



# TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 140

July 2015

Deadline for next issue:  
Monday 17 August 2015

## SUBMIT AN ARTICLE TO THE NEWSLETTER

Contributions are welcome to the newsletter at any time. The closing date for articles for each issue is approximately the 15th of each month.

Articles may be edited and used in the newsletter and/or on the website news page.

The Network will publish almost any article about plants and plant conservation with a particular focus on the plant life of New Zealand and Oceania.

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

### Postal address:

P.O. Box 16102,  
Wellington 6242,  
NEW ZEALAND

## PLANT OF THE MONTH, p. 2



*Aciphylla dieffenbachii*.  
Photo: John Barkla.

## Conference 2015

The 2015 conference in Dunedin is shaping up to be an exciting and thought-provoking event. The speaker programme, workshops and field trips have now been finalised and can be viewed on our website at this link: [http://nzpcn.org.nz/page.aspx?nzpcn\\_events\\_conference\\_2015](http://nzpcn.org.nz/page.aspx?nzpcn_events_conference_2015).

The conference will start on Wednesday 28 October with a range of interesting and engaging workshops, followed by welcome drinks and the launch of Alan Mark's new book in the evening. On Thursday and Friday, conference delegates will be informed, challenged and entertained by a broad range of speakers. During the conference dinner on Friday evening, the prestigious annual plant conservation awards will be presented, the David Given Threatened Plant Scholarship recipient will be announced and a silent charity auction will be held. Finally, on Saturday, three field trips will be run to diverse and botanically exciting sites across Otago.

NZPCN wishes to thank the following organisations: Wildland Consultants, Dunedin Botanic Garden, University of Otago, ERA Environment Solutions Ltd and Fern Factor for their support. The conference would not be possible without the tireless efforts of the volunteers organising it: Jesse Bythell, Rewi Elliot, Matt Ward, John Barkla and Kate Caldwell.

We would also like to acknowledge the following people and organisations who have donated items to the charity auction: Marcia Dale, Cactus Outdoors, Swazi New Zealand, the New Zealand Ecological Defence Society, Catherine Kirby, Burton and Potton Publishing, Val Smith, Otago University Press, Manuka Press and Dunedin Botanic Garden and Canterbury University Press. Many interesting and useful items have been donated for the silent charity auction. Donated items are being regularly profiled on the website: ([http://nzpcn.org.nz/page.aspx?nzpcn\\_events\\_conference\\_2015\\_auction](http://nzpcn.org.nz/page.aspx?nzpcn_events_conference_2015_auction)).

If you would like to make a donation for the auction or suggest an organisation that might be interested in supporting the conference or donating an auction item, please get in touch with the conference coordinator, Jesse Bythell ([jesse.bythell@orcon.net.nz](mailto:jesse.bythell@orcon.net.nz)).

Registration for the conference has now opened and can be completed online by following the button on the home page ([www.nzpcn.org.nz](http://www.nzpcn.org.nz)). Early-bird registration closes on 1 October 2015 after which fees increase by 10%.

## PLANT OF THE MONTH – *ACIPHYLLA DIEFFENBACHII*



*Aciphylla dieffenbachii*. Photo: Peter de Lange.

Plant of the month for July is *Aciphylla dieffenbachii*. A member of the carrot family (Apiaceae), this *Aciphylla* is quite unlike many other species of the genus, with softer flaccid leaves rather than the familiar stiff, needle-like leaves of its relatives (often distressing if stumbled upon with bare knees while tramping). Naturally occurring only on the Chatham Islands, *A. dieffenbachii* has become popular in gardens in New Zealand, growing best in a free draining soil in the sun; great for breezy coastal areas. Unfortunately it is classified as Threatened—Nationally Vulnerable and, in the wild, it is now restricted to steep, usually south facing, cliffs, rock scarps, ledges and colluvial slopes. Domestic stock and feral mammals are the main threats to its survival.

