



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 73. DECEMBER 2009

Deadline for next issue: Monday 15 January 2010

Message from the President

Greetings to you all. Being new to the role of President, I am somewhat daunted by the task, but honoured to be representing NZPCN. I would like to acknowledge the valuable contribution made to the Network by the retiring President, Professor Ian Spellerberg. He has capably steered the Network through many challenges over the past four years. The returning officers of Council are John Sawyer (Secretary), Mike Oates (Treasurer), Sarah Beadel, Shannel Courtney, Rewi Elliot and Mike Thorsen. We welcome two new members, Danielle Hancock (Waitakere City Council) and Susan Wisser (Landcare Research), and co-opted member, Erik van Eyndhoven (Biosecurity NZ).

It is great to see that so many people have voted for their favourite plant this year. The competition helps to increase knowledge about our native plants. The fish guts plant was new to me—a plant that smells like rotting fish! I love the botanical name, *Chenopodium detestans*. It was good to hear John Sawyer being interviewed on National Radio about the competition. The new website is up and running now. Check out the new sections on New Zealand's ecosystems, as well as the links to videos.

Wishing you all the best for the Christmas celebrations and I hope you are looking forward to the International Year of Biological Diversity – 2010.

Philippa Crisp, Greater Wellington Council

PLANT OF THE MONTH – *Myrsine aquilonia*



Myrsine aquilonia.
Photo: Peter de Lange.

Plant of the month for January is *Myrsine aquilonia* (coastal matipo). Aquilonia means northern, referring to the natural distribution of coastal matipo, which is found on Rauhomaumau Island, in Tutukaka, Rangaunu Harbour, and Te Arai in the far north of New Zealand. It is scarce on the mainland, however, and is found most abundantly on the Poor Knights Island group where it is often the co-dominant species in the main vegetation types.

This endemic species is commonly associated with coastal scrub, kanuka forest and mangrove swamps. It can grow to a small tree up to around 12 m tall, with an erect and spreading, crowded branching habit. Leaves are thick, dark green, and semi-glossy with a rounded or obtuse apex with a shallow notch. The plants are dioecious, meaning that male and female flowers are borne on separate plants. Tiny flowers appear in August followed by circular purple or violet drupes in December – January.

Coastal matipo makes an interesting garden plant and is easy to grow, tolerating a range of conditions, but can be damaged by frosts. Sometimes sold as *Myrsine* 'Poor Knights', it is easy to strike from semi hard wood or hardwood cuttings and fresh seed. Coastal matipo has a relict threat classification. The network factsheet can be seen at:

www.nzpcn.org.nz/vascular_plants/detail.asp?PlantID=1029

Remaining remnant of original Canterbury Plains kanuka

Loralee Hyde, Queen Elizabeth II National Trust (lhyde@openspace.org.nz)

South-west of Ashburton at Lovetts Road, one of the last remnants in the area of the original Canterbury Plains vegetation of manuka, kanuka and matagouri was protected in 1988 by Arthur



Sir Brian Lochore, QEII Chairperson, and Dr Brian Molloy, QEII High Country Regional Representative, discuss the management of the kanuka covenant with Val Clemens. Photo: Courtesy of the *Ashburton Guardian*.

and Shirley Harris with a 2.6ha QEII covenant. The kanuka is an undescribed species, adapted to both cold winters and hot summers and characterised by a small stature and very small leaves, flowers and seed capsules.

The site is now owned by Ashburton District Council. A project led by Val Clemens and Edith Smith from the Ashburton Community Conservation Trust is enhancing the covenant by transplanting locally sourced kanuka seedlings into adjoining pasture. With funding from Environment Canterbury and Honda TreeFund, the conservation group recently planted 2500 kanuka. This significant contribution to preserving the area's biodiversity was acknowledged by QEII in November.

Climate change increases value of Kiwi native plant

(Press release 21 December, 2009)

The golden sand sedge—pingao—has won the New Zealand Plant Conservation Network's 2009 favourite plant poll, and could be a valuable defence against climate change effects.

The pingao topped more than 100 species in the annual poll. Network President Philippa Crisp said that pingao would become increasingly important in combating the effects of climate change, particularly as an increasing number of coastal homes came under threat.

