



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 112. MARCH 2013

Deadline for next issue: Monday 15 April 2013

President's message

Registrations for the Network conference in May are now open and the first registration has been received. A charity auction is being planned for the Conference Dinner on Saturday 25 May to raise money for the David Given Research Trust and for plant conservation projects. If you have an item that could be auctioned, or know of a potential sponsor that you would be willing to contact to obtain items, please contact the Conference Organising Committee at info@nzpcn.org.nz. Items suitable for the auction include plant conservation memorabilia, conservation equipment (e.g., compass, hand lens, camera gear), wine and food, botanical books, plant prints, experiences (such as a trip to an island), or anything else you can think of.

The updated website is very popular, with over 2,500 visits per day, and this is reflected in the increased membership.

For those who have been out in the field in the last few weeks in the drought zone, the recent rain will be very welcome. At sites I have visited in the central North Island, many species are obviously under severe stress. A wide range of sites are affected, across a considerable altitudinal range, from the coast to the central plateau and ranges. Canopy trees in secondary forest are wilting and, in some cases, are dead, such as kohuhu (*Pittosporum tenuifolium*) and rewarewa (*Knightia excelsa*). Understorey species affected include *Astelia solandri* (severely wilted), makomako (*Aristotelia serrata*), tarata (*Pittosporum eugenoides*), māhoe (*Melicytus ramiflorus*), rangiora (*Brachyglottis repanda*), and mangeao (*Litsea calicaris*). It will be interesting to see how many of these recover following the recent rain; some have already shown a rapid response.



Drought-affected *Astelia solandri*, central North Island.



Wilted tarata and dead foliage (lemonwood), Central North Island. (See also wilted mahoe (*Melicytus ramiflorus*) in the foreground.)

It is exciting to see the level of botanical activity around the country reflected in the newsletter each month, and the innovative work being undertaken. One example of this innovation is the use of a shotgun to blast seeds of threatened species into potentially suitable micro-habitats in the wild that are extremely steep and otherwise difficult to access.

Have a great month botanising.

Sarah Beadel
President

PLANT OF THE MONTH – *MELICYTUS CRASSIFOLIUS*



Melicytus crassifolius. Photo: Jeremy Rolfe.

Plant of the month for March is the thick leaved mahoe, *Melicytus crassifolius*. This hardy coastal shrub is a New Zealand endemic found in both the North and South Islands from Cape Turnagain and Paekakariki south to Cape Palliser and Te Rawhiti, and on nearby offshore islands. In the South Island, it's found in the Marlborough Sounds east and south to about Kaikoura. It's usually coastal, growing in open grey scrub, on talus and alluvial terraces, cobble beaches, cliff faces, in coarse stable sand dunes, and inland in open grassland, amongst kanuka stands.

It grows to form a stout, much branched, spreading shrub up to 2 × 2 m (though usually much less). In spring and summer, small pale green to lemon-yellow flowers line the stems, often partially hidden by branches and foliage, followed by white or greenish-white berries frequently with a purplish blotch on one side or to the top of the fruit.

Melicytus crassifolius is easily grown from seed and is a very attractive hardy shrub for windy situations. It grows best in open, sunny, free draining soils and is very drought tolerant once established.

Melicytus comes from the Greek meli (honey) and kytos (hollow container), referring to the staminal nectaries of the flowers (literally "honey-cave"); *crassifolius* means thick leaf.

You can see the Network factsheet for *Melicytus crassifolius* at: www.nzpcn.org.nz/flora_details.aspx?ID=283

Cliff scramble gives critically rare plant a shot at survival: Conservationists boost national population by one-third in a single day

Forest Liferforce Restoration Trust press release



Clianthus maximus. Photo: Peter de Lange.

Conservationists have boosted by one-third the number of endangered kakabeak plants known to exist in the wild in New Zealand. Staff at the Forest Liferforce Restoration (FLR) Trust used a helicopter and abseiled down cliffs to dig 35 of the plants with the spectacular curved, crimson flowers into bluffs in the Te Urewera National Park, overlooking the Maungataniwha Native Forest in inland Hawke's Bay.

Until now, just 110 kakabeak (ngutukākā in te reo) plants were known to exist in the wild. Five of those are on the Waiau Bluffs, where they have been joined by the 35 transplants, protected from predatory browsers by sheer rock faces and fences erected by the Trust.