The Network factsheet for *Aciphylla dieffenbachii* can be found at: [http://www.nzpcn.org.nz/flora\\_details.aspx?ID=98](http://www.nzpcn.org.nz/flora_details.aspx?ID=98):

### Council Member profiles (2)

#### Jesse Bythell

I originally trained as a linguist but found myself transferring my interest from endangered languages to endangered plants when I moved from Christchurch to the deep south in 2006. I am currently the NZPCN webmaster and have interests in alpine flora, plant photography, botanical etymology, endurance horse riding and playing the banjo. You can contact me at: [jesse@biosis.co.nz](mailto:jesse@biosis.co.nz)



Jesse Bythell at Lake Pukaki

#### Peter de Lange



Peter de Lange on Mangere Island

Peter is a senior scientist with the Department of Conservation, where he has national responsibilities for indigenous plant conservation, biosystematics, and the development of threat classification systems. He is the chair for the New Zealand Indigenous Vascular Plant and Lichen Threat Listing panels. A Fellow of the Linnean Society of London (FLS) since 2003, Peter is an Adjunct Professor with the University of Sassari, Sardegna. Outside botany, Peter maintains a strong interest in Quaternary Earth Sciences, speleology (mostly as an armchair caver) and psychedelic music.

## New Zealand Indigenous Flora Seed Bank (NZIFSB) – the vital role played by the seed bank volunteers

Jessica Schnell ([J.L.Schnell@massey.ac.nz](mailto:J.L.Schnell@massey.ac.nz)) and Craig McGill ([C.R.McGill@massey.ac.nz](mailto:C.R.McGill@massey.ac.nz))

For this issue of *Trilepidia*, we would like to focus on the seed bank volunteers and the critical job they have been doing in processing and assessing the quality of the seed collected once it reaches the seed bank. Without the volunteers hard work, all the efforts of the collectors to carefully collect and promptly despatch the seed to the seed bank would come to nothing. The work undertaken by the volunteers is varied with no two weeks being the same. One week may involve delicately extracting seeds from their pods to ensure that damage, which may reduce the seed storage life, is minimised if not completely avoided; the next week may involve aspirating seeds in the seed blower to separate the light and heavy seeds or weighing seeds to accurately determine the number of seeds in the collection. In other weeks, key tasks undertaken by the volunteers may be x-raying or setting up the seeds for a germination test to determine the quality of the seed before it is banked. Many volunteers are also trained collectors who collect seeds for the seed bank. Seed bank volunteers come from a range of backgrounds and include retired seed analysts, members of Forest and Bird, Department of Conservation staff and members of the community who have a passion for conservation.

The hard work of the volunteers keeps the processing and assessment of seed on course and means that, despite a steady flow of collections (57 so far for 2015) arriving at the seed bank, the collections are banked as quickly as possible. Our thanks go to the volunteers, Anthea McClelland, Sarah Galley, Hippolyte Perry, Josephine Randall, Bill Norris, Lorraine Cook, Helen Johnson and Emma Rabone who have put in the long hours needed to get the processing and banking done.



Anthea McClelland cleaning *Ozothamnus leptophyllus* (collected from Cape Palliser).



Josie Randall sorting *Melicytus ramiflorus* seed (collected from Otari-Wiltons Bush) from debris.



Emma Rabone setting up *Kunzea robusta* seeds (collected in Taranaki) for germination tests after being x-rayed. The x-ray identified a number of empty seeds or 'pseudo seeds' in the collection. The number of seeds in the collection was adjusted to take account of the number of empty seeds.

## NZPCN 2015 Conference Charity Auction donations update

Matt Ward NZPCN Council Member

This is just a quick update on how we are going with donations for the NZPCN 2015 Conference Silent Auction. The auction will run from the beginning of the conference, 28 October until the conference dinner on 30 October. We are also going to let NZPCN members not at the conference bid on items, details about how will be posted in the September *Trilepidea*.