"If the global plan to fight climate change stalls and sea level rises occur, pingao will become even more important to New Zealanders because it plays an important role in stabilising sand dunes and creating a beach contour that is not so vulnerable to storm events and sea level rises," Dr Crisp said. "Pingao may be our only sustainable hope for coastal protection".

Thousands of votes were cast in the online poll, which closed today. The top 10 included three species on the verge of extinction—Bartlett's rata (native to the far north), kakabeak (from the East Coast) and the fish guts plant (from Canterbury and Otago). It also included pohutukawa, two species of rata and the tree nettle—famous for having killed a tramper in the 1960s.

"Fans of the tree nettle fought hard as they wanted to protect the habitat it provides for the red admiral butterfly," said Dr Crisp.

Pingao (or pikao as it is known in Otago) was also important because the yellow-green to orange leaves, when dried were used by Maori for weaving, Dr Crisp noted. Parts of the plant (fresh or dried) were also said to have medicinal properties.

Results of the poll and voters' comments can be viewed on the Network's new online plant encyclopaedia launched today (www.nzpcn.org.nz), which stores images and information about more than six thousand plant species.

"Built with Government assistance, this online encyclopaedia is the primary reference point for people wanting to learn more about plants," said Dr Crisp.

The Network's website receives more than half a million visitors each year.

The 2009 vote for the top 10 most favourite native plants

More than 100 species were voted for this year from all over the country and the world. Those who wanted pingao to win (the Pingao Pressure Group was involved here) and those wanting to promote habitat for the native red admiral butterfly who voted for tree nettle dominated the vote. Other themes included voting for species people had in their garden, species that brought back memories of childhood, species being studied and threatened species that deserved promotion to increase attention to their plight.

In the end, pingao, pikao or golden sand sedge won and was voted New Zealand's favourite plant for 2009. The top 10 were as follows (with selected comments):

1. Pingao – *Desmoschoenus spiralis*



“Its gorgeous yellow orange colour and bold slender leaves that give the plant a fantastic form. It is a great for weaving and makes beautiful kete and has a long history of being used by Maori. It is also great for binding sand and growing sand dunes—helping protect our coast.” By Iain.

2. Tree nettle – *Urtica ferox*



“Sick of kids climbing over the fence to pinch your fruit? Tadaaaaaaaaaa *Urtica ferox*... they don't call it ferox for nothing! And good idea to host a few gorgeous admirals too.” By Jane.

3. Bartlett's rata – *Metrosideros bartlettii*



“Ten reasons why Bartlett's Rata should be number 1:

1. It has white flowers—so that colour-blind people can see it as well;
2. It is taller than pohutukawa;
3. You can say “Rartletts Bata”;
4. The bark can be used for tissue paper;
5. Y not?
6. It can't bite, sting, poison or kill you;
7. Well it could kill you if you stood under it and it fell on you;
8. It is not a nettle—but butterflies, moths, etc., like its nectar;
9. It supports an endemic liverwort (which is known on only one Bartlett's rata);
10. It is an oddball in the tree subgenus *Metrosideros*.” By Brian.

4. Chatham island speargrass – *Aciphylla dieffenbachii*



“Well it's a novel plant and seems to fit in with this year's voting theme of all things dull and ugly.” By Owen.

5. Kowhai ngutukaka (kakabeak) –
Clianthus maximus



“It stopped me dead in my tracks one day on an otherwise uneventful walk to the bus. So vibrant and with a common name of kaka beak—implies all sorts of fun stuff doesn’t it?” By Wendy.

6. Chatham island forget-me-not –
Myosotidium hortensium



“Every year we have a competition to see who can get the largest amount of flowers! Quite a thing to achieve in Whakamaru!” By J&S.

7. Southern rata – *Metrosideros umbellata*



“I love the splash of colour it shows around Christmas, whole valleys in the South Island are suddenly dark, deep crimson.” By Sacha.

8. Pohutukawa – *Metrosideros excelsa*



“Flowering pohutukawa are an uplifting sight—bold, red and beautiful, a stunning accent to the coastline, heralding the start of summer and the festive season.” By Denyse.

9. Creeping fuchsia – *Fuchsia procumbens*



“It’s an amazing ground cover and has lovely little flowers. It’s also very hardy (doesn’t mind dry conditions, semi-shade and isn’t eaten by slugs and snails).” By Andrew.

10. Fish guts plant – *Chenopodium detestans*



“Edaphic, endemics rock.” By Matt.

