

# TRILEPIDEA

# NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

Please send news items or events to <a href="mailto:events@nzpcn.org.nz">events@nzpcn.org.nz</a> Postal address: P.O. Box 16-102, Wellington, New Zealand

E-NEWSLETTER: No 48. November 2007 Deadline for next issue: Friday 14 December 2007

# **Message from the President**

I am sure that many of you will know that the year 2007 is the 300th anniversary of the birth of one of the most important biologists of all time and one whose work continues to have a major influence on the work of many plant ecologists and plant taxonomists. I am of course talking about Carl Linnaeus (1707–1778). This year, there have been many books and articles published about this very remarkable man who made such a significant contribution to systematic biology. Living in Sweden, he became a legend in his own time for his teaching and research. He established the universally accepted system of binomial nomenclature and he remains the most well known name in taxonomy. For me, as a Fellow of the Linnaeu Society of London, I have had access to many of the archives about Carl Linnaeus. It is a very moving experience to see, first hand, material that was written so long ago by Linnaeus yet remains so relevant today. It is nothing less than inspiring to see this material.

Talking of being inspired, there are several contributions to this Newsletter that will surely inspire many members of the Network. You will read about the culinary explorations of Grant Timlin. He explores ways of making pesto with the 2006 most popular native plant no less. This year's vote for New Zealand's most popular native plant is coming to an end and you have but a short time to enter! As in previous years, I have received many communications to the say that the annual vote is proving to be a very welcome teaching resource in many schools. Talk about being inspired, is there nothing better to start a vigorous discussion than to ask a class of children to name their favourite native plants? I wonder how many young people have become inspired by nature by simply recording nature's events around them. Rewi Elliot continues the discussion about the value of phenology studies and makes some valuable suggestions.

If none of the above has yet inspired you, then take a look at this month's offerings for coming events. There must be something of interest!

Ian Spellerberg Lincoln University

#### One million visits to website

In the first week it was launched, the Network website had only 125 visits. Visitation has grown steadily as the Network has added more and more features to the site. It now receives over 10,000 visits per week and has reached a total of one million visits. It was established to educate people about the native and naturalised components of New Zealand's plant life and also to provide a focus for members of the NZPCN. It has certainly achieved that goal and is now a wonderful advertisement for the government's Terrestrial and Freshwater Biodiversity Information System (TFBIS), which funded much of the initial development of the site.

#### Plant of the Month

Plant of the Month for November is the endemic shrub or tree *Coprosma foetidissima*, otherwise known as stinkwood. This species is found in North Island (from Moehau southwards) and South, Stewart and Auckland Islands. It grows up to 3 m tall (although occasionally it can reach 6 m). The most striking feature of this plant is the smell of rotten eggs which is given off when the leaves are crushed. Interest in this species has increased lately as voting continues in this year's Vote for your Favourite Native Plant competition. Stinkwood is now 10th in the Top 10 with less than 2 weeks to go. The Network fact sheet for the *Coprosma foetidissima* may be found at:



*Coprosma foetidissima*. Photo: Jeremy Rolfe.

www.nzpcn.org.nz/nz threatenedplants/detail.asp?PlantID=1761



Chatham Island forget-me-not (*Myosotidium hortensia*).

# **Chatham Island Forget-me-not takes the lead**

We encourage you to make your five votes count. At the time of writing, having led from the start, the bamboo rush (*Sporadanthus ferrugineus*) has dropped to Number 3 following a late surge in voting for the Chatham Island forget-me-not that has taken it to Number 1 and the willowherb to No 2. Voting closes on Friday 30 November 2007, so please vote and remind your friends to vote also. The results will be announced on Saturday 1 December and in the next newsletter.

# **NZPCN Committee 2007–2008**

In the interests of providing better information about the New Zealand Plant Conservation Network provided here is a brief outline of the committee members, their backgrounds, network responsibilities and contact details.

## **President: Professor Ian Spellerberg**



Professor Ian Spellerberg. Photo: David Hollander.