“This is probably one of the more dramatic replants at a wild site attempted for the species,” said Don McLean, head of the Kakabeak Recovery Team at the Department of Conservation (DOC). “New methods of establishing

kakabeak in the wild are vital if we're to successfully place the plants beyond the reach of browsers. The ultimate long-term aim is really to get plants established on sites where they can mature and reproduce in relative safety."

The 35 plants were propagated at Plant Hawke's Bay Nursery in Napier from cuttings and seed taken by the Trust, under Department of Conservation (DOC) supervision, from a selection of wild kakabeak across the region. They were grown to about 300 mm high before being given a 'haircut' to promote root growth, then flown to the transplant site where they were lowered in fish bins with a long strop to Trust staff who had abseiled to a scree slope about 150 m above the Waiiau Gorge.

"It was pretty precarious mission," said FLR Trust forest manager Pete Shaw. "The chopper was being buffeted by strong winds and we were inching along this scree above some fairly significant drops, digging holes to put the plants into."

The kakabeak were planted in three lots about 20 m apart, in a varied genetic mix. "We know it's a good place for them," Shaw said. "They're in with the five original plants and the terrain, along with the new fences we've installed, will ensure they're not picked off by predatory browsers like deer."

He hopes there will be further natural regeneration outside the protected area when the new plants seed in October this year. The FLR Trust has already established two kakabeak seed orchards in protected enclosures at its property in the Maungataniwha Native Forest. Shaw hopes the rejuvenated population on the Waiiau Bluffs will provide a third source of seed for further propagation and transplantation.

Trust staff are in the process of perfecting a ground-breaking technique to propagate the plants by blasting seeds from a shotgun into likely nursery sites in the wild. Staffer, Barry Crene, developed the technique using re-loaded shotgun shells packed with regular shotgun pellets, a pulp medium and kakabeak seed. The shells were then discharged into soil from a range of 20 m, about the distance a helicopter might have to hover from likely nursery sites in the wild. As with the Waiiau Bluffs, such sites are frequently patches of topsoil on bluffs or cliff faces that are as inaccessible to humans as they are to browsers. Helicopters are often the only way to reach them. This innovation will create the potential for an aerial propagation effort on a scale that hasn't yet been possible. (*Editor's note: see the January issue of Trilepidea for more about this technique.*)

"Anything that helps us expand the population of this spectacular plant without having to dangle 150 m above a rocky, river bed has to be a good thing," Shaw said.

Charity auction at conference dinner – can you help?

We plan to hold a charity auction at the Network's conference dinner on Saturday 25 May to raise money for the David Given Research Trust and for plant conservation projects. Do you have an item that could be auctioned or do you know a potential sponsor that you would be willing to contact to obtain suitable items? Suitable items for auctioning include plant conservation memorabilia, conservation equipment (hand lens, botanical books, camera, etc.), wine and food, books, plant prints, experiences (such as a trip to an island) or anything else you can think of. Please contact the Network's conference organising committee if you have suggestions or if you have a suitable item that could be auctioned. We look forward to hearing your ideas (e-mail: info@nzpcn.org.nz).

Explaining scientific names (2): White is not a mere absence of colour

Jesse Bythell (jesse.bythell@orcon.net.nz)

Botanical Latin is very rich in descriptive terms, many of which are used in the species epithet of botanical names. There are many terms that denote colour, including at least 13 words to denote white. Often, these colour terms are derived from objects in the natural world that provide a reference for users, e.g., *niveus* – 'snow-white'; *calcareus* – 'chalk white'; *argenteus* – 'white with a metallic (silvery) sheen'. Colour terms are currently being added to the etymology section of species

factsheets. Please feel free to contact us if you have suggestions for this part of the website (info@nzpcn.org.nz). Thanks to Warren Brewer of Auckland for the etymological insights that he sent.

Some examples of native plants with colour terms included in their names are:

Chionochloa rubra subsp. *cuprea* – copper tussock – from the Latin *ruber* ‘red’ and *cupreus* ‘copper’, referring to the colours of the leaves.

Alepidis flavida – yellow mistletoe – from the Latin *flavus* ‘pale yellow’ referring to the colour of the flowers.

