



# TRILEPIDEA

NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

Please send news items or events to [events@nzpcn.org.nz](mailto:events@nzpcn.org.nz)

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

E-NEWSLETTER: No 29. APRIL 2006

Deadline for next issue: Friday 12 May 2006

## Message from the President

This issue of the Newsletter is what some people might call a 'bumper' issue. The Newsletter is always great reading and a valuable resource but this issue seems to be particularly special. So this will make great reading over the Easter break - not that everyone will be taking a break from their usual endeavours.

The Network has long played a very valuable role in helping to coordinate ideas, people and of course information. This time it is information and here is an important opportunity for you to make a significant contribution. I am of course talking about the New Zealand Plant Conservation Education Stocktake. Everyone - yes I mean everyone - has something valuable to offer no matter how small that contribution may be. So here is an opportunity to help achieve one of the 14 targets of the Global Strategy for Plant Conservation. Please complete the form at the back of the Newsletter and send it in. Do you know of anyone else who could contribute information?

The formation of the New Zealand IUCN Plant Specialist Group is a very significant milestone and we need your comments about the size and the formation of the Group. The Network has a valuable role to play in helping the IUCN and there are of course many people well qualified to assist. Do please send in your comments about the size of the group and the formation of the group.

There have, from time to time, been discussions about Network patrons. Earlier this year I approached a few well known people in New Zealand to ask if in principle they would be willing to take on the important role of patrons. I told them about the history and current activities of the Network. In particular I drew to their attention the Vision of the New Zealand Plant Conservation Network. I am delighted to say that both Peri Drysdale (from Christchurch) and Rob Fenwick (from Auckland) agreed to become patrons. At the last Council meeting their offers were accepted. There is more information about these two Patrons below.

Also at the last Council Meeting we discussed what could be done to carry on the memory of David Given and his extensive work on native plants and conservation in general. Kerry-Jayne Wilson (a colleague of mine at Lincoln University) and I have volunteered to help coordinate ideas and work with the Given Family. The sale of the David Given collection of Wollemi pines brought a considerable sum of money to the Network. I am very pleased to say that the Family has given approval to the establishment of a Trust Fund for the David Given Threatened Plant Research awards or scholarships. The Network has set aside \$20,000 (made possible by the sale of the Wollemi pines) to start the Trust Fund. The details of the Trust have yet to be agreed but the plan is to invest the money and use the interest for threatened plant research. If we had about \$100,000 invested then this would allow us to offer a substantial scholarship each year. If anyone would like to contribute to the David Given Threatened Plant Scholarship then please send your donations to our Treasurer.

Other suggestions and ideas as tributes to David and his work are currently being considered. Both Kerry-Jayne Wilson and I would welcome any suggestions. I wish you all a very pleasant and satisfying Easter.

*Ian Spellerberg*

Professor Ian Spellerberg, Lincoln University

## Plant of the Month

Plant of the month for April is parapara (*Pisonia brunoniana*). This is an indigenous tree of coastal and lowland forests in the Kermadecs (Raoul), Three Kings and northern North Island (mainly offshore islands). It is mainly found on rodent-free offshore islands where it can be a very important component of the understorey of mixed-broadleaf forest. Within the mainland part of its range, parapara is virtually extinct, in recent years it has only been recorded from the Whangape Harbour to Mangawhai. Its large leaves are especially palatable to browsing animals such as possums, goats and other feral livestock. However, the main threat to mainland populations is people who wish to cut down trees because of their reputed ability to trap numerous small passerines. The Network fact sheet may be found at: [http://www.nzpcn.org.nz/vascular\\_plants/detail.asp?PlantID=306](http://www.nzpcn.org.nz/vascular_plants/detail.asp?PlantID=306)



Parapara, *Pisonia brunoniana*.  
Photo: Peter de Lange, November 2005.

### UPDATE on parapara

Recently a campaign has been initiated by members of various organisations, including the SPCA, to have parapara banned from sale and cultivation on the grounds that this tree is “the prime killer of New Zealand native birds”. The Network finds this statement reactive, too emotive and in particular unqualified with sound scientific data. Few scientific peer-reviewed studies have been published; of the few available, it is clear that while bird captures do occasionally happen, they are not at the exaggerated levels promoted by these individuals. Past attempts to argue that parapara is not indigenous to New Zealand have already been shown to be unfounded. The species is now at risk throughout its natural world-wide range because of vandalism by people who believe in its bird-killer reputation and rat predation of seed and seedlings. The Network would suggest that cultivation is a matter of informed decision. Nurseries stocking this plant should clearly label specimens with the warning that the fruits may catch small birds and insects. The Network considers cats to be far more effective animal killers than parapara.