New Network website goes live

The Network has now launched a new version of its website—a new encyclopaedia of plant life in New Zealand. Please log on to the site, have a look and tell us: where the mistakes are; tell us what you like; and what we could do to improve it. It is more than 18 months since hackers from China attacked the Network site. Since then, a large team of people has been working behind the scenes to create a new site (re-building it to be better than before, we hope). The new site has:

- An on-line forum for members to ask questions and discuss plant conservation issues (see Forum rules on line and in this newsletter)
- An ecosystem database with information about plant communities
- A combined flora search engine (you can now search native and exotic plants at the same time)
- A built in glossary of terms to help people understand botanical language
- A training area (with information about the Network's plant courses)
- A restoration portal—with links to information about native plant species recovery, restoration and revegetation
- A monitoring portal (to be expanded) with information about monitoring species and communities
- Links to videos of native plants embedded within pages

If you have a great idea for how to improve the site then please tell us. Please send your feedback to info@nzpcn.org.nz. Tell us also if you have restoration or revegetation case studies that you are willing to have us publish on the site.

Rules for users of Network's on-line forum

The Network has included an on-line forum for members to discuss plant conservation and to help each other. Log on as a member and then enter the forum (under Conservation) or follow the links on each species page. The rules are as follows:

Moderation

This forum is moderated by the Network Council with help from volunteers. All submissions are screened before being posted. Moderators will not limit discussion or promote or suppress points of view. The Network wants to ensure use of the forum is enjoyable and educational. If your posts are not accepted, there will be a reason for it.

Accepted behaviours

Please be courteous to fellow members. Before posting a new topic, please search the past topics to make sure it has not already been posted and answered. Keep your topics and responses on the subject of plant conservation. Use common sense, be friendly and be helpful with your responses. If in doubt about any aspect of the forum, please email the Network at info@nzpcn.org.nz.

Warnings

Moderators may at any time send a warning to a forum user for not adhering to these rules. This warning will be for violating the rules of the forum. Repeated warnings may lead to a ban that can be temporary or permanent.

Bannable offences

You may be banned from the forum for any of the following offences:

- Insults
- Harassment
- Overposting
- Advertising
- Posting vulgar or hateful or threatening messages
- Purposely misleading users

What not to do

- Do not post threads or answers that are unrelated to plant conservation.
- Do not post two or three word threads such as "I agree".
- Do not point out other people's spelling or grammatical mistakes.
- Do not use foul language or swear words.

New Council member

Susan Wiser

Susan is a plant community ecologist. She did her degrees in the U.S. and moved to New Zealand in 1993. She began working as a scientist for Landcare Research in 1997. She runs a research programme on ecosystems that are naturally rare and oversees the management and development of the National Vegetation Survey databank, the primary archive for vegetation plot data in NZ. Her current research interests include understanding the ecology of a number of naturally rare ecosystems—including shingle beaches, rock outcrops and tors, volcanic dunes, gum lands and granite sand plain—developing a quantitatively based classification of New Zealand plant communities, and eco-informatics.

Why toxins like 1080 are critical to protect our native forests and fauna

Key messages from the Department of Conservation for discussion over the barbecue this Christmas

- New Zealand's native wildlife faces a continual battle for survival. Landcare scientists estimate over 26 million native birds are killed each year by imported predators like stoats, rats, cats and possums.
- 1080 is a key weapon in the fight to protect New Zealand's native wildlife. Without protection, nine out of ten North Island brown kiwi born in the wild are killed before they reach the one year old. After an aerial 1080 operation targeting stoats and rats in Tongariro Forest, almost seven out of 10 kiwi chicks made it past their first birthday.
- The active ingredient in 1080 is a naturally occurring substance found in plants including tea and puha. It is biodegradable, dilutes and breaks down in water, and plants and animals excrete non-lethal quantities of 1080 naturally. DOC has monitored over 200 kiwi through 1080 operations and no birds have ever been lost to 1080.
- The independent environmental watchdog ERMA put 1080 under intensive, expert examination two years ago and concluded that "continued use of 1080 has significant benefits for New Zealand's environment".
- DOC uses 1080 according to strict guidelines imposed by ERMA and health authorities. There have been more than 2000 tests of water supplies and there has been no risk to public health in the results. Safety standards for reticulated water have never been breached.
- Refinements in the use of 1080 have seen the amount of toxin used per hectare cut by up to 90 percent over the decade – under a teaspoonful of toxin is spread over a hectare.
- DOC does around 560,000 ha of pest control annually, of which most is ground control; 150,000 ha is aerial 1080, used in challenging country where the other options are not cost effective. DOC's aerial 1080 operations cover less than two percent of public conservation land.
- DOC spends hundreds of thousands of dollars a year on work to find alternative pest control methods in search of a better solution than current tools. Alternatives must be cost effective, have comprehensive coverage, be humane and pose little risk to human health. There are at least 30 research projects underway to find improvements in the use of 1080, alternatives to 1080 and other related topics.
- The recent self-setting stoat and rat traps have been financially resourced by the Department and made by private firm Good Nature. A possum trap is due shortly. These innovations should boost the cost effectiveness of ground control, because they will reload 12 times with big savings on labour
- Two new toxins due for ERMA registration in the next two years are PAPP (for stoat control) and cholecalciferol for possums and rats (currently significantly more expensive than 1080). If they work, and are cost effective, we will use them.

