



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 130.

September 2014

Deadline for next issue:
Wednesday 15 October 2014

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

Postal address:

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

PLANT OF THE MONTH, p. 2



Wahlenbergia matthewsii

Annual General Meeting

The 2014 Annual General Meeting of the New Zealand Plant Conservation Network will be held in Wellington on Tuesday 14 October at the Wellington Botanic Gardens Begonia House (adjacent to the Lady Norwood Rose Garden) commencing at 6.00 p.m. After the AGM and the presentation of the awards, there will be “The Mysterious Secrets of Uncle Bertie’s Botaniarium” followed by drinks and nibbles.

2014 Winner of the Allan Mere Announced

Congratulations to Dr Brian Molloy of Riccarton, Christchurch, who is the 2014 recipient of the New Zealand Botanical Society’s highest honour—the Allan Mere.



Brian Molloy and Peter de Lange on the occasion of Peter de Lange receiving the 2006 Allan Mere from the New Zealand Botanical Society at the Cheeseman Conference, Auckland, November 2006. Photo: Peter Heenan.

Dr Brian Molloy, a hugely respected member of New Zealand’s botanical community, was successfully nominated for the 2014 New Zealand Botanical Society Allan Mere by Drs Peter de Lange (Department of Conservation), Peter Heenan (Allan Herbarium, Landcare Research) and Brian’s late son Michael Molloy. Brian Molloy has been (and continues to be) an extremely influential force behind the careers of many of New Zealand’s top botanists, conservationists and environmentalists. Of course it’s unlikely that Brian could have ever foreseen (indeed if anyone ever can) how his working life would pan out. Brian had once admitted that when he ‘grew up’ all he really wanted to be was a farmer. One thing led to another and, after a PhD examining the ecology of briar rose (*Rosa rubiginosa*), he started his career with the Ministry of Agriculture and Fisheries, before his skills were recognised by the then Director of DSIR Botany Division, the late Dr Eric Godley, and Brian switched departments and roles.

PLANT OF THE MONTH – *WAHLENBERGIA MATTHEWSII*



Wahlenbergia matthewsii. Photo: Robyn Smith.

Plant of the month for September is *Wahlenbergia matthewsii*. *Wahlenbergia* belongs to the campanula family and has a wide distribution, especially in the southern hemisphere.

Wahlenbergia matthewsii is possibly the most beautiful of the New Zealand harebells. It can be found growing only in calcareous rock in gorges and steep valleys of Marlborough, from the Flaxbourne River to the Clarence River mouth and inland on the Chalk Range.

The dark green linear leaves and relatively large pale blue to lilac flowers make this a very photogenic plant and easily distinguishable from all other New Zealand *Wahlenbergia*. *Wahlenbergia matthewsii* populations are abundant, stable and healthy. However, being a very local range endemic qualifies its status as 'At Risk' and 'Naturally Uncommon'.

For more information on *Wahlenbergia matthewsii* visit the NZPCN factsheet www.nzpcn.org.nz/flora_details.aspx?ID=703

In his early years at Botany Division, Brian worked mostly on ecological surveys of reserves, and national parks, picking the Peel Range near Geraldine for his most intensive work. During his time in the field, Brian encouraged and mentored many people and became a firm friend with the late A.P. (Tony) Druce with whom he shared many memorable field trips. Brian soon gained a reputation as a 'tough nut' once preferring a 'short cut' through a valley full of *Aciphylla*, so that he could get home slightly earlier for a meeting and score an ice cream on the way as well—the alternative 'kinder' route would have got him and his companion out at night fall and by then the ice cream shop would have been closed!

It is not clear when Brian first took a serious interest in biosystematics, though it was probably through his interests in New Zealand's mistletoes and karaka (*Corynocarpus laevigatus*). Whilst most of that research was never published it provided the foundation for his future work on New Zealand orchids, conifers, *Melicytus* and the eastern South Island limestone flora. Brian also explored the Chatham Islands, dabbled in lichens—finding a number of new species—and by the time of his retirement in 1995 had started a series of revisions leading to the publication of two new species of *Leucogenes* (*L. neglecta*, *L. tarahaoa*), a new conifer genus (*Manoao*), a new name for toatoa (*Phyllocladus toatoa*), and a bevy of orchids. In his field, his contributions have been honoured by the genus *Molloybas* and the kowhai species *Sophora molloyi*.