Since the last newsletter we have been busy begging and pleading for kind folks to donate items for the auction. Thank you to those people who have contacted me with donations after reading the article in the June *Trilepidea*. This has resulted in many potential and confirmed donations. We have received amazing donations from Swazi New Zealand, Manuka Press, Burton & Potton Publishing, Otago University Press, Val Smith, Bushy Point Fernbirds-Ecofriendly Bed & Breakfast. As well there are many potential donations that will be put on the [website](#) once they are confirmed.

Here's what is up for bids so far:

### Accommodation

- One night's accommodation for two including a guided walk and breakfast at [Bushy Point Fernbirds – Ecofriendly Bed & Breakfast](#)

### Art

- An acrylic painting of *Dracophyllum menziesii* by Dunedin artist and NZPCN member Marcia Dale. The painting is based on a photograph by Mike Thorsen.

### Gear

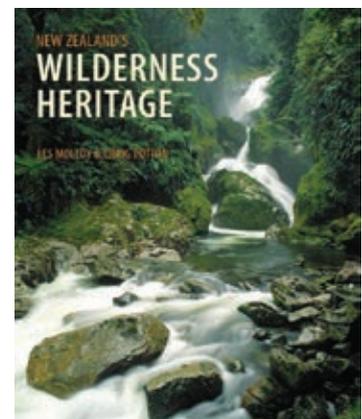
- A 'Nort' pack donated by [Cactus Outdoors](#).
- A 'One Tough Brutha' rain jacket donated by [Swazi New Zealand](#) (similar to the 'Tahr' anorak), XL, black, see picture.

### Books

- A signed copy of “[Vanishing Nature: Facing New Zealand’s Biodiversity Crisis](#)” published by the New Zealand Ecological Defence Society, donated by Marie Brown.
- A signed copy of “[Field Guide to New Zealand’s Epiphytes, Vines and Misteltoes](#)” donated by Catherine Kirby
- A signed copy of “[Wilderness Heritage](#)” by Les Molloy and Craig Potton donated by [Burton and Potton Publishing](#).
- A signed copy of “[Common Ground: A Who’s Who of Botanical Names](#)” donated by Val Smith.
- 2 signed copies of “[Wild Dunedin: the Natural History of New Zealand’s Wildlife Capital](#)” by Neville Peat and Brian Patrick, donated by [Otago University Press](#).
- 2 copies of “[The Natural History of Southern New Zealand](#)” donated by [Otago University Press](#).
- 5 copies of the soon-to-be-released memoir by Sir Alan Mark, “[Standing My Ground: a Voice for Nature Conservation](#)” donated by [Otago University Press](#).
- A copy of “[Seeds of New Zealand - Gymnosperms & Dicotyledons](#)” by Colin Webb and Margaret Simpson, donated by [Manuka Press](#).
- A signed copy of “[Small-leaved Shrubs of New Zealand](#)” by Hugh Wilson and Tim Galloway, donated by [Manuka Press](#).
- A signed copy of “[Wild Plants of Mt Cook](#)” by Hugh Wilson, donated by [Manuka Press](#).



A jacket similar to the one donated by Swazi New Zealand



A signed copy of Wilderness Heritage by Les Molloy & Craig Potton donated by Potton and Burton Publishing

## Recent taxonomic changes

Two papers have been published recently that affect New Zealand native plant names.

Dr Joanne Birch's research into the Asteliaceae (Birch 2015) has shown that *Collosperrum* is nested within *Astelia*, so the two New Zealand species revert to their original names, *Astelia hastata* and *Astelia microsperma*.

Dr Brian Molloy has found that the earliest valid name for the tree commonly known as Hall's totara is *Podocarpus laetus*, not *Podocarpus cunninghamii* or *Podocarpus hallii* as had been widely believed for many years (Molloy 2015).