Rare yellow form of red mistletoe found

On Wednesday 15 December in *The Press*, Christchurch (and 'Morning Report', Monday 21 December), there was a report about finding a population of the rare yellow form of the native red mistletoe, *Peraxilla tetrapetala*. The report said that 20 plants of this rare form (*P. tetrapetala* has the status Declining) were found growing on the slopes of Mt Bruce, near Arthur's Pass in an area covered by a conservation programme run by the nearby Wilderness Lodge. The lodge owner, Dr Gerry McSweeney, is a well-known conservationist; the lodge has had a possum control programme operating in the area for the past 12 months. Gerry has known for about three years that the species was there but this was the first time he had seen it in flower (and thus was able to see that it was the yellow form). Next winter volunteers will transfer seeds of the mistletoe on to more beech trees in the lodge area to help maintain the population. In commenting on the find, Dr Colin Meurk of Landcare Research said that there was no reason the mistletoe could not prosper if possums were controlled. In a further comment to *Trilepidea*, Dr Meurk said that he knew of another population of the yellow form on the shores of Lake Ohau.

Notes on garden trials with threatened species

Philip Smith O2 Landscapes (p.smith@o2landscapes.com)

Much of my landscape design practice concerns the use of threatened native species within gardens, especially those species that do not receive widespread attention. In this respect, I am particularly interested in extending the fine work that has been, and is, consistently carried out by both Oratia Native Plant Nursery and Joy Plants—by bringing plants forth into gardens.

It is good to see that the use of certain threatened native species, such as *Muehlenbeckia astonii*, has become widespread, and it is to be hoped that the landscape industry further takes up the task of promoting New Zealand's biodiversity. I have certainly noticed that clients respond very well to the notion that they are assisting in the advocacy for (and increasing knowledge about) native species. This is a brief note on some of the plants that we have used within gardens that have performed particularly well, including some of the practical aspects related to the cultivation of those species.

One of the most important species that we have planted recently has been the Critically Endangered *Pimelea actea*. I have a personal affinity for this plant because I spent my university years in Manawatu (at Massey). *Pimelea actea* is a very good garden species and I am particularly attracted to its 'projecting' character—in this respect, it has a similar feeling to *P. traversii* in the way it contributes a sense of movement into plantings. Its growth form and foliage colour are obviously more significant characteristics than the flowers (with regard to cultivation), although the translucent fruits have a curious appeal.

Pimelea tomentosa is another species that has proven to be a very worthwhile landscape plant. It does, however, present a conundrum which must be accounted for in the style of planting (or the management of the plant). Its glaucous foliage, compact growth and copiously produced white flowers make it an excellent shrub, with potential for mass appeal. However, it shows a tendency towards being relatively short-lived in gardens. This is, in part, ameliorated by its tendency to self-seed freely in appropriate conditions; but, in a composed planting scheme, the sudden disappearance of a key component presents a problem. I am going to carry out pruning trials on this species to see if it can be maintained in a vigorous state through thinning the shrub. Another option of finding a long-term place for such a species is its use in association with other 'aesthetically dominant' species of a



Pimelea tomentosa.

different form, such as *Astelia trinervia*, *A. grandis* or *A. solandri*, which maintain the structure of the garden (if individual specimens of *P. tomentosa* do not endure). *P. tomentosa* can therefore provide medium-term structure, while slower-growing species assume a structural role; if seedlings establish, they may grow in association with the dominant plant.