Mt Peel edelweiss (*Leucogenes tarahaoa*) Threatened—Nationally Vulnerable. Photo: Barbara Mitcalfe.

The New Zealand Plant Conservation Network has long appreciated Brian's help—he was the Network's inaugural Tane Ngahere Lecturer (2008)—and his contributions to plant conservation were recognised in 2006 by a lifetime achievement award of the Network. His conservation work has perhaps been his least recognised but in many ways most important contribution—Brian was an early supporter of the Queen Elizabeth II National Trust (QEII), and was instrumental in changing the way that land was covenanted. In his role as QEII rep, and then Director, Brian was at his best with a steaming cuppa either out bush or in a landowner's house working toward a common goal of sensible, sustainable conservation. Many of our most treasured covenants came from his patient work. Brian has a well-respected 'knack' of calming even the most fractious person.

Brian also led a charmed botanical life in the field. His encouragement of others led to the rediscovery of *Geum divergens* in 1992 and the rediscovery of *Leptinella filiformis* in 1999, then in the throes of being declared extinct. In the case of the *Leptinella*, Brian's quick work prevented its extinction because the site he found it in was up for sale and, had plants not been taken (with permission), that species would now be extinct for sure. Alas, though, even his famous 'luck' failed with searches for *Trilepidea adamsii*.



Leptinella filiformis. Photo: Jeremy Rolfe.



Loder Cup recipients together at the 2005 NZPCN conference in Christchurch, from left to right Drs Colin Meurk, Brian Molloy, David Given and Gerry McSweeney. Photo: John Sawyer.

Aside from the New Zealand Plant Conservation Network, Brian's nomination was supported by the Auckland, Canterbury and Nelson Botanical Societies, Riccarton Bush Trust, Queen Elizabeth II National Trust, National Biodiversity Trust (UK), Landcare Research and by individual letters from Drs Ian St George (Wellington), Joshua Salter (Auckland), Rob Smissen (Christchurch), David Galloway (Dunedin) and Rod Hitchmough (Wellington).

We wish Brian all the best for the future, which we know will still be enlivened by his ongoing interest in our indigenous flora and—though he may not say this—the work of his botanical disciples.

Great Find on the East Coast

Graeme Atkins, Department of Conservation

Hibiscus richardsonii was recently discovered in the Tokomaru Bay area, north of Gisborne. The species was found during pampas eradication along this remote coastline. This finding extends the known range for *H. richardsonii* further south; Hicks Bay had formerly had this distinction. This same area is also home to other recently discovered botanical treasures, namely, *Sonchus kirkii* (puha), *Euphorbia glauca* (shore spurge), *Plantago picta* (papa plantain), which is endemic to this area, and *Pimelea xenica* (pinatoro).



Hibiscus richardsonii. Photo: Jeremy Rolfe.

All these species grow on coastal cliffs and headlands and are severely threatened by an advancing wave of pampas infestations that have originated from Tokomaru Bay township. The hibiscus was found growing on a recent slip scar associated with a coastal rocky headland that, in pre-European

times, was a refuge pa for local iwi. Several plants were observed growing at this site; most were juveniles with only two adult plants. No mammal or insect browse was seen on the plants. Some seed was taken from one of the plants and this was used to grow plants that are being kept as an insurance population and for translocation into safe, managed sites.

The owners of the property have retired several hundred hectares of secondary coastal forest with Nga Whenua Rahui, who have carried out effective deer and goat control. This could possibly explain the flourishing coastal plant assemblages. This newly retired land has a shared boundary with the Waipare/Nuhiti, home of one of the largest populations of *Clianthus maximus* (kowhai ngutu-kaka).

NZPCN forum comes alive

Earlier this year the forum on our website was opened up to non-members to encourage its use. This has been a great success, not only dramatically boosting the number of posts submitted to the forum but also increasing the engagement with other members and non-members. A very heartfelt thank-you goes out to our forum moderators (whose watchfulness is necessary to keep spamming at bay) but also those keen and generous people who answer questions, identify species or further discussions on various threads. Peter de Lange, Mike Thorsen, Astrid van Meeuwen-Dijkgraaf and Matt Ward deserve honourable mention for the active interest they play in the forum.

