green wave'.

Let's make sure the world sees the map of New Zealand covered in new trees on 22 May!

What you need to do:

- Look at the Green Wave website http://www.greenwave.cbd.int/en/home to help you make your tree planting plan.
- Choose a tree that's native or special to where you live.
- Choose a good planting site (or join a community tree planting event if there's one happening close to you).
- Register on the greenwave website.
- Plant your tree/s on or before 22 May.
- If you can, water your tree at 10.00 a.m. on 22 May to help create a symbolic 'green wave'.
- Take photos and write a couple of sentences about your tree/s and your planting site.
- Go to the GreenWave website and post your tree symbol, photos and story.
- Watch the website at 20:20 on 22 May to watch your trees appear on the map of New Zealand as the Green Wave goes live.

For more information: www.greenwave.cbd.int/en/home; http://www.enotreeday.net/

Network's image library tops 22,000

The Network's on-line library of plant photographs now has over 22,000 images. Thanks go to over 250 photographers nationwide who have provided images to store on the website.

The Network website was established in 2003 to act as a repository of information about threatened plants. Since then, it has grown to include all native vascular plants, all naturalised vascular plants as well as many fungi, mosses, liverworts and lichens. If you have plant images that you are willing for the Network to use on the website, please e-mail them to the Network at info@nzpcn.org.nz or post a CD to PO Box 16-102, Wellington. Note that images should be be correctly named with the genus and species (and subspecies where necessary).

FORGOTTEN PASSWORD?

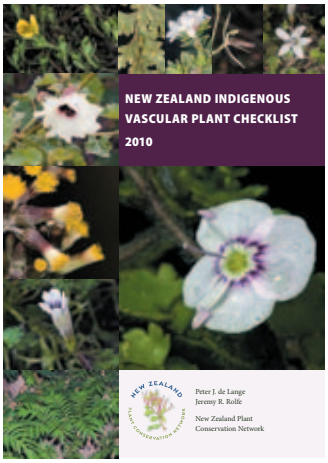
If you have forgotten your password, use the website to remind you. On the right hand side bar of the home page of the website, there is a "Forgotten your password" link. Click on this link, enter your e-mail address in the space and you will be sent your password.

On-line bookshop

For the information of new members of the Network (and a reminder to other members), the Network has a number of publications available for purchase on-line. Members may purchase them at a significant discount. To do this you must go to the website (www.nzpcn.org.nz) login and then go to "Visit the Network Shop" on the left hand side menu. The prices you will then see are the discounted ones.

Currently available (prices include postage and GST):

Members: $87.00
Non-members: $107.00



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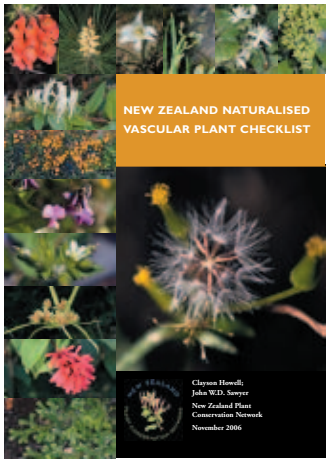

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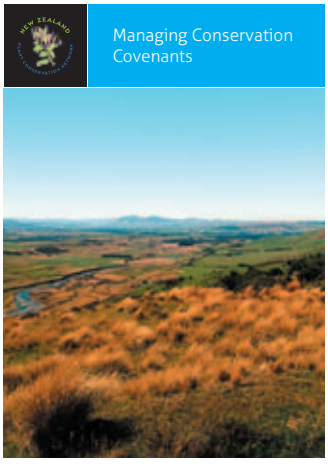

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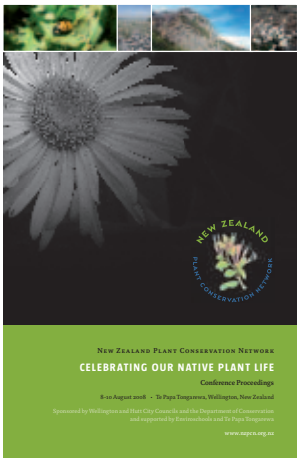

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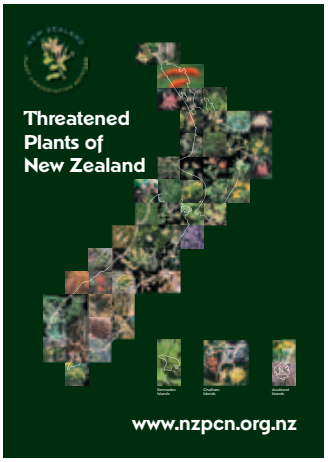

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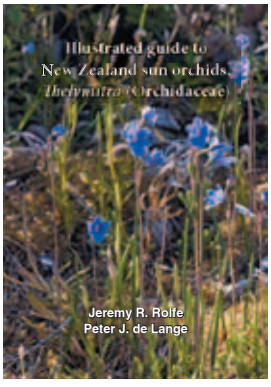

$25.00

UPCOMING EVENTS

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

XVIII International Botanical Congress

Melbourne 23-30 July: probably the cheapest option for New Zealanders to ever be able to attend this international event. Registrations are now open.	**More information:** http://www.ibc2011.com/news/Issue3-1.htm.