Te Mata Peak *Pimelea* aff. *aridula*.

Whilst on the subject of *Pimelea*, we had an occasion in which we were able to establish a small population of a threatened taxon within the close vicinity of its natural habitat. The Te Mata Peak endemic, noted in Eagle (2006) as *P. aff. aridula* (iv), is a highly attractive and garden worthy plant. In a recent project, we were able to plant over 70 plants of this form (propagated from material descending from Tony Druce's original collection of this *Pimelea*) on a property on the foothills of Te Mata Peak. It has performed excellently and the clients are extremely pleased with it—to the extent that they have added more specimens of it to our plantings.

It will come as no surprise to members of the Network that *Pittosporum obcordatum* is one of the most useful of our threatened taxa for use in gardens. An increased appreciation of the characteristics of our filiramulate trees and shrubs has eased the way for species such as *P. obcordatum*. The often 'sculptural' quality of such species makes them very desirable for providing interesting form to plantings as well as adding significant depth (on account of their fine texture). *Pittosporum obcordatum*'s columnar growth form is well adapted to many landscape and garden situations and it has thrived in a wide range of conditions, including dry soils and low light. The scent of the flowers is noticeable, especially considering the extremely floriferous nature of forms of this species that I have encountered. Of all of our filiramulate trees and shrubs, *P. obcordatum*, perhaps, has the greatest potential to become as widely used as *Muehlenbeckia astonii*, especially because its growth form and resilience can provide a solution in difficult areas. Another application for this, and other, species is as living climbing frames for climbers, such as *Clematis forsteri* or *C. cunninghamii*.



Pittosporum obcordatum.

The delightful creeping shrub, *Coprosma spathulata* ssp. *hikuruana*, has performed very well within gardens. Although very different in form to *P. actea*, the way in which this plant 'projects' forth within the underplanting of gardens can lend a sense of movement to plantings. Its dark leaves are also worthy of mention; dark-foliaged plants have traditionally been very popular with gardeners. Interestingly, this species illustrates the shifting state of communication with regard to threatened species; two years ago, I was informing clients that this plant was Critically Endangered and now it has the lower threat ranking of Naturally Uncommon.

It is very satisfying when an endangered plant naturalises within a garden. In a garden within a gully in central Auckland, this has occurred for us. The critically endangered herb *Myosotis petiolata* var. *pottsiana*, the Critically Endangered fern *Christella dentata*, and the relict fern *Pellaea falcata* have all naturalised around a crushed limestone courtyard. The forget-me-not is especially satisfying, because it does not match many people's perception of the native flora, in much the same way as *Scandia rosifolia* surprises people. When the latter is in full flower, it evokes connotations of English country lanes and traditional flower gardens, rather than the image that many people have of native ecologies.



Myosotis petiolata var. *pottsiana* (left) and *Pellaea falcata*.

In opening people up to a wider range of species, we not only advocate for individual species, but expand the general view of New Zealand's natural environments. Ecologists are well aware of the varied matrix of natural landscapes throughout the country, but people outside specialist native horticulture or botany can be surprised by the diversity of our landscapes. As we can all agree, engendering a greater affection and respect for the native flora should be an important part of the landscaping/horticulture industry. Thus far, more leadership has been shown by members of the nursery industry than by landscape designers and contractors (although notable exceptions exist, including the Auckland landscaper, Nev Arbury, and Di Lucas in Christchurch). Commitment to such a goal does involve risks, which is at odds with the commercial nature of landscaping. However, an interest in threatened species provides clients with the opportunity to make a tangible contribution towards environmental ideals, and may therefore be viewed as an advantage. More important, though, it is about the landscape industry taking its role seriously as steward of the environment.

Reference

Eagle, A. 2006: Eagle's complete trees and shrubs of New Zealand. Wellington, Te Papa Press.

Marae-based plant training course, Wellington 13–14 March 2010

An Introduction to plant life in New Zealand—a 2-day marae-based plant training course—will be run from Saturday 13 – Sun 14 March 2010 at Tapu Te Ranga marae, Island Bay, Wellington. This module introduces plant life in New Zealand including both native and exotic species. The course covers plant names, where plants grow and why, plant communities, the life cycle and growth form of plants, the identification of plants using flowers, spores, seed and fruit, leaves, stem and bark and the collection of plant specimens for identification. There are 25 places so if you would like to enrol please email the Network at info@nzpcn.org.nz. There is no charge for attending although a koha donation towards food for the two days and the cost of the course book would be appreciated. For those registering from out of town, you will have to arrange your own accommodation. For more information about the Network's marae-based plant courses see the Network website (under Conservation > Training).