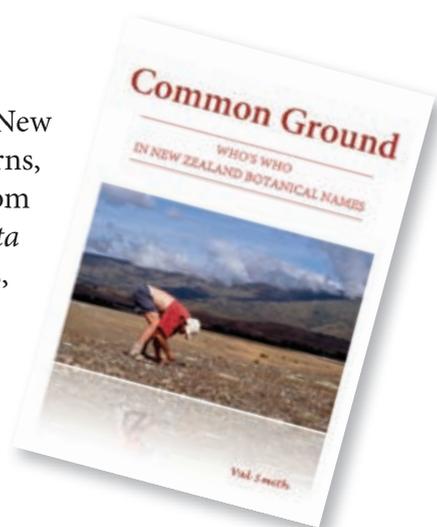
These names have been updated on the NZPCN website.

## References

- Birch, J. L. 2015: A revision of infrageneric classification in *Astelia* Banks & Sol. ex R.Br. (Asteliaceae). *Phytokeys* 52: 105–132. <http://dx.doi.org/10.3897/phytokeys.52.4768>
- Molloy, B. P. J. 2015: The correct name for the New Zealand endemic conifer Hall's totara (Araucariales: Podocarpaceae). *Phytotaxa* 220 (2): 101–116. <http://dx.doi.org/10.11646/phytotaxa.220.2.1>

## New book: Common Ground: who's who in New Zealand botanical names by Val Smith

This book brings together the stories of 250 people commemorated in New Zealand botanical names, not only of flowering plants, but also ferns, seaweeds, mosses, lichens and fungi. Arranged chronologically from the Greek philosopher Aristotle, 384 BC–322 BC, (*Aristotelia serrata* – makomako or wineberry) to contemporary New Zealand botanists, *Common Ground* includes early European physicians and herbalists, later explorers and scientists, New Zealand pioneer settlers and visitors, and locally born and educated naturalists. Each biographical entry is on a separate page, accompanied by a relevant colour image and plant information. A social and botanical history with an amazing number of connections is revealed.



- A4 format, 304 pages, soft cover
- Published in a limited edition by Wordsmith, New Plymouth, assisted by Wellington Botanical Society's Jubilee Fund and the George Mason Charitable Trust.
- ISBN 978-0-473-30847-6

**Price:** \$30.00 (plus \$5.00 postage within New Zealand)

**Orders and enquiries to:** Val Smith (email: [valdsmit@xtra.co.nz](mailto:valdsmit@xtra.co.nz), ph: 06 758 3521)  
80 Mill Road  
Lower Vogeltown,  
NEW PLYMOUTH 4310

The book will be launched at the Wellington Botanical Society's Annual General Meeting on Monday 17 August and is generously donating copies to various organisations as well as to our conference silent auction. Get your order in now to help the author establish the size of the print run required.

## Seedling survival and growth in urban forest restoration planting.

A paper in the latest issue of the *New Zealand journal of ecology* (Anton et al., 2015) describes an investigation into the survival and growth of three native species, wineberry, cabbage tree and lemonwood, at 11 restoration sites around Wellington. Seedling mortality was 38%, 20% and 11%, respectively. Various factors were considered and though they were species specific, initial seedling height and the grass height surrounding the seedlings were in the best models explaining mortality

for each species. Trees were still at risk of mortality two years and more after planting. There was no difference in mortality between community group projects and those managed by local government. The authors note that reduction in grass cover is likely to improve seedling survival and plant height, rather than time since planting, is the best predictor of the likelihood of mortality of planted seedlings.

To read the full paper, click on the link below: <http://newzealandecology.org/nzje>.

### Reference

Anton, V; Hartley, S; Wittmer, HU. 2015: Survival and growth of planted seedlings of three native species in urban forest restoration in Wellington. *New Zealand journal of ecology* **39**: 170-178.

## NZPCN Annual Plant Conservation Awards

The prestigious New Zealand Plant Conservation Network Awards are now in their tenth year. We are now calling for nominations for the 2015 awards. The purpose of these awards is to acknowledge outstanding contributions to native plant conservation.

Award categories are:

- Individual
- School
- Council
- Community
- Plant Nursery
- Young Plant Conservationist of the Year (under 18 years at 30 June 2015)

The nomination form is available from the Network website:

### [Nomination form 2015](#)

We look forward to your nominations; you may make multiple nominations under different categories. Anyone is eligible to make nominations, not just Network members.