Ian Spellerberg is Director of the Isaac Centre for Nature Conservation and Professor of Nature Conservation at Lincoln University. He is also chairs the University Environmental Sustainability Advisory Group. He has established two international masters programmes, one in sustainability and one in nature conservation. His teaching includes 'Ecological Monitoring', 'Science and Policy' and 'Sustainability'. He has published several books in the area of ecology and conservation and regularly contributes opinion articles to newspapers. A forthcoming book ('Living with Natives') about New Zealanders' love of native plants will be published by Canterbury University Press in 2008. As President, Ian coordinates the activities of the network via the council and by representing and promoting the network at every opportunity. Ian plays a major role in the overall strategic direction of the network, helping to recruit members, listening to the members; seeking support via sponsorship and via patrons. Ian provides a regular commentary in the network's newsletter Trilepidea and by prompting members to contribute. Ian strongly maintains his key role is to initiate new ideas to help the network achieve its mission. Contact: Spelleri@lincoln.ac.nz

Vice President: Position vacant Secretary: Mr John Sawyer



John Sawyer. Photo: Peter de Lange.

A plant ecologist with the Department of Conservation for 14 years involved in threatened species recovery, island restoration, habitat protection and pest plant management. As well as being a founding member and Secretary of the New Zealand Plant Conservation Network he is also Editor of the Wellington Botanical Society Bulletin and Immediate Past President of the New Zealand Ecological Society. He has written a range of books about native plants, environmentally friendly gardening and, most recently, about gourmet tramping. John is the webmaster for the NZPCN website and is the first point of contact for the website.

Contact: jsawyer@doc.govt.nz

#### **Treasurer: Mr Mike Oates**

Founding member of the network, former President of the NZPCN Mike is currently the network's treasurer. Mike has a keen interest in native plants and horticulture. Aside from being responsible for the network's finances, for the next 12 months Mike will be part of a small Wellington team to organise the logistics for the 2008 NZPCN conference. Contact: <a href="mailto:michael.oates@wcc.govt.nz">michael.oates@wcc.govt.nz</a>

#### **Committee members**

#### **Dr David Norton**

David has a PhD in botany, and has been on the staff of the University of Canterbury, School of Forestry since 1985. Research and teaching interests include lowland forest ecology, threatened plant conservation, mistletoe ecology and restoration ecology. Current teaching and research focus is on biodiversity conservation in production systems, especially farmland and plantation forests. David has published nearly 100 papers in peer-reviewed journals as well as numerous other articles and reports, and was elected a Fellow of the Linnean Society (London) earlier this year. In the next year David's main contribution to the NZPCN will be the organisation of the NZPCN 2008 conference science programme with Peter Heenan. Contact: <a href="mailto:david.norton@canterbury.ac.nz">david.norton@canterbury.ac.nz</a>

#### Dr Peter Heenan



Dr Peter Heenan. Photo: Peter de Lange.

A taxonomist at the Allan Herbarium (CHR), Landcare Research, Peter works mainly on the taxonomy of the indigenous New Zealand flora in a variety of genera and has published over 100 papers in peer-reviewed literature. His other research interests include naturalised plants, conservation biology, biogeography, phylogeny and cycling. In the next year Peter's main contribution to the NZPCN will be the organisation of the NZPCN 2008 conference science programme with David Norton.

Contact: <a href="mailto:heenanp@landcareresearch.co.nz">heenanp@landcareresearch.co.nz</a>

# Dr Philippa Crisp

In her current role, Philippa heads a team that cares for the ecological health of Greater Wellington Regional Council's parks and forests. She has been involved in a wide range of conservation topic areas over the past 12 years. Philippa was a founding member of the NZPCN and helped to develop the marae-based native plant training courses. She will be part of the Wellington team for the 2008 conference and has recently taken on the sponsorship co-ordinator role.