Eco-sourcing

Kristy Hall, Thomas Civil Consultants Ltd (kristy.hall@waitakere.govt.nz)

Planting native trees and shrubs on a rural property can be a particularly rewarding experience. Native plants can provide amenity, shade and shelter for stock, and food and habitat for birds, insects, and lizards. Wetlands and bush areas can also qualify a property for subdivision.

When planting on a rural property it is highly recommended that you choose eco-sourced native plants. This means plants grown from seed collected from naturally occurring local populations. Eco-sourced plants are grown from seed rather than cuttings or other vegetative means. They need to be collected from natural bush or forest remnants, as opposed to cultivated plants, gardens, or restored areas where the original source of the plants is unknown. Seeds must also be collected from many individuals and habitats to gain a representative sample of the population, rather than from only one or two source plants. Most importantly, seed must be sourced locally. What is “local” will vary according to the site, but as a rule of thumb, the closer the source population to the site where it is to be planted, the better. Many nurseries buy in plants from other areas of the country, or even grow stock from imported native seed. This is, of course, not eco-sourcing!

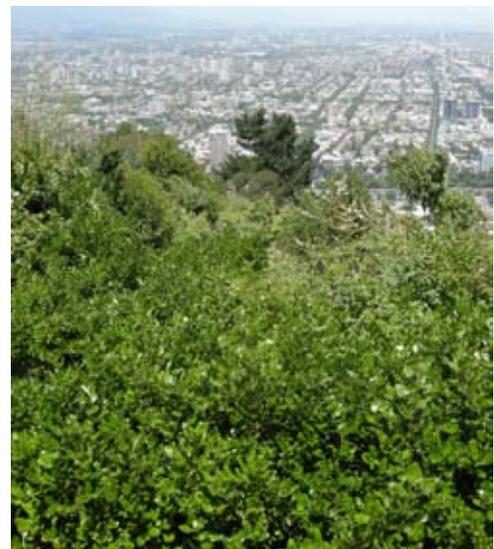
Why is eco-sourcing important? First, plants from the local area tend to grow well because they are adapted to the local climate. Most native plants vary throughout the country so planting locally sourced plants helps to conserve local populations and genetic diversity. It avoids the creation of hybrids or in-breeding from plants not native to the area. Eco-sourcing is imperative when conducting restoration, if the site is near existing native vegetation, or if the planting is over a large area.

How do you know if a plant has been eco-sourced? The first thing to look for is the name of the plant. Cultivars are plants that have been bred by nurseries for certain traits such as foliage or flower colour—they often have names such as *Carex* ‘Bronze Delight’ or *Hebe* ‘Wiri Cloud’. Cultivars are not eco-sourced plants and should be used only for ornamental purposes. Other species can be harder to tell apart. Ask your nursery where the seed was collected. If they don’t know, then don’t buy the plant! Some good native nurseries will include the origin of the plant on the label. If possible, you can even grow your own plants from seeds that you collect yourself.

Our natives overseas

Have you seen a New Zealand native plant growing overseas? Send us your images for publication in the newsletter and for use on the website.

The two images accompanying this item show (below, left) *Cordyline australis* (cabbage tree) and *Coprosma repens* (taupata) growing on top of Cerro San Christobal in Santiago, Chile.



***AoB PLANTS* – a new open access journal for plant biologists**

Authors are turning in increasing numbers to open access journals to publish their work. The attractions of doing so are several. They include having greater control over copyright, the appeal and flexibility of the latest publishing technologies and, above all, having papers made available without charge worldwide and thus freely available to anyone who wishes to read them as soon as they are published. The newly launched journal *AoB PLANTS* offers these and other attractive features. It covers all aspects of plant biology, is owned and managed by plant scientists on a not-for-profit basis and is published by Oxford University Press. *AoB PLANTS* publishes 'Research Articles', 'Points of View', 'Reviews', 'Mini-reviews' and 'Technical Articles'. Submitted papers are evaluated against published minimum criteria for acceptability using a double-blind refereeing system. Papers will appear online within 3–5 days of acceptance and benefit from a full typesetting and proofing service. For an introductory period, there will be NO CHARGE to publish in *AoB PLANTS*. This creates the ideal opportunity for authors to try the new journal and enjoy the benefits of open access publishing at no cost. For further information contact Mike Jackson, Chief Editor *AoB PLANTS*, E-mail: mike.jackson@bristol.ac.uk or visit the web site <http://aobpla.oxfordjournals.org/>.