The awards will be presented at the [2015 conference dinner](#), Friday **30 October**, Otago Museum, Dunedin. Winners will be informed in advance and each will get a pair of complementary tickets to the dinner.

## David Given Threatened Plant Research Scholarship is now even sweeter!

The David Given Threatened Plant Research Scholarship is open to applicants biennially. This award was named after the late David Given in recognition of his considerable influence on plant conservation in New Zealand and worldwide over his lifetime.

In 2015, there is \$7,000 available and as well as a gear voucher valued at \$225 from Cactus Outdoors. The scholarship is for research that assists the protection and recovery of New Zealand's threatened plant species and threatened communities.

For the purpose of this scholarship, plant species include vascular and non-vascular plants as well as fungi. Applicants must be New Zealand residents or citizens but the work could involve overseas researchers who collaborate with the principal New Zealand researcher. Applications addressing each of the subject areas on the scholarship brochure should be emailed (preferred delivery option) to [info@nzpcn.co.nz](mailto:info@nzpcn.co.nz) or posted to:

David Given Scholarship  
New Zealand Plant Conservation Network,  
PO Box 16 102  
Wellington



Applications close **30 September 2015**. The application form can be downloaded here (link: <http://nzpcn.org.nz/publications/DRG-scholarship-brochure-2015.pdf> )

## Australian National Seed Science Forum

The Australian Seed Bank Partnership is calling for proposals for oral, rapid fire or poster presentations for its upcoming National Seed Science Forum (see Events section for details). Presentations that cover descriptive or mechanistic seed science, theoretical seed research, and/or their application for effective seed use are encouraged from conservation, restoration and agricultural perspectives. The four key themes are:

Theme A: Dormancy and germination

Theme B: Seed storage, conservation and utilisation

Theme C: Establishment and management

Theme D: Seed ecology

A photo competition will be run as part of the Forum; details will be released soon.

Visit the Forum web pages (<http://seedpartnership.org.au/seedscienceforum>) for more details.

Proposal submissions close on 4 October 2015.

## Auckland Council workshops on its grants programmes

These workshops are scheduled across Auckland to help individuals and community groups understand the Council's new grants programmes and implications for environmental and historic heritage projects. These workshops will be a great opportunity to ask questions, to familiarise yourselves with SmartyGrants and the application process and meet Council staff.

If attending any workshop, please RSVP to [environmentalfunding@aucklandcouncil.govt.nz](mailto:environmentalfunding@aucklandcouncil.govt.nz).

Area	Location	Date	Time
Howick	Howick Library, 25 Uxbridge Rd, Howick	04.08.2015	2.00–3.00 pm
Franklin	The Centre, Edmund Hillary Room 10 Massey Ave, Pukekohe	06.08.2015	6.30–7.30 pm
Waitakere	Waiatarua Community Hall, Main hall 911 West Coast Road, Waiatarua	05.08.2015	6.30–7.30 pm
Helensville	Helensville Library, 49 Commercial Rd	04.08.2015	3.00–4.00 pm
Takapuna	Takapuna Library, 9 The Strand	06.08.2015	5.30–6.30 pm

If you are unable to attend one of these workshops and would like further information on how to access Council grants please contact one of the team by emailing [Environmentalfunding@aucklandcouncil.govt.nz](mailto:Environmentalfunding@aucklandcouncil.govt.nz) or phone Auckland Council 09 301 0101.

## Call for articles—Australasian Plant Conservation

We are seeking articles for the September – November 2015 issue of *Australasian Plant Conservation* (APC), the bulletin of the Australian Network for Plant Conservation (ANPC).

The issue will carry the theme of “**Ferals**”.