Conservation Biology Conference 2011

Change of venue and dates: as a result of the 22 February earthquake that damaged much of Christchurch, including the Convention Centre, the ICCB conference 2011 has had to be shifted to Auckland with a consequential change of dates. The conference will now be held 5-9 December 2011 at the Sky City Auckland Convention Centre.	**Information:** www.conbio.org/2011. We will update it regularly to bring the latest information on the venue, accommodations, conference trips, social events, and more.

The Global Partnership for Plant Conservation conference

Conference: Tuesday 5 July – Thursday 7 July. The conference theme is *Supporting the worldwide implementation of the Global Strategy for Plant Conservation*. **Venue:** Missouri Botanical Garden, St Louis, Missouri, U.S.A.	**More information:** www.mobot.org/gppc2011/ or e-mail: gppc2011@mobot.org

Auckland Botanical Society

Meeting: Wednesday 1 June at 7.30 p.m. two talks; one by Rhys Gardner titled 'Geniostoma' and one by John Early titled 'Figs and Wasps: a Marvellous Mutualism'. **Venue:** Unitec School of Health Sciences, Gate 4, Building 115. Room 2005.	**Contact:** Maureen Young, e-mail: youngmaureen@xtra.co.nz.
Field trip: Saturday 18 June to Goodwood Heights. **Leader:** Mike Wilcox.	**Contact:** Maureen Young, e-mail: youngmaureen@xtra.co.nz.

Kaipatiki Project

Community Planting Day: Saturday 4 June at Francis Kendall Reserve, Kaipatiki Road, Glenfield, North Shore, Auckland. **Start:** 9.30 a.m. Come and plant new native trees with Kaipatiki Project, the environment centre of the North Shore. Free BBQ for all planters, bring a spade if you have one.	**Information:** www.kaipatiki.org.nz
Meeting: Wednesday 8 June, 10.30 a.m. – 12.00 noon at Kaipatiki Project Environment Centre, 17 Lauderdale Road, Birkdale, Auckland. **Theme:** Healthy Child, Healthy Planet, eco-parenting session and playgroup in one, topic: Allergies & Food Intolerances. Learn what foods to avoid, how to resolve an allergy issue and create a healthier diet. Free but booking essential	**Bookings:** ph: 09 482 1172 or e-mail admin@kaipatiki.org.nz. Information: www.kaipatiki.org.nz

Auckland Council Northern Regional Parks

Public planting days: Sunday May 22 at Long Bay Park; Saturday and Sunday 4 and 5 June, at Tawharanui Park; Sunday 12 June, at Shakespear Park. Start time: 10.00 a.m. Come and take part in the on-going ecological restoration of bush, wetland and sand dune areas in the parks. In exchange for your help, we will provide a barbeque lunch and hot drinks, hundreds of grateful trees and our thanks. We guarantee that you will leave us muddied but satisfied with a job well done! Please bring with you: good enclosed shoes or boots; a pair of gloves, if you have some; a spade, if you have one, cold drinks; your family and friends; your boundless energy.	**Contact:** Naomi Harrison, e-mail: naomi.harrison@aucklandcouncil.govt.nz

Waikato Botanical Society

Field trip: Saturday 12 June: Peat Lakes followed by a Waikato Wetland Plants Field Guide Workshop. **Meet:** 9.00 a.m., Landcare Research car park, Gate 10 Silverdale Rd, Hillcrest. **Workshop:** 1.00 p.m., Waikato University Gate 9, Hillcrest Rd (we will be in D1.16, swipe card access required at the CD link stairwell at Gate 9 entrance, please call 07 838 4466 x 7824 if your are late.	**Contact:** Monica Peters, e-mail: monica.peters@landcare.org.nz, ph: 07 859 3725 (wk), mob: 021 049 2036 or Liz Overdyck, e-mail: eg3@waikato.ac.nz, ph: mob 021 155 362.