Hymenophyllum atrovirens – filmy fern – from the Greek *ater* ‘black’ and the Latin *viridis* ‘green’, referring to the fronds that are deep green verging on black.

Celmisia incana – white mountain daisy – from the Latin *incanus* ‘hoary’, referring to the greyish whiteness caused by hairs overlying the green surface of the leaves.

Thelymitra cyanea – swamp sun orchid – from the Greek *cyano* ‘blue’ referring to the blue flowers.

Network’s new website proves a hit as daily visitation rate doubles

The new Network website (www.nzpcn.org.nz) is proving to be very popular with visitation doubling since the website’s launch in December 2012. The Network website now receives over 2500 visits per day (or almost 2 visits per minute and close to 1 million visits per year). Each visitor is spending between 5 and 10 minutes on the site, which equates to 4860 days of reading and viewing information about New Zealand’s flora each year! Or, to put it another way, that is 13 people reading the website for every minute of every day for an entire year! The Network website was launched at the Network’s inaugural conference in Wellington in August 2003 thanks to support from the government’s TFBIS fund and that week 35 visits were made to the website. Please help us make it even better by sending us your suggestions for improvements (info@nzpcn.org.nz).

Number of plant images passes 24,000!

Thanks to a growing team of photographers nationwide, the Network’s online image library has passed the 24,000 images mark! Images provided in the last month plugged gaps in our collection for several species. Images have been provided this month by Sue Lake, Colin Ogle, Graeme Jane, Alastair Macdonald, Jesse Bythell, Pat Enright, Jeremy Rolfe, Rob Cole, Tony Foster, Bill Clarkson, Dave Toole, Simon Walls and John Sawyer.

Can you add to or improve on what we already have? Do you have habitat shots, or images of flowers, bark, seed, fruit or leaves?



Metrosideros umbellata flower. Photo: John Sawyer.

Please look through your image collections and search out your best shots and send named images to the Network as jpeg files on a CD to PO Box 16-102, Wellington or, if only a couple of images, by email to info@nzpcn.org.nz.

Network's forum proving popular with website users

Use of the Network's on-line forum has taken off in the last few months with Network members and others getting involved in discussions about plants and plant conservation. In the last four weeks, 12 new posts have been made to the Network's forum on a wide range of subjects from mimicry in *Alseuosmia*, to the cultivation of kakabeak, the identification of a yellow pond plant near Warkworth and a mountain-dwelling *Myosotis* species.

The Network's forum has now been opened up to allow everyone to post their plant conservation questions. If you post a question or join in the discussion on a particular topic, you will automatically be emailed when new posts are made. To deactivate this you can change the settings in your 'Member's profile'.

If you have any burning plant related questions, please post them to the forum. Alternatively, please help your fellow members by answering questions or contributing to the discussion.

New Zealand Epiphyte Workshop provides unique collaborative opportunities

Catherine Bryan, Research Support Officer, Environmental Research Institute, University of Waikato (cbryan@waikato.ac.nz)

The 2013 New Zealand Epiphyte Network was held in New Plymouth 21–23 February. Delegates from Warkworth to Dunedin gathered to share what is known about New Zealand's epiphytes, vines and mistletoes. They also worked to identify where our knowledge gaps lie and to investigate collaborative research opportunities. The workshop was attended by representatives from many organisations including the Universities of Waikato, Auckland, Victoria, Otago, Lincoln and Oldenburg (in Germany), the Department of Conservation, New Plymouth District Council, Taranaki Regional Council, Auckland Council, Landcare Research, New Zealand Plant Conservation Network, Ngāti Whātua o Ōrākei and local community groups.

Highlights

Symposium: A full day of presentations on relevant epiphyte, vine and mistletoe research included talks on both vascular and nonvascular species as well as the conservation and restoration of these interesting plants. The abstracts of these talks are available at: <http://sci.waikato.ac.nz/nzepiphyteworkshop2013>

The keynote speaker for the workshop was Professor Gerhard Zotz, University of Oldenburg, in Germany. This distinguished professor was hosted by the Environmental Research Institute along with support from the DFG German Research Foundation. Gerhard has published over 100 articles on epiphytes around the world including his recent paper in the *Botanical Journal of the Linnean Society* that updates the international list of epiphyte species. In his keynote presentation, Gerhard summarised current assumptions about epiphytes and the large gaps in our understanding of these species. He also introduced the concept of an epiphyte network and kicked off a workshop to set up The New Zealand Epiphyte Network. While in New Zealand, Gerhard visited forests from Karioi to Stewart Island and connected with key researchers around the country.