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):

Auckland Botanical Society

Summer camp: 9–15 January- Bannockburn Camp, Central Otago.

Contact: Maureen Young (e-mail: youngmaureen@xtra.co.nz).

Anniversary weekend camp: 30 January–1 February at Turangi Camp.

Contact: Maureen Young (e-mail: youngmaureen@xtra.co.nz).

Waikato University

Summer course: Friday February 5 – Friday February 19, Biol226C Flora of Aotearoa/New Zealand. Open to all with an interest in Botany (at the discretion of the Course Coordinator).

Enquiries: Dr Chrissen Gemmill, e-mail: c.gemmill@waikato.ac.nz, ph: 07 838 4053), Prof Bruce Clarkson, e-mail: clarkson@waikato.ac.nz ph: 07 838 4237 or contact the Department of Biological Sciences ph: 07 838 4022 or 0800 WAIKATO, University of Waikato, Private Bag 3105, Hamilton.

Rotorua Botanical Society

Summer camp: Joining with the Auckland Botanical Society trip to Turangi, see above.

Field trip: Saturday 6 – Sunday 7 February to Lake Surprise, Tongariro National Park. **Meet:** Saturday morning in Rotorua or at Ohakune (contact trip leader by Wednesday 3 Feb for car pools). Grade: medium and hard options. **Accommodation:** DOC Maangaturuturu Hut \$15/\$5 (adult/youth) hut tickets required. Bring: Full tramping gear and food for an overnight stay in an alpine hut.

Leader: Chris Bycroft
ph: 07 346 3647,
e-mail: chris@wildlands.co.nz.

Wellington Botanical Society

Summer camp: Monday January 25–Wednesday February 3
2010 Summer Camp on Coromandel Peninsula. **Accommodation:**
Kauaeranga Valley Education Centre, c15 km from Thames.

Contact: Mick Parsons
ph: 04 972 1142, e-mail:
mtparsons@paradise.net.nz.

Nelson Botanical Society

Field camp: Friday January 29 to Monday February 1, Nelson
Anniversary Camp, Reefton.

Leader: Cathy Jones,
ph: 03 546 9499.

Canterbury Botanical Society

Summer camp 2010: 15–22 January at the Glen Mary Ski Club,
Lake Ohau.

Contact: Gillian Giller,
ph: 03 313 5315, for bookings or
further information.

University of Canterbury

Summer course: Biology 305 Practical Taxonomy for Field
Biologists. A technique-based course with examples from the
montane and alpine flora of the Cass region but focus is on
general principles, so that most acquired skills are transferable to
other regions and other groups of organisms.

Information: see the UC website,
www.canterbury.ac.nz/courses/
or contact the course coordinator,
Dr Julie Barcelona, or the School of
Biological Sciences office,
ph: 03 364 2500,
e-mail: biology@canterbury.ac.nz.

Botanical Society of Otago

Field trip: Friday and Saturday 15–16 January, an alpine plant
and lichen trip to the Remarkables Ski Field area. Accommodation
nearby.

Contact: [David Lytle](mailto:David.Lytle@otago.ac.nz),
ph: 03 454 5470 for full details.

The Island Invasives Conference

Venue: Auckland, in February 2010. Registrations are now open.
See: www.cbb.org.nz/conferences.asp to read the updated
information and proceed to the payments page. Please pass this
information on to as many people as possible.

Conference Manager: Dick Veitch
e-mail: dveitch@kiwilink.co.nz.

4th National Wetland Restoration Symposium

Venue: Rotorua on March 3–5, 2010. The theme is: "Wetland
Management and Restoration (Freshwater and Estuarine)". Online
registration: www.wetlandtrust.org.nz; early bird registrations
opened 1 June 2009.

Contact: National Wetlands
Symposium 2010, The Organiser,
ph: 07 343 1732, e-mail:
theorganiser@RotoruaNZ.com.