*Feral animals are a major feature in many communities and can have significant impacts on plant conservation projects. We would welcome contributions that focus on the interaction between feral animals and plant conservation. These could include both vertebrate and invertebrate fauna, and deal with: alterations to the environment (trampling, burrowing, changing nutrient status); direct effects on plants (grazing, bark stripping); indirect effects through changes to pollination or propagule dispersal (these could either be effects on native species or promotion of invasive plants); or the measures needed to minimise effects of ferals on conservation projects.*

Articles generally should not exceed 1200 words and authors are encouraged to submit two or three high resolution images to illustrate their article. We also welcome:

- book reviews;
- titles of interesting recent publications or resources, and where they can be found;
- conference, workshop, course and fieldwork announcements; and
- details of relevant publications, information resources and websites.

**Deadline for submissions is Friday 21 August 2015.** If you are intending to submit an article or wish to discuss possibilities, please contact our new Editor, Paul Adam, by **Friday 7 August**. Please email your article to Paul at [editor@anpc.asn.au](mailto:editor@anpc.asn.au). Please note that guidelines for authors regarding APC style and scope are located on the ANPC website at [www.anbg.gov.au/anpc/apc/APCGuideContrib.pdf](http://www.anbg.gov.au/anpc/apc/APCGuideContrib.pdf)

## 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)):

### Australian National Seed Science Forum

The Australian Seed Bank Partnership is pleased to invite you to participate in a National Seed Science Forum in March 2016. The Forum will be held at the Australian PlantBank hosted by the Australian Botanic Garden, Mount Annan, in collaboration with the Australian Network for Plant Conservation and the Australian Grains Genebank.

The Forum will commence with an evening event on Monday 14 March; the main science programme will be presented on 15–16 March 2016. The Forum will be a rare opportunity to bring together leading botanical and agricultural institutions, seed scientists and conservation and restoration experts to share ideas that showcase the importance of seed science to the future of plant conservation and food security in Australia.

An exciting programme of local and international experts is planned, speaking on seed conservation, storage, preservation and germination. More details on the National Seed Science Forum will be provided in the near future. Invited keynotes and a call for presentations will be announced soon. Visit the Forum web pages at: [www.seedpartnership.org.au](http://www.seedpartnership.org.au). Please email: [info@seedpartnership.org.au](mailto:info@seedpartnership.org.au) to register for Forum announcements.

Please share information on this Forum with your colleagues and through your networks.

### Auckland Botanical Society

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**Meeting:** Wednesday 5 August at 7.30 p.m. for a talk by Mark Horrocks. **Venue:** Unitec Room 115-2017.

**Contact:** Ewen Cameron.

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**Field trip:** Saturday 15 August to Rangitoto Island, Shipwreck Bay. **Leaders:** Mike Wilcox and Stephen Benham.

**Contact:** Mike Wilcox,  
email: [mike.wilcox@xtra.co.nz](mailto:mike.wilcox@xtra.co.nz).

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**Meeting:** Wednesday 2 September at 7.30 p.m. for the Lucy Cranwell Lecture to be given by Dr Leon Perrie, Te Papa Tongarewa. **Venue:** Auckland Museum.

**Contact:** Ewen Cameron.

### Waikato Botanical Society

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**Field trip:** Sunday 16 August 9.00 a.m. to 4.00 p.m. at Koroki Kahukura ki Hinuera Scenic Reserve.

**Leader:** Paula Reeves,  
ph: 07 854 7259, 021 267 5802,  
email: [pnreeves42@gmail.com](mailto:pnreeves42@gmail.com)

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## Rotorua Botanical Society

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**Field trip:** Sunday 2 August to Rotoma Scenic Reserve, Manawahae Road, Rotoma. **Meet:** the car park Rotorua at 8:30 a.m. or 9:00 a.m. at the corner of Hamilton and Manawahe Roads. **Grade:** easy.

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**Leader:** John Hobbs, ph: 07 348 6620, email: [jffhobbs@clear.net.nz](mailto:jffhobbs@clear.net.nz).

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## Wanganui Museum

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**Meeting:** Tuesday 4 August at 7.30 p.m. for the Annual General Meeting and members' evening. **Venue:** Davis Lecture Theatre.