Professors Gerhard Zotz and Bruce Clarkson above the treeline on Mt Taranaki where the highest vascular epiphyte in the area can be found.
Photo: Catherine Bryan.

The New Zealand Epiphyte Network: This has been established to facilitate collaboration between people with a common interest in New Zealand's epiphytes, vines and mistletoes. The objectives and operational details are yet to be shaped but it is intended that the group may start by collecting

information to fill the many gaps we have in basic areas such as morphology, phenology, and ecology. If you are interested in knowing more, or contributing, please contact: epiphytes@waikato.ac.nz or visit our Facebook group: “The New Zealand Epiphyte Network” <https://www.facebook.com/groups/423175967765842/>

Tree Climbing: A tree climbing demonstration by consultant arborist Andy Barrell was a highlight of the afternoon field trip to Huatoki Scenic Reserve. Andy explained the applications of tree climbing for research before participants had an exciting opportunity to try it for themselves. Two rope systems were set up in a large tawa that allowed climbers to reach around 15 m high. There were many comments about how different the epiphytic communities looked from eye-level and how amazing it is to get up close and personal with the forest canopy. A walk around the reserve made it clear that New Plymouth has a wonderful natural heritage within the city since we discovered enormous *Collospermum hastatum* nests providing habitat for many species including *Griselinia lucida*, *Pittosporum cornifolium* and flowering *Earina autumnalis*.

Egmont National Park: We climbed the lower flanks of Mt Taranaki to find the highest growing vascular epiphyte in region. Looking rather dry and thirsty in the hot conditions, *Notogrammitis angustifolia* subsp. *nothofaeti* was successfully located on a *Brachyglottis elaeagnifolia* shrub above the treeline. A fantastic view of the central North Island from Pirongia to Ruapehu was unusually clear all day. We also visited the moss and lichen laden trees in the cloud forest and the dense forest near Potaema wetland where we saw flowering *Astelia solandri* and the shrub epiphyte *Pittosporum kirkii*. Our final stop was at the forest near Rāhiri Cottage at the base of the mountain. Here we saw flowering *Metrosideros fulgens* and a large clump of fallen plants that allowed a closer inspection of species such as *Asplenium polyodon*, *Winika cunninghamii*, *Microsorium pustulatum*, *Cardiomanes reniforme* and *Astelia solandri*.



Pittosporum kirkii in the forest near Potaema Bog. Photo: Catherine Bryan.



A dense community of vascular and nonvascular epiphytes on a tree in Potaema forest. Photo: Catherine Bryan.



A tree laden with epiphytes in the cloud forest of Mt Taranaki. Photo: Catherine Bryan.

Acknowledgement

The organising committee would like to thank the Environmental Research Institute at the University of Waikato, New Plymouth District Council and the University of Oldenburg for making this workshop possible.

Lunch break at the North Egmont Visitors Centre. Photo: Catherine Bryan.



DOC's natural heritage prioritisation systems promoted

The Department of Conservation has released two videos describing details of its natural heritage prioritisation work.

The videos are presented by Dr John Leathwick, the Department's senior scientist overseeing the programme of work.

The videos may be viewed here (link to external YouTube):

[Natural heritage prioritisation \(Part A\)](#)

[Natural heritage prioritisation \(Part B\)](#)

For more information about the Department's Natural heritage programme see:

[DOC's Natural Heritage Management System](#)

Symptoms too serious to ignore—Wise Response appeal launched

Wise Response has just been launched by Sir Alan Mark (Emeritus Professor, Otago University). It is an appeal to Parliament, asking for a dispassionate and non-partisan risk assessment of the “unprecedented threats to our collective security” facing the country as a result of climate change, fossil fuel extraction and economic uncertainty. There are five risk areas:

1. Economic security: the risk of a sudden, deepening, or prolonged financial crisis.
2. Energy and climate security: the risk of continuing our heavy dependence on fossil fuels.
3. Business continuity: the risk exposure of all New Zealand business, including farming, to a lower carbon economy.
4. Ecological security: the risks associated with failing to genuinely protect both land-based and marine ecosystems and their natural processes.
5. Genuine well-being: the risk of persisting with a subsidised, debt-based economy, preoccupied with maximising consumption and GDP.



