

TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 156

November 2016

Deadline for next issue: Thursday 15 December 2016

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



Zotovia acicularis. Photo: Rowan Hindmarsh-Walls.

Message from the President

Kia ora koutou,

After the last AGM we have had a change in the make-up of the NZPCN council. I'd like to introduce myself as newly elected president and Matt Ward as newly elected Secretary. Both Matt and I have been a part of the NZPCN council for several years and are looking forward to continuing in our new roles. Sarah Beadel has stepped aside after three years as president, but remains on the council. I'd like to thank Sarah for her excellent leadership over the last three years; I'm looking forward to working with the rest of the council over the next year. Our focus in the short term is on finalising the Network's strategy for the next five years, investigating a new 'back end' for our website and organising the next NZPCN conference in late 2017.

Our current council consists of:

President: Rewi Elliot Secretary: Matt Ward

Treasurer: Nicky Oliver-Smith

General member: John Barkla
General member: Catherine Beard
General member: Jesse Bythell
General member: Peter de Lange
General member: Melissa Hutchison
General member: Sarah Beadel
We also have several co-opted members:

Shannel Courtney, Rowan Hindmarsh-Walls, Alex Fergus, Sarah Richardson, Jeremy Rolfe, Astrid Van Meeuwen

In the next issue we'll each have a short bio of ourselves letting you know who we are.

Rewi Elliot (<u>rewi.elliot@wcc.govt.nz</u>)
President

NZPCN Award winners 2016

As in previous years, this year's Plant Conservation Network awards span the full breadth of activity required to protect New Zealand's native plants. The 2016 award winners are:

- Young Plant Conservationist of the Year: Penelope Te Pania
- Plant Nursery Involved in Plant Conservation: The Women's Native Tree Project Trust
- School Plant Conservation Project: St Mary's School, Gisborne
- Community Group: Rings Beach Wetland Group
- Local Authority Protecting Native Plant Life: Waikato District Council
- Individual Involved in Plant Conservation: Tony Silbery

PLANT OF THE MONTH - ZOTOVIA ACICULARIS



Zotovia acicularis. Photo: Rowan Hindmarsh-Walls.

Plant of the month for November is *Zotovia* acicularis, one of three *Zotovia* species, all endemic to New Zealand. Like the other species, *Z. acicularis* can be found in alpine and sub-alpine habitats. This species lives on shaded, damp, rocky faces and seepages. It is only found in south western Fiordland where it is sympatric with the other two *Zotovia* species, *Z. colensoi* and *Z. thomsonii*. It forms short, turfy swards and is very easily overlooked, so is seldom observed.

The species is similar in appearance to both the other two *Zotovia*, but is easily distinguished in the field. Its bright green leaves are much larger

than those of *Z. thomsonii*, which has blue green leaves, and are similarly coloured to but much smaller than those of *Z. colensoi*, which lives in much drier habitats. It probably flowers between December and February, with immature fruit present by March.

The species is endemic to New Zealand and is currently listed as At Risk—Naturally Uncommon because of its restricted distribution. Very little is known about the species because the area it inhabits is inaccessible to all but the most intrepid botanists. As such, we know almost nothing about its population dynamics, but suspect that it is stable, since it is not prone to ungulate browse, and is not currently threatened by exotic weeds. The species has probably rarely, if ever, been cultivated because of its rarity and inaccessibility.

You can view the NZPCN website factsheet for *Z. acicularis* at: http://www.nzpcn.org.nz/flora_details.aspx?ID=778

Young Plant Conservationist: Penelope Te Pania

Penelope is a pupil at Nawton School, Hamilton. To celebrate Matariki this year, students at her school spent a term planning, building, planting and caring for their own rongoā (medicinal) garden. The project was led by the School's Enviro Group -Pride Heroes – of which Penelope is a member. The children have been on field trips, researched plants, applied for funding from Waikato District Council and designed, planted and cared for the garden. Their efforts will help attract native species to the school and help protect the native plants. Penelope's teacher nominated her for the Young Plant Conservationist award because, although the rongoā garden was a group achievement, the energy that Penelope put into this conservation effort at her school (leading the implementation and ongoing sustainability of the project), and her obvious ongoing interest in the plants and their uses, stood out. Penelope used her own break times to research native plants and their possible medicinal qualities, checked on all the plantings daily and continues to monitor their ongoing health. In Penelope's words, she "felt really good about it because it would be helping the environment". Penelope is eight years old. A great achievement for someone so young.



Penelope Te Pania, Young Plant Conservationist.

Nursery Award: The Women's Native Tree Project Trust

The Women's Native Tree Project Trust is a volunteer group working hard to restore the cloak of Papatuanuku. The trees they grow from eco-sourced seeds are gifted to community groups that would otherwise be unable to afford to buy plants. This year, the Trust donated over 2200 native trees to over 21 different community groups (including schools and marae), and for council reserves. The Trust also offers advice to groups about suitable plants and sometimes assists at the planting. The Trust also maintains plantings on Gisborne District Council reserves at Makorori, Titirangi and Wainui schools and the Esplanade through 2-monthly working bees. The members also encourage local schools to visit the Project's nursery to start to learn how to grow native trees from seed and cuttings.