## Network announces two Patrons

We are pleased to announce that Peri Drysdale and Rob Fenwick have both accepted invitations to become the Network’s first Patrons. They are both leaders in their respective fields as you will see from reading their brief biographies below.

### Peri Drysdale

North & South’s New Zealander of the Year 2005, Peri Drysdale has built Snowy Peak Ltd, an export apparel company based out of Canterbury, from scratch. Her label is Untouched World. She has pioneered high performance eco-friendly fibres and has set up a charitable foundation to foster young leaders. Peri was made an MBE in 1992 for services to New Zealand (manufacturing and export) and in 2002 won the Most Ethical Company award in the Deloitte’s Top 200 Companies.



### Rob Fenwick

Environmental entrepreneur Rob Fenwick is an advocate for the environment and the sustainability movement through his business and several governance roles. He is founding director of Living Earth Ltd the country’s principal commercial composting business and is chairman of three organisations that traverse sustainability in New Zealand: NZ Business Council for Sustainable Development; the United Nations Decade of Education for Sustainable



Development in New Zealand; and the crown research institute—Landcare Research *Manaaki Whenua*. He has been instrumental in the planning the replanting of Motutapu Island in the Hauraki Gulf, as well as his family's coastal block on Waiheke Island. He is a former president of Eden Gardens in Auckland, a member of the garden committee at Government House Auckland and a trustee of WWF. He was a member of the working group to develop the National Waste Strategy and has written papers and speeches on organic waste recovery, soil health, conservation and sustainability generally.

## **Network projects update**

A number of Network members have asked for a progress report on some Network projects. This newsletter includes an article about the national education stock take. Progress with the marae-based plant training course will be included in the May edition. Some other projects underway are:

### ***Covenant management for threatened plants (joint project with QEII)***

In 2005 the Network set up a programme (in conjunction with QEII Trust) to prepare management action plans for landowners that have threatened plants on their covenants. These will provide information on the distribution of the species in the covenant and what work is required to maintain suitable habitat for the species and mitigate threats. Work is on-going for this project.

### ***Threatened plants of New Zealand book***

MWH-New Zealand sponsored the Network to write and publish a book about New Zealand's threatened plants. This book is in the final stages of production and will be going to the publishers in the next month. The intention is to publish this year.

### ***Website improvements***

The website continues to grow. Visitation continues to grow also with over 6000 people a week using the site. The site has received over a quarter of a million visitors since it was launched in August 2003. Over 3000 images have been added in the past 5 months thanks to John Smith-Dodsworth, Jonathan Boow, David Norton, Bec Stanley, John Hobbs, Barry Hartley, Ingrid Gruner, Jenny Ladley, Jeremy Rolfe, John Barkla, Leon Perrie, Lisa Forester, Naomi Lorimer, Paul Cashmore and Robyn Smith. Work is planned to add threatened mosses, liverworts and lichen to the site, as well as an area for sponsors and patrons. Suggestions for improvements are always welcome.

### ***National seed bank***

The Network is currently preparing a business case for the establishment of a national seed bank in New Zealand. This will be used to garner support from potential sponsors and partners. For more information or to provide information please contact Phil Knightbridge: [pknightbridge@doc.govt.nz](mailto:pknightbridge@doc.govt.nz).

## **The Great New Zealand Plant Conservation Education Stocktake**

It's big, it's searching—and if it hasn't already, it's coming to a place near you! New Zealand's first comprehensive stock take of plant conservation education resources and programmes is underway.

This extensive review is part of a wider approach aimed at raising awareness of and involvement in plant conservation. The goals are:

- to identify all existing plant conservation education resources and programmes nationally;
- to disseminate information about existing resources and programmes, promote best practice and identify gaps; and
- to raise awareness about Target 14 of the Global Strategy for Plant Conservation and encourage New Zealanders to participate in its implementation.