This appeal recognises that caring, informed people are now accepting that a healthy sustainable environment is integral to all life and that our future depends on having genuine sustainability as our core goal. Signatories include (among many others—for full list see: [Signatories](#)):

- **Keri Hulme**, Kai Tahu, writer, Okarito
- **Morgan Williams**, Former Parliamentary Commissioner, Nelson
- **Alan F Mark**, Professor emeritus, Botany, Dunedin
- **Wayne Smith**, Former All Black and assistant coach, Hamilton
- **Lloyd Geering**, Professor emeritus, Religious Studies, Wellington
- **Tamsin Cooper**, Fashion Designer & TV Presenter, Dunedin
- **Rick Boven**, former Director of the New Zealand Institute, Auckland
- **Celia Wade-Brown**, Mayor, Wellington

To read more about Wise Response and to sign the appeal go to: <http://wiseresponse.org.nz/>

To help collect signatures—[download the petition form](#)

Applications called for inaugural QEII National Trust Brian Molloy scholarship grant

Students from any New Zealand university are invited to apply for the inaugural Queen Elizabeth II National Trust Brian Molloy scholarship to support a full-time supervised doctoral research degree. Funded by Queen Elizabeth II National Trust, the scholarship has been established in recognition of Dr Molloy's contribution to the Trust and to promote and advance ecological science and conservation in New Zealand.

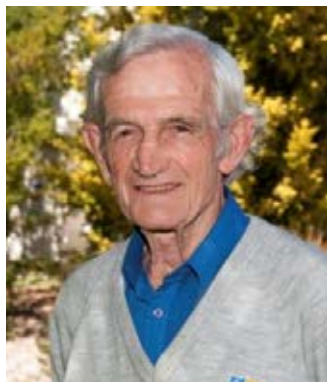
Trust Chief Executive Mike Jebson said that the scholarship celebrates Dr Molloy's long and remarkable record in conservation and botanical research in New Zealand. "Brian is held in high esteem both in New Zealand and internationally for his in-depth knowledge of New Zealand's native flora and for his unwavering generosity in sharing that knowledge with others. The studies funded by this scholarship will lead to a greater understanding of the core values of Open Space Covenants and their management for the benefit of QEII National Trust and its covenantors in particular, and New Zealand's environment in general," Mr Jebson said.

The scholarship funding covers an allowance of \$30,000 per annum for living expenses, tuition fees and associated student services levies, and a research and travel allowance of \$20,000 per annum to be applied to research costs. Scholarships will be awarded for a tenure of three years (36 months) or until the thesis is submitted (whichever is shorter), with the possibility of an additional 12 months of funding, should it be deemed appropriate by the scholarship selection board.

Further information about the scholarship can be found at: www.openspace.org.nz

Scholarship contact: Dr Elizabeth Heeg, QEII National Trust, 04 471 4190,
e-mail: ehieg@openspace.org.nz

Dr Brian Molloy ONZM



Dr Brian Molloy ONZM began his career as a research scientist in agriculture, later specialising in the conservation and ecology of native plants. Although retired, he continues to work as a botanical and conservation consultant and as a research associate with Landcare Research. He was a Director of the Queen Elizabeth II National Trust from 1989 to 1998 and became its High Country Representative shortly thereafter, holding that position until his retirement in June 2012.

Dr Molloy has done extensive work and is a recognised authority on New Zealand orchids, conifers and some daisies. His work on orchids, in particular, has been novel in the way he has undertaken comprehensive systematic studies which integrated ecological, taxonomic and cytological data to unravel complex problems of hybridism and evolution of species. In all of his work, he has been careful, meticulous and patient in seeking the evidence and reporting it in a scientifically accurate form.

He has written over 100 scientific papers, most of them on botanical subjects. He has also been to the forefront of many conservation organisations, and instrumental in the acquisition of new protected areas and extensions to existing parks and reserves.