Most forum posts concern plant identification, but there has been a range of other interesting questions. Below is a selection of recent forum topics:

“Simbelmynë, the flowering white plant on graves in the ‘Two Towers’ movie: Can anyone tell me the name of this plant please and something about where it likes to grow, soil type etc.. please? Thank you.”—*Beth, Kapiti Coast*

“Preserving Cotoneaster: I have a wedding in August am looking for plants with berries. Should I pick berries now and do the glycerine technique, freeze it or will it still be available in August?”—*Catherine, Timaru*

“Propagation of *Streblus banksii* by cutting: We are trying to propagate from cuttings as a lot of trees are isolated so not much chance of viable seed. Has anyone any ideas of best time of year, type of cuttings and best medium. We are working on trees in the Wellington region.”—*Graeme, Rangiora*

“Numbers of plants in North vs South Island: My French volunteer student asked me a question that I don’t know the answer to: Does the South Island have more or less native plant species than the North Island and how many? Help!”—*Pieter, Christchurch*

Good news for plants: Last known hind removed from Fiordland’s Secretary Island

Press release, Department of Conservation

Two of the last remaining deer on Secretary Island, in Fiordland’s Doubtful Sound, have been culled by the Department of Conservation’s (DOC) Secretary Island hunting team. Since 2006, Secretary Island (8140 hectares) has been the focus of a deer eradication programme, which has seen approximately 700 deer removed from the island.

DNA sampling has shown that the Secretary Island deer population has remained genetically isolated since the 1950s. By comparing DNA from scat and hair collected during the eradication with the DNA from the deer as they were despatched, as well as images of deer caught on trail cameras, it was estimated that four individuals—one hind and three stags—still existed on the island. No unknown deer have been encountered.

During the late-August hunting trip, Norm Macdonald, DOC Senior Ranger, Services (Biodiversity) said that, “We used the hunting team to systematically cover the island with a combination of bailing and indicator dogs to detect and then flush out the hind, which was then shot from the helicopter. This deer was subsequently found to be pregnant.”

“The technique we are using on Secretary Island to remove these last deer has been constantly evolving. We are now at a point where we have a very high chance of despatching these last wary deer”, Norm Macdonald said.

The removal of the last known hind from Secretary Island is a significant milestone for the eradication programme since it eliminates the potential for fawns to be born on the island. The team also found and killed a large stag after tracking it through the island's rugged terrain and coastline.

A deer-free Secretary Island will be a haven for native plant species that are vulnerable to deer browse, including native ferns, broadleaf, mahoe and kamahi. The operation forms part of the wider Secretary Island Restoration programme, the long term aim of which is the reintroduction of threatened species. The project was a joint effort between DOC, local contractors and expert tracking dog handlers from Te Urewera. Te Anau Helicopters provided aerial support.

Special broadcast of 'The Secrets of Uncle Bertie's Botanarium' at the 2014 AGM

After the 2014 AGM there will be a special broadcast of 'The Mysterious Secrets of Uncle Bertie's Botanarium', a radio play loosely based on Joseph Banks' first voyage.

Date: Tuesday 14 October at the Wellington Botanic Gardens

Venue: Begonia House (adjacent to the Lady Norwood Rose Garden) commencing at 6.00 p.m. After the AGM and the presentation of the awards, there will be "The Mysterious Secrets of Uncle Bertie's Botanarium" followed by drinks and nibbles.

If you are interested in attending this event please RSVP to: info@nzpcn.org.nz

Review of "The Mysterious Secrets of Uncle Bertie's Botanarium"

Jesse Bythell, Network Council member (jesse.bythell@orcon.net.nz)



Illustration by one of the project's creators, Stephen Templer.

"Have you ever wondered what it is that drove Joseph Banks to set forth on his voyages of botanical discovery? Well one talented trio of New Zealand artists has taken the liberty of imagining an alternate history which answers that very question. "The Mysterious Secrets of Uncle Bertie's Botanarium" is a collaborative project created by Duncan Sarkies, Stephen Templer and James Milne.