Contact: Philippa.Crisp@gw.govt.nz

#### Sarah Beadel

The founding Director of Wildland Consultants since 1985, she is a restoration ecologist and botanist, and plans and implements ecological restoration projects, undertakes vegetation surveys and mapping, threatened species survey and monitoring, and identification of management issues and options for natural areas. Sarah is the author of more than 500 botanical reports, papers and articles and is passionate about plants and ecological restoration. In the next year Sarah will work with Peter Heenan setting priorities for the website, and work on sponsorship as well as organising a marae based training course in Rotorua with John Sawyer. Contact: <a href="mailto:sarah@wildlands.co.nz">sarah@wildlands.co.nz</a>

# **Bec Stanley**

A plant ecologist with the Auckland Regional Council working on threatened plant survey, protection and restoration in Auckland's 26 regional parks. Bec provides ecological assessments for events in parks, is writing the council's revegetation strategy, and has involvement with statutory projects that are consented to by council. The statutory role of councils in ensuring biodiversity values are protected has been enhanced by the publication by Bec, Peter de Lange and Ewen Cameron on the regionally threatened plants of Auckland. Bec was a plant ecologist with the Department of Conservation from 1997 to 2005 involved in threatened plant recovery, island restoration, and habitat protection. Bec is also on the Auckland Botanical Society committee. For the network, Bec provides a quarterly update on the work of NZPCN to the Australian Network for Plant Conservation which is published in their journal *Australasian Plant Conservation* and is responsible for checking information loaded on the NZPCN website for accuracy, clarity and spelling. Contact: rebecca.stanley@arc.govt.nz

#### **Network Administrator: Dr Eric Scott**

A retired Lincoln University academic. Interests include insect ecology and conservation including plant-insect interactions. As administrator for the network Eric's responsibilities are to look after membership details from the processing of new registrations through issuing subscription notices to keeping the database up to date with members' changes. He also assembles the text of each issue of *Trilepidea* before sending it to Jeremy Rolfe for formatting. Contact: mescott@clear.net.nz

# **Phenology studies**

Rewi Elliot, Curator/Manger, Otari Native Botanic Garden and Wilton's Bush Reserve (<u>rewi.elliot@wcc.govt.nz</u>)

Phenology has been lurking in the back of my mind since Professor Ian Spellerberg suggested a volunteer botanical phenology network in the editorial in July 2007. I began thinking about it again after hearing Dr Philip Moors from Melbourne Royal Botanic Gardens talk about how botanic gardens could contribute.

I like Ian's suggestion of volunteer participation. Botanic gardens are a good place to achieve this and there are several advantages to their involvement. Gardens often already offer some sort of volunteer programme; secondly, as usually long-lived institutions, they are able to commit to the longitudinal study necessary for phenology; thirdly, they are in the position of holding a wide range of plant material that can be observed, either in collections or in reserves; and last of all they have the benefit of staff who know the plants at hand.

I can see volunteers and apprentices being easily involved in gathering simple data. But, volunteer work cannot be in vain. These people are giving up their free time and need results. Volunteers need to see the value added by their efforts, and the reasons for their time spent need to be clearly articulated. For many of them, the educational aspects may be reason enough, and the chance to contribute locally to a global phenomenon like climate change also has some attraction. They also need to be able celebrate success—some sort of regular feedback from users of the data would be essential.

Data collection would need to be in a reasonably simple format for volunteers. Perhaps if a set of simple recordings was developed, which were meaningful to researchers and students, other institutions could follow suit. We have over 1000 accessions at Otari, but we need to learn more about how to decide which taxa or types of plants to measure, what to measure, and over what time frames.

When I was studying horticulture, I was required to keep a 12-month diary and record flowering events. When working at the Wellington Botanic Garden, we recorded flowering durations of plants in the Australian collection in weekly time slots. These simple recordings were a useful in an amenity context because they assisted with planting design.

Dr Philip Moors' angle was climate change and how climate change is affecting botanical events. I wonder now what else phenology can bring to the table, and who's interested in eating there. What sort of data would be useful? What appropriate data collection methods are in use? Who out there would make use of the data gathered and how? Please contact me if you can help in any way.

# Cook's scurvy pesto – making use of our flora

Grant Timlin, Department of Conservation, Mana Island



Photo: Grant Timlin.

Each year I try to grow a crop of sweet basil to make into pesto. When the sweet basil runs out I sometimes resort to watercress, the stuff we find growing in small creeks and drains. Recently, while propagating the nationally threatened plant Cook's scurvy grass, I noticed that it grew easily from seed and quickly developed lush leafy growth. It being a cress I thought, well, why not pesto? So I whipped some up in the food processor one morning. The young plants grow quickly and could easily be grown hydroponically as a commercial crop.