Rotorua Botanical Society

Field trip: Saturday 11 June to Tirohanga Dunes, Opotiki. **Meet:** the car park, Rotorua, at 8.00 a.m. or outside the Opotiki DOC office at 9.45 a.m. **Grade: e**asy.	**Leader:** Sarah Beadel, ph: 07 345 5912 or 021924476, e-mail: Sarah@wildlands.co.nz
Meeting: Monday 27 June the AGM and Slide Show. **Venue:** DOC East Coast BOP Conservancy Office, 99 Sala St, Rotorua, enter the Scion (Forest Research) north entrance and turn left before the locked gates. **Time:** 6.00 p.m. Wine, juice, cheese and nibbles will be provided. Following the AGM, members will show images of recent expeditions so bring photos of recent expeditions on memory stick or CD (10 images or 10 minutes please).	

Wanganui Museum Botanical Group

Field trip: Saturday 4 June to Bushy Park for weeding. **Meet:** Police Station at 9.30 a.m. Bring lunch, drinks, warm clothing and tools (spade or garden fork, gloves plus plastic bags for weed seeds and bulbs).	**Leader:** Esther Williams.
Meeting: Tuesday 7 June a talk by Jim Campbell titled Management options and opportunities on the South Taranaki dunelands. **Venue:** Museum's Davis lecture theatre.	**Contacts:** Robyn and Colin Ogle, ph: 06 347 8547, e-mail: robcol.ogle@xtra.co.nz

Royal Society of New Zealand – Sir Charles Fleming Lecture

Meeting: Wednesday 25 May at 6.00 p.m. Sir Alan Mark (Emeritus Professor, University of Otago) will give a lecture entitled 'Mountain tops to Ocean Depths: Involvement with a Range of Ecological/Environmental Issues, Mainly in the South'. **Venue:** Rutherford House Theatre 2 (north end of Lambton Quay, near the Railway Station).	**Details:** www.royalsociety.org.nz/programmes/awards/fleming/charles-fleming-lecture-tour/

Wellington Botanical Society

Field trip: Saturday 11 June: Upper Solomon Spur NOTE: Not Saturday 4 June. Botanise this spur in the Wainuiomata Catchment. Check the plant list prepared by our previous trip which reached c. 380 m, then expand the list as we climb to c. 630 m at the Old Whakanui Track. See regenerating shrublands, mature forest, and pest control work. **Maps:** street, and NZTopo50-BQ32 Lower Hutt. **Meet:** 9 a.m. at main gate, Reservoir Rd, off Whitcher Grove, off Moores Valley Rd, Holmdale, Wainuiomata. Booking essential, so we can report to Greater Wellington Regional Council.	**Leader:** Mick Parsons, ph: 972 1148; **deputy-leader:** Chris Horne ph: 475 7025.
Evening meeting: Monday 20 June: Propagation of NZ native plants. **Speaker:** Jill Broome, Plant Collections Supervisor, Percy Scenic Reserve, Lower Hutt, will describe propagation techniques she uses when growing indigenous plants, and discuss successes and failures owing to timing and methods, and old-fashioned methods versus modern equipment.	**Venue:** lecture theatre MYLT101, ground floor Murphy Building, west side of Kelburn Parade. Enter building off Kelburn Parade about 20 m below pedestrian overbridge.

Nelson Botanical Society

Field trip: Sunday 19 June to Archer Track, Penzance, Marlborough Sounds. Meet: at 9.00 a.m. at Selwyn Place, between the gum tree and the Cathedral steps or at the junction of SH6 and the road to French Pass (on the Nelson side of Rai Valley township) at 9.45 a.m.	**Leader:** Cathy Jones, ph: 03 546 9499, e-mail: jonesc@doc.govt.nz.
Meeting: Monday 20 June at 7.30 a talk by Rebecca Bowater titled 'The Flora and Fauna of Brazil'. **Venue:** Jaycees Room in Founders Park, Nelson.	**Contact:** Cathy Jones, ph: 03 546 9499, e-mail: jonesc@doc.govt.nz.

Canterbury Botanical Society

Meeting: Saturday 11 June at 10.30 a.m. the AGM and a talk by Sally Tripp and Rosemary Koller titled 'Rare and Unusual Ferns of the Port Hills'. This will be followed a social time and potluck lunch in the adjoining room. A plate of finger food would be very much appreciated from those staying on to socialise. Drinks will be provided.	**Venue:** St Ninian's Church Hall, 9 Puriri St, Riccarton.

Botanical Society of Otago

Meeting: Wednesday 25 May at 12.00 noon a talk by Dr Ralf Rautenberger, DGF Postdoctoral Fellow, Dept of Botany, University of Otago, titled 'Antioxidative strategies of intertidal macroalgae to radiation stress'**. Note**: special time and venue: Union St Lecture Theatre, cnr Union St West and Great King St.	**Contact:** Trish Fleming, ph: 03 479 7577.
Meeting: Wednesday 1 June at 12.00 noon a talk by Dr Rainer Hoffman, Lincoln University. **Note**: special time and venue: Union St Lecture Theatre, cnr Union St West and Great King St.	**Contact:** Trish Fleming, ph: 03 479 7577.