Dr Molloy's contribution to the conservation and study of New Zealand's native flora has been recognised with a number of awards. In 1990, Brian Molloy was awarded the Loder Cup for his contribution to conservation and the study of native plants and, in 1992, received the Community Service Award. A new kowhai species, *Sophora molloyi*, "was named in his honour" in 2001. The following year, a new orchid genus was named *Molloybas* in "well-deserved recognition of the man who has contributed so much to New Zealand orchids". Additionally, he was recipient of the New Zealand Plant Conservation Network's Lifetime Achievement Award in 2006 and became a Companion of the Royal Society of New Zealand in 2011.

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):

New Zealand Plant Conservation Network Conference

Network 2013 conference: Auckland from Thursday 23 to Sunday 26 May. Registrations are now open.

To register online: armed with your credit card, click the link: [Registration](#)

Conservation Incorporated – What’s ahead for community-based conservation in New Zealand?

Yellow-eyed Penguin Trust 25th anniversary: National conference for citizen-based conservation organisations like the Network. The conference is entitled *Conservation Incorporated*. Its aim is to strengthen and diversify the community base for biodiversity conservation in New Zealand. We will convene *Conservation Incorporated* in Dunedin on 17–18 October 2013. The conference will be preceded on 16 October by applied workshops on fundraising, leadership and predator management. *Conservation Incorporated* will be a strongly applied conference, from which participants will leave better prepared for the future and more aware of their place in the broader conservation landscape. We are now calling for papers.



Details: conference themes, workshops, events and how to tell us what you'd like to present: <http://yellow-eyedpenguin.org.nz/wordpress/conservationinc/>

5th Global Botanic Gardens Congress

Dunedin: Sunday 20 to Friday 25 October, 2013.

Submit proposals for: symposia, papers and posters online at www.5GBGC.com

Auckland Botanical Society

Meeting: Wednesday 3 April at 7.30 p.m. for a talk by Mike Wilcox titled 'The Flora of South Australia'. **Venue:** Unitec School of Health Sciences, Gate 4, Building 115, Room 2005.

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

Field trip: Saturday 20 April to Shakespear Regional Park. Leader: Alison Wesley.

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

Kaipatiki Project

Nursery bites: FREE native plant propagation workshops on Tuesday 26 March and 2 April. Venue: Kaipatiki Project Environment Centre, 17 Lauderdale Road, Birkdale, Auckland. Time: 9.30 a.m.–12.30 p.m.

Weekly topics and bookings: www.kaipatiki.org.nz/courses

Waikato Botanical Society

Field trip: Saturday 20 April to Mt Karioi for a *Pittosporum kirkii* hunt. **Meet:** at 8.00 a.m. outside the Countdown Supermarket, Whatawhata Road, Dinsdale or 8:30 a.m. at Te Mata School.
Grade: medium/hard.

Leader: Kerry Jones
e-mail: km8j1s@gmail.com
ph: 07 855 9700 (home) /
027 747 0733.

Rotorua Botanical Society

Field trip: Sunday 7 April to Carter Block, Rerewhakaaitu. **Meet:** the car park Rotorua at 8:30 a.m. or by arrangement. **Grade:** easy.

Leader: John Hobbs,
ph: 07 348 6620
e-mail: jfhobbs@clear.net.nz

Field trip: Saturday 13 April for the Okareka Mistletoe Restoration Project Weed Control Work Day. **Meet:** corner Summit and Loop Roads (lake end) at 8:45 a.m. **Grade:** medium-hard—activities suitable for all ages and abilities will be provided.

Leader: Paul Cashmore,
ph: 07 348-4421 (hm),
07 349-7432 (wk),
e-mail: pcashmore@doc.govt.nz

Wanganui Museum

Field trip: Sunday 31 March to Waitahinga Track off Rangitatau East Road. **Meet:** Police Station at 9.00 a.m. **Leader:** Esther Williams.

Contacts: Robyn and Colin Ogle,
ph: 06 347 8547,
email: robcol.ogle@xtra.co.nz.

Meeting: Tuesday 2 April at 7.30 p.m. for a talk by Bill Clarkson titled 'Swamp maire (*Syzygium maire*) in Taranaki'. **Venue:** Museum's Davis lecture theatre.