The initial offering takes the form of a radio play which enthusiastically lampoons the prudish attitudes towards '*scientia amabilis*' prevalent during the eighteenth century. Undeterred by the derision of fellow scientists, Banks is inspired by a remarkable discovery and sets off on a quest to find his long lost Uncle Bertie.

The production values of this radio play are top notch, with excellent Foley work and music. Banks is performed by Jemaine Clement, well known from the comedy duo 'Flight of the Conchords' and the recently successful film 'What We Do in the Shadows'. James Milne's (aka Lawrence Arabia) long-suffering Solander is a delightful foil to Banks's self-absorbed genius. I had the pleasure of listening to a private broadcast of this play in May and thoroughly enjoyed each minute. I came away with aching muscles from laughing so much and a renewed sense of pride in being a member of the fiercely curious and slightly mad tribe of botanists."

Hidden treasures in Titahi Bay

Astrid van Meeuwen-Dijkgraaf (Astrid@wildlands.co.nz)

A small group of people is working with the Porirua City Council to develop a plan to restore native habitat in Stuart Park, Titahi Bay. This is a steep coastal cliff site backed by undulating pasture grassland with mahoe-ngaio (kohekohe) in the inland gullies. Until recently, the pasture area was used by a local horse riding group, which helped to keep the gorse and other weed species down. The overall aim of this project is to nip the gorse in the bud by replacing it with native coastal species, and gradually changing the dominance of pasture grassland to a silver tussock (*Poa cita*) dominant grassland.



Enjoying the comfort of *Melicytus crassifolius*. Photo: John Hornblow.

In the process of exploring the site, John Hornblow, who is the main driver behind this project, found populations of species that were thought to be locally extinct beneath the tauhinu and gorse. This includes a large population of the Cook Strait endemic, and not yet formally described, *Melicytus* aff. *obovatus* (page 108 of Eagle's trees and shrubs). The related *Melicytus obovatus* is considered to be At Risk—Naturally Uncommon. They also found thick-leaved mahoe (*Melicytus crassifolius*, At Risk—Declining) when the kids were jumping on those nice bouncy bushes. Other local treasures include white rata (*Metrosideros perforata*, and *M. diffusa*) and *Clematis* infected with the rust fungus *Aecidium otagense* (see image). We know that yellow-flowered woollyhead (*Craspedia uniflora* var. *maritima*, At Risk—Declining) occurs on rocks nearby and Titahi Bay is the only known North Island location for the Threatened—Nationally Critical pygmy button daisy (*Leptinella nana*). So who knows what else we will turn up.

Eric McKenzie is preparing a rust flora for New Zealand and asked us to keep an eye out on this plant so that we could take a photo when it is showing yellow spores. Unfortunately, John found this plant by falling into it, and hasn't managed to fall in the same location yet! So if somebody else finds something similar take a photo please.



The rust fungus *Aecidium otagense* on clematis. Photo: John Hornblow.

The New Zealand's indigenous flora seed bank—one year on

Craig McGill (C.R.McGill@massey.ac.nz) and Jessica Schnell (J.L.Schnell@massey.ac.nz) Massey University

One year on from the appointment of Jessica Schnell as the seed bank coordinator, progress in collecting and safeguarding the genetic biodiversity held within the seed of New Zealand's indigenous flora has been made in the key areas of collector training and collecting, processing and banking seed.

This first stage of the project has focussed on training of seed collectors. Four training workshops have been held since October 2013; one in Auckland, one in Christchurch and two in Palmerston North. These workshops were led by Jason Halford from Queensland Seeds for Life project (a Millennium Seed Bank Partner), Patricia Wood (Team Supervisor, Conservation & Technology, Seed Conservation Department, Royal Botanic Gardens Kew), Michael Way (Head of Collecting & Network Support, Seed Conservation Department, Royal Botanic Gardens, Kew) and Craig McGill (Massey University and Project Leader for the New Zealand Indigenous Flora Seed Bank) with Jessica Schnell contributing to all four training workshops. As a result of these workshops, and one held in May 2013, there are now 66 trained collectors. Collectors come from a range of backgrounds and include staff from the Department of Conservation, regional councils and botanic gardens as well as iwi groups and environmental organisations.