Target 14 states: *The importance of plant diversity and the need for its conservation are incorporated into communication, educational and public awareness programmes.*

The outcome will be a searchable database of plant conservation resources and programmes, similar to one produced for marine education two years ago. The database and associated information gained will be distributed to everyone who helped with the project and all those involved or potentially involved in plant conservation education in NZ.

Sioux Campbell, an environmental public relations specialist, has been contracted to undertake the project for the NZPCN. Sioux was involved with the marine education stock take and has a long association with environmental education and advocacy. She says even in the early stages of information gathering it's obvious that a very large number of people and groups has an interest in the field. "Once I started to seriously investigate who might hold resources or be providing related services the list started to grow rapidly. It will be fascinating to see where the overlaps and any gaps are once we get into some analysis." An initial questionnaire has been sent to nearly 670 individuals and organisations around the country including central, regional and local government, environment centres, universities, polytechs, schools, museums, botanical gardens and research organisations.

Just in case you haven't been contacted (and a reminder if you already have!) the questionnaire is included at the end of this newsletter. Please fax, mail or e-mail responses back to Sioux immediately at: Chameleon Public Relations Ltd, Postal Delivery Centre, Ngunguru, RD 3, Whangarei. Email: [chameleon.1@xtra.co.nz](mailto:chameleon.1@xtra.co.nz). Phone and fax 09 4344264. Mobile: 0274 768 414

### **BGCI holds 3rd global botanic gardens congress in Wuhan, China: 16–20 April 2007**

Botanic Gardens Conservation International are organising the next global botanic gardens congress in Wuhan, China in 2007. The main aim of the Congress is to establish how botanic gardens are playing their part in building a sustainable future and to help botanic gardens build this sustainable future. BGCI's objective will be to review the contribution of botanic gardens to the Global Strategy for Plant Conservation (GSPC) and provide a framework and guidance for botanic gardens to achieve its targets by 2010. For more information please visit [www.3GBGC.com](http://www.3GBGC.com) and register your interest. BGCI will be developing the programme, local tours and the accommodation and look forward to your participation.

### **Formation of the New Zealand IUCN Plant Specialist Group**

The Network accepted the role of **IUCN Plant Specialist Group** for New Zealand at last year's Network conference (to take over from the Australian Network for Plant Conservation who previously had this role on our behalf). The purpose of the group is:

- To provide answers to questions received by the IUCN on New Zealand plant conservation matters.
- From time to time assess the threatened status of New Zealand's plant life and act as a Red-Listing authority for New Zealand.
- To provide information to the IUCN so that they can publicise our work and provide a forum for exchange of information between people worldwide and the Network.
- Members of the group will also receive the SSC's newsletter SPECIES twice a year as well as the monthly SSC conservation e-bulletin.

The Network Council is now ready to form this Plant Specialist Group but they would like feedback on the feelings of members about the size and make-up of the group. One option is to run a formal process to nominate and appoint an SSC plant group for New Zealand.

Issues for your feedback are below. Please tell us your thoughts by emailing [info@nzpcn.org.nz](mailto:info@nzpcn.org.nz)

1. Size of the group—should there be a limit on the number of members or do we just want to reflect the diverse knowledge of the New Zealand flora?
2. Formation of the group—the Network Council can appoint people by invitation or the Network can run a nomination process.

## Progress report on *Craspedia* research at the Allan Herbarium, Landcare Research, Lincoln

Ilse Breitwieser, Landcare Research

*Craspedia* (Asteraceae: Gnaphalieae) is a genus of 23 species found only in Australia and New Zealand. Its species have confusing and continuous character variation and indistinct boundaries, which makes their relationships difficult to elucidate.

The New Zealand species of *Craspedia* have long been regarded as one of New Zealand's most difficult and important taxonomic group of higher plants. I started to revise the genus in 1996, but soon realised that with my increasing leadership role at Landcare Research, it would be almost impossible to undertake this revision. A revision of *Craspedia* requires full time research of about 6 years. Staff at the Allan Herbarium agreed that I would work on *Craspedia* as a very long term research project.

So, what have we achieved so far? First of all, I wanted to test whether *Craspedia* in New Zealand is monophyletic. Phylogenetic analyses of ITS, ETS and psbA-trnH non-coding spacers showed that New Zealand *Craspedia* is derived from a single dispersal event over the Tasman Sea from south-east Australia. Therefore we can exclude conspecificity with Australian species and can delimit the revision of *Craspedia* to the New Zealand species.