Contacts: Robyn and Colin Ogle,
ph: 06 347 8547,
e-mail: robcol.ogle@xtra.co.nz

Field trip: Saturday 27 April to Dunbar Trust, Mission Road, Westmere. the city. Trip involves some scrambling up and down hill slopes. **Meet:** Police Station at 9.30 a.m., bring lunch.

Leader: Clare Ridler. **Contacts:**
Robyn and Colin Ogle,
ph: 06 347 8547,
e-mail: robcol.ogle@xtra.co.nz

Wellington Botanical Society

Field trip: Easter Friday 29 March to Sunday 31 March to the Rangitikei and Foxton areas, Manawatu. **Accommodation:** Foxton Beach Motor camp (2 nights), there is room only for camping but facilities are good; should any wish to stay in more 'salubrious' surroundings, we have a number of options (some motel units in the township or one house at the beach). Please advise Mick urgently how many may be coming so that he can firm up numbers of campsites or other accommodation. **Food:** potluck dinner Friday and Saturday; breakfasts and lunches self-catering. **Meet:** 10.30 a.m. Friday at Rosina Road turn-off to Tangimoana from SH1, 20 km north of Foxton (just past big grain silos).

Leader: Mick Parsons,
ph: 04 972 1148,
mobile: 027 249 9663.
Book promptly to receive further information about trip.

Meeting: Monday 15 April at 7.30 p.m. for a talk by Geoff Ridley, Principal Scientist, Environmental Protection Authority, titled 'The mushrooms of New Zealand.

Venue: Lecture Theatre M101, Murphy Building ground floor, west side of Kelburn Parade.

Nelson Botanical Society

Field trip: Thursday 28 March to Monday 1 April Easter Camp based at the Collingwood Campground. Please book with the leader.

Leader: Shannel Courtney,
ph: 03 546 9922,
e-mail: scourtney@doc.govt.nz

Field trip: Sunday 21 April to Otuwhero Wetland.

Details: Helen Lindsay,
ph: 03 528 4020.

Meeting: Monday 29 April at 6.00 p.m. for pot luck dinner followed by the AGM and a slide show by Cathy Jones and Don Pittham titled 'The Plants of Arthur's Pass'.

Venue: Jaycee Rooms, Founders Park, Nelson.

Canterbury Botanical Society

Meeting: Friday 5 April at 7.30 p.m. for a talk by Janet Wilmhurst and the 'Student Night'. **Venue:** Room A5 University of Canterbury.

Contact: Gillian Giller,
ph: 03 313 5315,
e-mail: ggillerma1@actrix.gen.nz

Field trip: Saturday 13 April to Nape Nape.

Contact: Gillian Giller,
ph: 03 313 5315,
e-mail: ggillerma1@actrix.gen.nz

Te Ara Kākāriki Greenway Canterbury Trust

Field trip and tour: Sunday 7 April to three locations, come for one or all three. RSVP essential by Thursday 4 April for catering and car-pooling.

Contact: for more information and to register, TAK Coordinator:
ph: 0210 293 3003,
e-mail: register@kakariki.org.nz

Otago Botanical Society

Meeting: Wednesday 27 March at 5.20 p.m. for a talk by Lorna Little titled 'High Arctic Hijinks; Flora, Fauna and Darkness'.

Contact: [David Lytle](mailto:David.Lytle@otago.govt.nz),
ph: 03 454 5470.

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. Please be prompt as we have to hold the door open.

Meeting: Wednesday 17 April at 12.00 noon for talks by two Botany postgraduates. **Venue:** Botany Department Seminar, Union St Lecture Theatre, corner Union St West & Great King St.

Contact: [Paul Guy](mailto:Paul.Guy@otago.govt.nz),
ph: 03 479 7574.

Meeting: Wednesday 17 April at 5.20 p.m. for the AGM and the photo competition. **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. Please be prompt as we have to hold the door open.

Contact: [David Lytle](mailto:David.Lytle@otago.govt.nz),
ph: 03 454 5470.

Field trip: Saturday 20 April to Tunnel Beach. **Meet:** Botany Car Park 9.00 a.m. for car-pooling, or at the Tunnel Beach car park at 9.20 a.m.

Contact: [John Barkla](mailto:John.Barkla@otago.govt.nz),
ph: 03 476 3686.