The pesto has a mustardy tang and although not as delicious as sweet basil, is quite acceptable on crackers with a Marlborough Chardonnay.

#### Recipe:

2 litre container loosely filled with *Lepidium* leaf 50 grams grated parmesan <sup>3</sup>/<sub>4</sub> cup pine nuts <sup>1</sup>/<sub>2</sub> teaspoon salt <sup>1</sup>/<sub>2</sub>–<sup>3</sup>/<sub>4</sub> cup of olive oil 4 cloves of chopped garlic

Put everything into a food processor and zap till thoroughly blended.

# **Australian Network for Plant Conservation**

Our sister organisation is holding its annual conference in Mulgoa, near Penrith, west Sydney in April next year. The organisers would love to see a significant number of New Zealanders at the conference. Contributions by way of papers or posters are very welcome. Plan to be there; the earlier you make your flight bookings the cheaper they are likely to be. For more details, see the information in the Events section of *Trilepidea* no 46.

# Your help is sought...

Included below is a list of images that the New Zealand Plant Conservation Network still seeks for use in the Network's book about Threatened Plants of New Zealand to be published next year by Canterbury University Press. We have many images already but if we can obtain the images included on this list then it will substantially improve the final publication.

Please tell us if you have (or can take) any of these images for us to use in the book or e-mail them to us at <a href="mailto:info@doc.govt.nz">info@doc.govt.nz</a>. Please feel free to forward this request to colleagues who may be able to help plug these gaps.

# Threatened plant images needed

Species name	Image 1	Image 2	Image 3	Image 4
Acaena rorida	Habitat			
Aciphylla dieffenbachii	Flower			
Ackama nubicola	In flower	In fruit		
Alectryon excelsus subsp. grandis	Flowers		Habit shot	
Amphibromus fluitans	Stipule close up	Close up spikelet	Over mature inflorescence	
Anzybas carsei	Habitat			
Asplenium paupaurequitum	Poor Knights shot			
Asplenium trichomanes subsp. quadrivalens	More images			
Atriplex holowayi	Toothed leaves	Fruits		
Atriplex cinerea	More images			
Australopyrum calcis subsp. calcis	Close up of ligule	Close up spikelet	Habitat	
Australopyrum calcis subsp. optatum	Close up of ligule	Close up spikelet	Habitat	
Botrichium lunaria	More images			
Brachyscome pinnata	More images			
Calochilus herbaceus	Whole plant			
Carex cirrosa	More images			
Carex inopinata	More images			
Carmichaelia carmichaelia	Seed pods			
Carmichaelia curta	Seed pods			
Carmichaelia hollowayi	Habitat	Growth habit	Seed pods	
Carmichaelia juncea	More images	Habitat		
Carmichaelia kirkii	Habitat			
Carmichaelia muritae	Seed pods	Habitat	Growth habit	
Carmichaelia williamsii	Seed pods	Habitat		
Celmisia macmahonii	More images			
Ceratocephala pungens	Habitat shot needed			
Chenopodium pusillum	More images			
Christella dentata	Sporangia	Basal pinnae		
Clianthus maximus	Seed pod	Leaf	Habitat	
Clianthus puniceus	Seed pod	Leaf	Habitat	Flower
Coprosma spathulata subsp. hikuriana	Habitat			
Coprosma waima	Close up of leaf base	Stipule	Female plant	Close up fruit and pyrenes
Cortaderia turbaria	Whole plant	Ligule	Habitat	
Crassula peduncularis	Habit	Pedunculate flower	More shots	
Dayeuxia lacustris	More images			
Daucus glochidiatus	More images			
Davallia tasmanii subsp. cristata	More images			
Epilobium hirtigerum	More images			

Gentianella calcis subsp. calcis More images

Gentianella calcis subsp. manuhune More images Flowering plant Habit

Gentianella calcis subsp. taikoMore imagesGentianella calcis subsp. waiparaMore imagesGentianella scopulorumMore images