An example of one of the many unnamed entities within *Craspedia*, No Man's Creek, next to Wairau Hanmer Springs Hydro Road, Marlborough. Photo: Ilse Breitwieser.



Ilse Breitwieser in the *Craspedia* glasshouse at Landcare Research.

We (Kerry Ford, Jo Ward, Rob Smissen, Steve Wagstaff and Ilse Breitwieser) have now almost completed our manuscript that is based on Kerry Ford's MSc thesis on "Origin and Biogeography of New Zealand *Craspedia* (Compositae: Gnaphalieae)". Rob Smissen, Kerry Ford and I are currently using molecular methods to gain more insight into what is a species in *Craspedia*. We are looking at uniform entities, such as an unnamed *Craspedia* believed endemic to Kaitorete Spit in Canterbury, also at areas where different looking entities occur sympatrically (e.g., three sympatric entities at Mt Arthur, Kahurangi National Park) and finally at areas where there appears to be obvious hybridisation between several entities (e.g., between Island Saddle and No Man's Creek in Marlborough).

For the revision, many helpers and I collected specimens of all of Tony Druce's tag name entities and of the described taxa. We are growing about 300 plants in one of Landcare Research's glasshouses under uniform conditions. I have measured them for a wide range of characters (e.g., corolla colour, pollen colour, anther tube colour, corolla length, floret number of capitulum, floret number of glomerule, glomerule

diameter and shape, scape length / width, scape colour, several rosette leaf characters, several characters of leaf hairs, fruit set). Kerry Ford has measured and scored fruits from all of Tony Druce's tag name entities and has undertaken a preliminary analysis. Numerous helpers, particularly Department of Conservation staff and keen amateurs, are sending us specimens. Over the years we have collected many specimens and scored their characters. I have also started measuring leaf characters from other herbarium specimens. All herbarium specimens are databased. A lot of time will still be needed to score herbarium specimens and to analyse data.

So, what are the more short term plans? They are to submit manuscript on origin and biogeography of *Craspedia*, to write a manuscript on first results from the genetic research and to write a manuscript on the fruit data. I would like to thank all those who have contributed specimens to the *Craspedia* study. Each specimen is very valuable and will be included in the research. I hope to continue to provide updates on the revision as and when new results arise. Should you have specimens or require further information we would be interested to know and can be contacted at Allan Herbarium, Landcare Research, Lincoln, P.O. Box 69, ph 03 3256700, e-mail: Ilse Breitwieser – [breitwieseri@landcareresearch.co.nz](mailto:breitwieseri@landcareresearch.co.nz) or Kerry Ford [fordk@landcareresearch.co.nz](mailto:fordk@landcareresearch.co.nz)

### **Important Plant Areas – criteria for comment**

This is a reminder that comments are sought by the Network on its draft set of criteria for identification of Important Plant Areas in New Zealand. The identification of Important Plant Areas is required in order to implement Target 5 of the Global Strategy for Plant Conservation (“Protection of 50 per cent of the most important areas for plant diversity assured”). The draft criteria are provided in E-newsletter Number 28 (March 2006). Please send comments to [info@nzpcn.org.nz](mailto:info@nzpcn.org.nz)

### **Register now for the Network Conference 2006**

See the Network website (under Conservation info>Events>Conference) for more details and to download the registration form.

**When:** Monday 20th –Wednesday 22nd November 2006 (including field trip)

**Where:** Conference Centre, University of Auckland

This year's 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.