There have been seven collecting expeditions, four of which were combined with the training workshops. The other three collecting expeditions comprised two collecting expeditions in the Wellington region, the first with Rewi Elliot and Finn Michalak from the Otari Botanic Gardens and Jessica Schnell and Marion Mackay from Massey University, and the second at Kaitoke Forest with Patricia Wood, Marion Mackay and Jessica Schnell. Patricia Wood and Jessica Schnell also undertook a collecting expedition in the Hunua Ranges.

As a result of the seven collecting expeditions' seed and seed being sent in by trained collectors, 31 species have been banked at the Margot Forde Germplasm Centre (AgResearch Ltd). Species banked include both those from within the target species groups identified at the beginning of the project and non-target species. Seven of the species banked are listed as threatened or at risk. Threatened species banked include *Brachyscome pinnata*, *Ranunculus paucifolius*, *Lepidium solandri*, *Gentianella scopulorum* and *Australopyrum calcis* subsp. *optatum*. Seed collected has been processed at Massey University for banking with the help of the seed bank volunteers. The volunteers include both trained seed analysts and enthusiastic amateur botanists. The Faxitron UltraFocus X-ray system purchased with funding from the New Zealand Lotteries Grant Board has been a great help in assessing the quality of the seed collected before banking. Herbarium voucher specimens of plants from which the seed has been collected have been sent to the Allan Herbarium (CHR) at Landcare Research Ltd, Christchurch, for accessioning. For threatened plants, photographs have been taken rather than herbarium specimens collected.

The project is off to a great start thanks to the contribution of all the seed bank partners (Massey University, AgResearch Ltd, Department of Conservation, Landcare Research Ltd and the NZPCN) and the Royal Botanic Gardens, Kew, through the Millennium Seed Bank Partnership. Progress would not have been made without the contribution of individuals from these organisations in particular Marion MacKay, Jeremy Rolfe, Department of Conservation, Peter Heenan, Landcare Research Ltd, Zane Webber, AgResearch Ltd, Rewi Elliot, NZPCN, and Peter Giovannini from the Royal Botanic Gardens Kew. What has been achieved would not have been possible either without the funding that has come from the Massey University Strategic Innovation Fund Responsibility Platform, the New Zealand Lottery Grants Board and, most recently, the George Mason Charitable Trust. This funding has enabled the employment of the seed bank coordinator, supported collecting expeditions and the purchase of equipment needed for the collecting and processing of the seed.

The collecting and collector training plan for 2014–2015 is being finalised now. More details of this and the seed already collected will be published in future issues of *Trilepidia*.

NZIFSB Dunedin Seed Collector Training Workshop 10–12 November

The second South Island seed collector training workshop for the New Zealand Indigenous Flora Seed Bank (NZIFSB) will be held at the Dunedin Botanic Garden. This workshop will cover the appropriate methods and protocols for collecting seed for the New Zealand Indigenous Flora Seed Bank. Attending a workshop is a requirement for anyone wishing to be involved in this project as a collector. Numbers for the workshop will be capped at 25 people. The workshop will be led by the NZIFSB Project Leader, Mr Craig McGill. The first day of training will cover theory and the second and third days, the practical side of collecting through expeditions into the surrounding forest parks. Full details are:

- **Date and time: Monday 10 November – Wednesday 12 November (9.00 a.m. – 4.00 p.m. each day)**
- **Venue: Dunedin Botanic Garden**
- **Refreshments for morning and afternoon tea will be provided.**
- **There is no workshop registration fee but you will need to bring your own lunch**, or food can be purchased from the Croque-O-Dile Café (which is open from 9.30 a.m. to 4.30 p.m. and is located in the lower garden beside the Information Centre), or food can be purchased from the Gardens shopping centre which is a 5 minute walk from the training room.

Please register your interest early to avoid disappointment! To register or for further information, please contact the Seed Bank Coordinator, Mrs Jessica Schnell at (06)356 9099 Ext 83236 or email: J.L.Schnell@massey.ac.nz by **Wednesday 5 November 2014**.

University of Cambridge MPhil degree in Conservation Leadership

Applications and scholarship support for October 2015 entry are now open. The University of Cambridge MPhil degree in Conservation Leadership is a full-time, 11-month, masters course, aimed at graduates of leadership potential with at least three to five years of relevant experience. The unique features of this course are its delivery by a partnership between several university departments and conservation organizations based around Cambridge, and its focus on issues of management and leadership. Consequently, the course aims to deliver a world-class and interdisciplinary education in Conservation Leadership that is not available elsewhere.