Gingidia grisea Wild flowering plants

Gunnera densiflora More images

Gunnera hamiltonii More images Flower and fruit

Hebe armstrongii More images

Hebe barkeri Growth habit

Hebe breviracemosa More images Close up of flowers

Hebe scopulorumMore imagesHebe societasMore images

Hebe speciosaHabitatMore imagesHelichrysum dimorphumHabitatGeneral shots

Juncus holoschonus More images
Lepidium oleraceum Fruits
Leptinella nana Habitat
Leptinella filiformis Habitat
Leptinella rotundata Habitat
Myosotis albosericea Habitat shot
Myosotis angustata More images

Myosotis lytteltonensisMore imagesMyosotis petolata var. petiolataFlowerMyosotis minimus subsp. novaezelandiaeHabitat shotMyrsine umbricolaFruit shot

Olearia cebra More images Close up of flower

Olearia politaMore imagesOphioglossum petiolatumMore imagesOreomyrris delicatulaMore imagesOurisa modestaMore images

Pennantia baylyssianaMore imagesHabitHabitatPittosporum dalliiGrowthHabitatFlower

Pittosporum obcordatumFruitSeedlingsPittosporum turneriAdult foliageRipe fruit

Poa sudicolaMore imagesPomaderris apetalaFlowerPomaderris phylicifoliaFlowerRanunculus acraeusMore imagesRorippa divaricataFlowers and fruit

Tecomanthe speciosa Seeds Seedling

Thelymitra matthewsii More images

Thelymitra sanscilla Whole plant More images

Triglochin palustris More photos

Uncinia strictissima Spikelet close up Culm Habit

# **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**

**Meeting:** Saturday 15 December. End of year pot-luck dinner, Landcare Research Cunningham Mycological Suite before a walk on Maungarei (Mt Wellington). **Contact:** *youngmaureen@xtra.co.nz*.

# **Waikato Botanical Society**

**Working Bee:** Sunday 25 November in the threatened plant garden. Please bring gloves, old clothes and boots for weeding, planting and propagating activities. **Meet:** 9.45 a.m. at Waikato University Gate 9, Hillcrest Rd. **Contact:** Liz Grove <u>eg3@waikato.ac.nz</u>, ph 07 846 0965 (hm).

**Field Trip:** Sunday 2 December to Kakahu Stream Kauri, Kaimai-Mamaku Forest Park (combined trip with Rotorua Botanical Society). Visit the southern most naturally occurring kauri trees growing in forest on the margins of the Kakahu Stream on the south-western edge of the Kaimai-Mamaku Forest Park. If time permits, we may also explore other forest remnants in the vicinity including kahikatea stands and some tawa dominated forest areas with emergent rimu present. **Contact:** Paul Cashmore ph: 07 348 4421 (hm), 349 7432 (wk), e-mail: <a href="mailto:pcashmore@doc.govt.nz">pcashmore@doc.govt.nz</a>. **Meet:** 8 a.m. Landcare Research car park, Gate 10 Silverdale Rd, Hillcrest, to carpool or 8:45 a.m. at Okoroire Hall on cnr SH 28 and Okoroire Rd. **Grade:** Medium.

# **University of Waikato**

Summer course: 8–22 February 2008, Flora of Aotearoa/New Zealand, Department of Biological Sciences summer course: BIOL226BLK-08. Enquiries to: Dr Chrissen Gemmill (e-mail: <a href="mailto:c.gemmill@waikato.ac.nz">c.gemmill@waikato.ac.nz</a>, ph: 07 838 4053), Dr Bruce Clarkson (e-mail: <a href="mailto:b.clarkson@waikato.ac.nz">b.clarkson@waikato.ac.nz</a> ph: 07 838 4237) or contact the Department of Biological Sciences (ph: 07 838 4022), Waikato University, Private Bag 3105, Hamilton.