### **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](mailto:events@nzpcn.org.nz)):

### **NZIF conference 2006: Absolutely positively forests: Te Papa, Wellington 20–23 April**

This conference will debate the many values of forests, and determine how we can improve the way that forest values are delivered in New Zealand. It will bring together NZIF members, forest owners and managers, farm foresters, scientists, policy makers, NGO members, conservationists and the public. It will highlight the richness of forests, the options forest managers have to offer particular environmental services, and the ways in which they can be encouraged. Please contact Conference Management Specialists, PO Box 101, Silverdale, Auckland, New Zealand. P: 64 9 426 3066 F: 64 9 426 3016 E: [nzif@eventmergers.co.nz](mailto:nzif@eventmergers.co.nz)

## **Botanical Society of Otago, Field trip to Nenthorn, inland from Palmerston. Saturday 29 April 2006.**

Start time: 8:30 a.m. The DOC reserve at Nenthorn/Macraes is best known as a site for rare skink conservation but there is also great botanical diversity, including over 25 threatened plants including coral broom, wetland herbs such as *Gratiola nana* and *Tetrachondra hamiltonii*, and the rare grass *Simplicia laxa*. Leave Botany carpark at 8.30 a.m. Saturday and return late afternoon. Bring lunch and be prepared for cool changeable weather conditions.

Contact [John Barkla](#), phone: (03) 476 3686.

## **Wellington Botanical Society field trip: Druce garden weeding. Sunday 30th April**

Contact Helen Druce, 123 Pinehaven Road, Pinehaven, Ph: 970 7853. Help with maintenance of this nationally important garden containing many threatened indigenous plant species established by Tony and Helen Druce over forty years ago. Bring food; hot drinks provided.

## **Waikato Botanical Society Field trip: Sunday 30 April. Clarkson's gully garden & Botanical Society Native Threatened Plant Collection working bee #2.**

Starting with an inspirational trip to the Clarkson's gully garden in Chedworth, Hamilton (7 Lynwood Place) we will look at the variety of threatened and other native plants they have been successful in growing at their gully site. After lunch a further working bee at the Society threatened plant collection to weed, plant and propagate more material. Bring your old gardening clothes.

Contact: Liz Grove ph. 07 846 0965 (hm) or [eg3@waikato.ac.nz](mailto:eg3@waikato.ac.nz) or Bruce Clarkson ph. 855 9534 (hm). Meet: 9.30 a.m. University of Waikato Gate 9. From here we can proceed to the Clarkson's and return to the new threatened plant collection site in the glasshouse compound at the University at 1 p.m.

## **Wellington Botanical Society Field trip: East Harbour Regional Park, Saturday 6 May**

Botanise Fern Gully Track and Rata Ridge Track and ridge to east of Gollans Valley then traverse the park via Gollans Stream to Days Bay, or retrace steps to Wainuiomata Road. Catch 9.05 a.m. train from Wellington to Waterloo Station, then no. 170 Wainuiomata South bus on east side of station. Meet: 9.45 a.m. at bus stop at Wainuiomata Road just past Davis Street. MAP: R27 and street map. Park pamphlet supplied. Leaders: Barbara Mitcalfe 475 7149, Chris Horne 475 7025.

## **20th NEW ZEALAND FUNGAL FORAY - WESTPORT, West Coast, South Island, New Zealand 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. 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.

## **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.

## **New Zealand Plant Conservation Network Education Stock take questionnaire**

**Q1. Which organisation do you work for?**

**Q2. Please include your name, address and contact details (postal, phone and electronic)**

**Q3. What is your role/position within the organisation?**

**Q3. Do you or your organisation provide plant conservation education resources, programmes or services?**

If yes, please give brief details (if your work in this area is comprehensive, please provide appropriate references and a contact person).

Otherwise state N/A.

**Resources (eg publications, kits)**

**Programmes (eg planting programmes, site management)**

**Services (eg advice to landowners)**

**Q4. Are the resources, programmes or services themed? (e.g., about weeds, threatened plants, visitor education?)**

If so, please describe the themes covered.

**Q5. Is there a charge for the resources, programmes or services?**

No

Yes – please state the cost

**Q6. Who is/are your target audience/s? (Tick as many as apply)**

Students – primary  
– secondary  
– tertiary

Community groups

Individual landowners

Gardeners

Other interest groups (list examples)

**Q7. If you know of plant conservation education resources, programmes or services held/used by others please note these here.**

**Q8. Would you be happy to provide more detailed information about the work you do as part of developing case studies for the stock take project? (via interview and possibly a funded workshop).**

Send completed forms to:

Chameleon Public Relations Ltd, Postal Delivery Centre, Ngunguru, RD 3, Whangarei.

E-mail: [chameleon.1@xtra.co.nz](mailto:chameleon.1@xtra.co.nz), Phone and fax 09 4344264. Mobile: 0274 768 414