For further information on course aims, structure, professional placements, current students and alumni, scholarship support and application process please see: www.geog.cam.ac.uk/graduate/mphil/conservation/

Application deadline is 2 December 2014.

Call for applications for the 2015 Lucy Cranwell student grant for botanical research

Applications are invited for the Lucy Cranwell Grant of \$2500 from the Auckland Botanical Society to assist a student studying for the degree of PhD, MSc, BSc (Hons) or B. Appl. Sci. in any tertiary institution in New Zealand whose thesis project deals with some aspect of New Zealand's flora and vegetation. Priority will be given to projects relevant to the northern half of the North Island.

The research project to be supported will be chosen on the basis of appropriateness to the objects of the Society, namely to encourage the study of botany, and to stimulate public interest in the plant life of New Zealand and its preservation, conservation and cultivation. The grant will be administered by the student's supervisor as a contribution to expenses associated with the project. Closing date for applications: **5.00 p.m. Friday 05 December 2014**

A copy of the Application Form and the Rules of the award may be downloaded from the Auckland Botanical Society website:

<https://sites.google.com/site/aucklandbotanicalsociety/>

Contact for enquiries: Vijay Soma, Secretary, Auckland Botanical Society, email: aucklandbotanicalsociety@gmail.com

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):

10th Australasian Plant Conservation Conference (APCC10)

Hobart, Tasmania 11–14 November 2014: The conference organising committee invites you to submit an Abstract for the Conference (APCC10). The four sub-themes are: • Securing biodiversity; • Prioritising actions; • Animals in plant conservation; • Engagement and communication in the modern world.

Information: www.anbg.gov.au/anpc/conferences/2014/index.html.

Australasian Systematic Botanical Society Conference

24-28 November 2014, Massey University campus, Palmerston North: The theme is 'Next-generation Systematics.'

More information and registration: <http://www.massey.ac.nz/~jtate/ASBS2014NZ.htm>

Auckland Botanical Society

Meeting: Wednesday 1 October at 7.30 p.m. for a talk by Sean Cooper titled 'Sun-Antarctic islands ecosystems'. **Venue:** Unitec Building 114, Room 2001.

Contact: Maureen Young, email: youngmaureen@xtra.co.nz.

Field trip: Saturday 18 October to Oruawharo River, Taporā Peninsula.

Leader: Dave Wilson.
Contact: Maureen Young, email: youngmaureen@xtra.co.nz.

Meeting: Wednesday 5 November for a talk by Peter de Lange titled 'Kunzea, and then there were 10'. **Venue:** Unitec Building 114, Room 2001.

Contact: Maureen Young, email: youngmaureen@xtra.co.nz

Kaipatiki Project

Bush walk & talk - HERITAGE series: Sundays 5 and 12 October, 9.30 till 11.30 a.m. **Where:** Glenfield and Birkenhead.

Information on locations, cost and bookings: www.kaipatiki.org.nz/courses

Rotorua Botanical Society

Field trip: Sunday 11 October to Lake Maraetai, Waikato River.
Meet: car park Rotorua at 9:00 a.m. or Lake Maraetai, at the ramp at Mangakino, at 10:00 a.m. **Grade:** easy. **Cost:** donation for boat fuel. *This is a boat trip so you must tell the trip leader that you are coming by the prior Thursday. He also needs to know whether you are coming so he can advise you, if necessary, if the weather is not suitable on the day.*

Leader: Willie Shaw,
ph: 07 345 5912 (hm) or 021 757 522; email: willie.shaw@wildlands.co.nz.

Field trip: Saturday 18 October to Okareka Mistletoe Restoration Project weed control/plant releasing work day. **Meet:** corner Summit and Loop Roads (lake end) at 8.45a.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), 027 650 7264 (cell),
email: pcashmore@doc.govt.nz

Field trip: Friday 31 October-Saturday 2 November-(Sunday 3 November optional) for East Cape revisited #8. **Meet:** for those coming on Friday meet at Tim's bach on Friday night; for those coming on Saturday morning meet at ex Opotiki DOC office (cnr Elliot & St John Street) at 8.00 a.m. **Grade:** medium. **Cost:** \$20 donation for accommodation for those staying Saturday night. **Bring:** 4WD if you have one.