#### **Rotorua Botanical Society**

**Field trip:** Sunday 2 December, Kakahu Stream Kauri, Kaimai-Mamaku Forest Park (Combined trip with Waikato Botanical Society). Leader: Paul Cashmore, ph: 07 348 4421 (hm), 349 7432 (wk) e-mail: *pcashmore@doc.govt.nz*. Meet: The Rotorua District Council car park on Fenton St at 8.00 a.m. or Okoroire Hall on cnr SH 28 and Okoroire Rd 8.45 a.m. Grade: Medium.

## **Wellington Botanical Society**

**Field trip:** Saturday 1 December to Pukerua Bay – Plimmerton. Botanise PCC's Raroa Reserve, DOC's Wairaka Scientific Reserve, part of the Carrad's QEII Covenant, and the coastal escarpment. See coastal broadleaf forest, scrub, grasslands, mat plants, and the weed fern, *Polypodium vulgare*. Meet: 9.15 a.m. at reserve entrance at south end of Raroa Place, Pukerua Bay. Transport: catch 8.30 a.m. train from Wellington to Pukerua Bay. If coming by car, return to it by train from Plimmerton. Leader: Robyn Smith, ph: 04 236 6086.

**Field trip:** Saturday 8 December to Hutt City rata walk. **Meet**: 9 a.m. at Hutt City i-Site Visitor Centre, The Pavilion, 25 Laings Rd, Lower Hutt. **Transport**: Stagecoach Flyer no. 91 bus 8.05 a.m. from Courtenay Place or 8.25 am from Upper Hutt, alight in Bunny St L.Hutt. **Leaders:** Dave Holey, ph: 04 566 3124; deputy leader: Gordon Leary, ph: 04 527 7380

**Summer Camp:** Thursday 30 January – Friday 8 February 2008 – nine nights at Aotea / Great Barrier Island – Summer Camp. If you intend to come, we would appreciate knowing as soon as possible. See website (<a href="www.wellingtonbotsoc.wellington.net.nz">www.wellingtonbotsoc.wellington.net.nz</a>) for further details.

# **Canterbury Botanical Society**

**Meeting:** Friday 7 December at 7.30 p.m., room A5 University of Canterbury, a talk by Alice Shanks on "Locally Rare and Nationally Threatened Plants of Te Waihora". Her talk focuses on the flora of Lake Ellesmere. (Note change of speaker.)

**Field Trip:** Saturday 8 December, a trip to Rocky Outcrops on Onepunga, Mt Grey. **Meet:** Belfast Hotel at 9 am for carpooling or at Amberley public toilets (beside the council offices) at 9.45 a.m. Bring your lunch and some warm clothing in case it turns cold. Sunday 9 December, is the reserve day. **Contact:** Ann Acton-Adams, ph: 03 314 8708 for queries or postponment.

**Botanical Camp:** Tuesday 27 November to Tuesday 4 December to the Chatham Islands. *The trip complement is full.* 

**Summer Camp:** Friday 11 January – Thursday 17 January 2008, Mokihinui River mouth, north of Westport. Botanise the special vegetation of the coal plateaux of Denniston and Stockton (see Forest & Bird No.284 pp. 27–33, 1997, by David Norton). Bookings to Margaret Geerkens (ph 03 352-7922, e-mail: *bert.marg@xtra.co.nz*) and deposits to: Summer Camp, CBS, P.O. Box 8212, Riccarton 8440.

**Winter Camp:** Tuesday 26 August – Monday 2 September 2008, to Broadbeach, Gold Coast, Australia. For further information contact: Margaret Geerkens (ph 03 352-7922, e-mail: *bert.marg@xtra.co.nz*) or Russell Moffitt (ph: 03384-1979).

# **Botanical Society of Otago**

**Meeting:** Monday 3 December, at 5.20 p.m., a talk by Professor Lars Franzén, Earth Sciences Centre, Göteborg University, Sweden entitled: The Peatland/Ice Age hypothesis, and a possible glacial pulse initiation trigger. At the Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel. Use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Rm. 215, 2nd floor. Please be prompt as we have to hold the door open. An end-of-year BSO dinner will follow this talk, at a restaurant to be decided. If you would like to go to dinner, e-mail Robyn Bridges (e-mail: robyn.bridges@otago.ac.nz) by 30 November 2007. Contact: Bastow Wilson (ph: 03 479 7572).