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**Contact:** Lyneke Onderwater, email: [lyneke@orcon.net.nz](mailto:lyneke@orcon.net.nz)

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## Wellington Botanical Society

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**Field trip:** Saturday 1 August to Taparanga Block, Baring Head. **Meet:** 9.30 a.m. at car park with large sign at park entrance on Coast Road, c.16 km south of Wainuiomata. Contact Owen if transport required from Wainui bus depot.

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**Leader:** Owen Spearpoint, ph: 027 285 8083 email: [owen.spearpoint@gw.govt.nz](mailto:owen.spearpoint@gw.govt.nz).

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**Meeting:** Monday 17 August at 7.30 p.m. for the Annual General Meeting followed by the A P Druce Memorial Lecture titled 'Complex interactions with friends and foes: How native plants manage the risks' by Dr Bill Lee, Landcare Research.

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**Venue:** Lecture Theatre M101, ground floor Murphy Building, west side of Kelburn Parade; enter building off Kelburn Parade about 20 m below pedestrian overbridge.

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**Field trip:** Saturday 5 September to East Harbour Regional Park. **Meet:** 9.30 a.m. at bus terminus, Muritai Rd.

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**Co-leaders:** Mick Parsons, ph: 04 473 1142 or 027 249 9663; Gavin Dench, ph: 04 387 9955 or 027 405 2987.

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## Resource Management Law Association

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**Meeting:** Wednesday 2 September at 5.30 p.m. for the Salmon Lecture to be given by Sir Peter Gluckman titled 'The place of science in successful environmental policy and law'.

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**Venue:** The Wellington Club, Level 4, 88 The Terrace. **Cost:** \$30 members, \$45 non-members.

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## Nelson Botanical Society

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**Field trip:** Sunday 16 August to Adele Island. **Meet:** at the Church steps at 9.00 a.m.; we ask that everyone registers with the trip leader so that our PLB protocols can be recorded and in case of cancellation.

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**Leader:** Helen Lindsay, ph: 03 528 4020.

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**Meeting:** Monday 17 August at 7.30 p.m. for a talk by Abby Grassham titled 'Tantalus monkeys and seed dispersal at Ngel Nyaki, Nigeria'.

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**Venue:** Jaycee Rooms, Founders Park, Nelson.

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## Canterbury Botanical Society

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**Meeting:** Monday 3 August at 7.30 p.m. for a talk by Sarah Wright titled 'Research on *Pittosporum obcordatum*'. **Venue:** Upper Riccarton Library community meeting room, 71 Main South Road.

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**Contact:** Alice Shanks 03 337 1256.

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**Field trip:** Saturday 8 August to Brooklands Dunes to search for species listed in old records.

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**Contact:** Alice Shanks, 03 337 1256.

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## Otago Botanical Society

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**Field trip:** Saturday 1 August to Harbour Cone. **Meet:** at the Botany Department car park at 9.00 a.m. or at Pukehiki Church at 9.30 a.m.; bring lunch, warm clothing, good footwear and parkas. **Rain day:** Sunday 2 August.

**Contact:** David Lyttle, ph: 03 454 5470, email: [djlyttle@ihug.co.nz](mailto:djlyttle@ihug.co.nz) or Moira Parker, ph: 03 478 0214, mobile 027 328 4443.

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**Meeting:** Wednesday 19 August at 5.20 p.m. for a botanical 'Show and Tell' evening.

**Venue:** 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.

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**Field trip:** Saturday 1 September to Stevensons Bush Scenic Reserve. Meet: Department of Botany car park at 9.30 a.m.

**Contact:** John Steel, ph: 021 2133 170, email: [john.steel@otago.ac.nz](mailto:john.steel@otago.ac.nz)

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## Dunedin Botanic Garden

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**Meeting:** Friday 7 August at noon for a talk by Tom Myers titled 'BioBlitz – studying life in Dunedin Botanic Garden'.

**Venue:** Information Centre – lower Botanic Garden.

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