Leader: Tim Senior,
ph: 0800 368 288 ext 6010 or
07 315 7371;
email: tim.senior@envbop.govt.nz.

Wellington Botanical Society

Field trip: Saturday 4 October to East Harbour Regional Park.
Meet: 9.15 a.m. at end of Lees Grove, Wainuiomata.

Leader: Chris Hopkins,
ph: 04 564 3980; **deputy leader:**
Chris Horne, ph: 04 475 7025.

Meeting: Monday 20 October for a talk by Myfanwy Emeny, Team Leader, Urban Ecology, Parks, Sport & Recreation, WCC titled 'Our natural capital – the Biodiversity Action Plan review'.

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

Nelson Botanical Society

Field trip: Sunday 21 September to Inches' Wairoa Valley. **Meet:** at Church Steps at 9.00 a.m. and bring weeding tools. Please register with the

Leader: Shannel Courtney,
ph: 03 546 9922.

Meeting: Monday 22 September at 7.30 p.m. for a talk by Cathy Jones titled 'Alpine plants'.

Venue: Jaycee Rooms Founders'
Park, Nelson.

Field trip: Sunday, 19 October, to Jimmy Lee Creek. **Meet:** at Church steps at 8.00 a.m.

Leader: Susan Cook ph: 544 6175;
please register with trip leader.

Labour Weekend Camp: 24-27 October at Matakītaki, Murchison.

Leader: Cathy Jones. Please
register with trip organiser:
Pam McConnell, ph: 545 0975.

Canterbury Botanical Society

Meeting: Friday 3 October at 7:30 p.m. for a talk by Laura Young on the plants she has encountered during her fieldwork.

Venue: Upper Riccarton Library
community meeting room
71 Main South Road.

Field trip: Saturday 11 October to Kaitorete Spit Scientific Reserve and other conservation land. **Meet:** at Halswell Bowling Club at 8.30 a.m. for carpooling or 9.00 a.m. at 5 Hill View Road, Birdlings Flat (Brian Patrick's house). **What to bring:** sturdy walking shoes, warm clothes, lunch, hand lens. **Suitability:** terrain includes flat to uneven grassland, shrubland and sand dunes. **Mileage cost:** approximately \$8 (10 c/km paid to drivers).

Trip leaders: Brian Patrick and
Melissa Hutchison,
ph: Brian 03 329 0900 or
Melissa 03 960 7051.

Field trip: Saturday 18 October to NZ Defence Force land at West Melton (with permission). **Meet:** 9.30 a.m. at Yaldhurst Tavern for carpooling. **What to bring:** sturdy walking shoes, warm clothes, lunch, hand lens. **Suitability:** relatively flat terrain. **Mileage cost:** \$2-\$5 (10c/km paid to drivers).

Trip leader: Brian Patrick,
ph: 03 329-0900.

University of Canterbury summer course: Practical Field Botany BIOL305

Venue: University of Canterbury Cass Mountain Research Area, Canterbury. **Dates:** 20 – 28 January 2015. This is an intensive, short summer course designed to meet the need for training in the collection, preparation, and identification of botanical specimens. **Enrolment:** starts 7 October 2014.

Information: Dr Pieter Pelser, ph: 03 364 2987 ext 45605, email: pieter.pelser@canterbury.ac.nz.

Botanical Society of Otago

Field trip: Saturday 4 October to Waianakarua Arboretum. **Meet:** at the Botany car park at 8.30 a.m. or at 9.30 a.m. at the intersection of State Highway One and McKerrow Road, south Mill House, Waianakarua.

Contact: John Steel, ph: 021 2133170, email: john.steel@botany.otago.ac.nz

Meeting: Wednesday 15 October at 5.20 p.m. for talks by Department of Botany Colloquium speakers. Please be prompt as we have to hold the door open.

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.

Field trip: Saturday 1 November to Macraes Flat (rain day Sunday 2 November). **Meet:** at the Botany car park to depart at 8.30 a.m.

Contact: Marcia Dale, ph: 03 454 6706, email: imaginarycrayfish@gmail.com.