School Award: St Mary's School, Gisborne

In 2012, the St Mary's School Envirogroup began thinking about how it wanted the school to look. The members realised that they wanted more native plants. They made a proposal that they bravely presented to the Board of Trustees. They met the local council to check the boundaries of the area they were planting. They then went to every class in the school and talked about the project. They also put it in the school newsletter, talked at assembly and had the proposal up in the foyer so the local community could comment on it. In 2012, there was their first planting day. Plants were donated by The Women's Native Tree Project Trust and bamboo stakes by the Department of Conservation. The Envirogroup members were outside all day helping to show all the classes what to do. Every class in the school now comes out twice a year to help the Envirogroup weed around all the trees. The group has also managed to get mulch donated so the members are learning about how that helps plants. So far, the group has planted over 650 trees along the Taruheru river. This project has inspired all the staff and students. They have seen a very weedy neglected area transformed into a lovely native planting. They are very proud of themselves and love taking care of the plants and the area that they have restored.

Community Group Award: Rings Beach Wetland Group

In 2008, a group of local volunteers started work on a 4.7 km back country track on public conservation land at Rings Beach. On completion, the focus turned to an unmodified wetland of 4.5 ha that hosted three pairs of endangered fernbird and a few other native species. In an effort to provide further incentive for the return of the birds, a planting programme was instituted. It has seen over 4500 native trees planted in the last five years. The trees selected are predominantly seeding varieties to provide a food source. This 276 ha property was farmed and regularly burned off until the 1950s so natural regrowth has been slow and, to a large extent, impeded by the spread of wilding *Pinus* pinaster pines which reduce the light available to



Winners of the Community Group Award, Rings Beach Wetland Group represented by Ian and Ann McDonald, Carrie Parker and Kathy Speirs with MP for Coromandel, Scott Simpson.

encourage regrowth of natives. A cutting programme was commenced in 2011 and thousands of pines from mature trees to small seedlings have been removed. A plan has been adopted to progressively clear the entire 276 ha over the next five years. This work has been achieved through over 7500 volunteer hours, the assistance of generous funding bodies, annual planting with the involvement of the local Te Rerenga Primary School senior pupils and the horticulture class from the Mercury Bay Area School. The walking circuit is enjoyed by locals and visitors, a track counter recorded 7000 hits in a six-week period last summer and the ongoing installation of botanic labels is improving the educational value of the area.

Local Authority Award: Waikato District Council

With a strong portfolio of environmental initiatives, collaboration and support, Waikato District Council continues to make a positive difference to the environment and native species. It continues to work closely with local communities on a wide variety of projects, from restoring native dune systems to improving or re-creating native habitat around lakes and wetlands, river margins and forests. The council has also worked with Ecosourced Waikato on a number of projects, including the production of planting guides, an environmental education programme with local schools, including a riverbank planting programme, and the development of "Plant Me Instead' booklets that aim to reduce weeds in the district. The council also works closely with local nurseries to ensure quality eco-sourced plants on all revegetation projects.

Individual Award: Tony Silbery

A measure of how deserved is this award is the fact that the nomination was accompanied by more letters of support than any other nomination in recent memory. While working for organisations like the Percy Reserve, Pukaha/Mount Bruce and the Department of Conservation, Tony Silbery has enthusiastically pursued conservation objectives, sometimes in spite of the desires of his line manager. In this brief paragraph it is not possible to document everything but, among his many achievements, the one that the public can most easily see are the 'Muehlenbeckia Islands' which first appeared in Lower Hutt as a way to conserve Muehlenbeckia astonii. The islands came to represent a particular southern North Island provenance and functional 'breeding unit', which had the added advantage that they helped reduce road fatalities. This idea caught on and has been copied by a number of other local authorities for endangered plants in their areas. The Network agrees with the nominator that it is high time that his dedication is formally acknowledged and this is the best way we can think of doing so. Tony is a National Treasure.





Tony Silbery (left) and Peter de Lange investigate the grass *Simplicia* aff. *laxa* which in 2014 was rediscovered in Wairarapa after having not been seen there since 1880.

2017 Award Nominations

The NZPCN awards are presented around October each year. Although we call for nominations around August/September you may submit a nomination at any time during the year. You can download a nomination form from the NZPCN website here. Please send your completed forms and supporting documents by email to cbeard@doc.govt.nz or by post to Catherine Beard, Department of Conservation, PO Box 3072, Hamilton 3240.

New Zealand Indigenous Flora Seed Bank (NZIFSB): The year in review

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

2016 at the Seedbank

The focus for the seedbank over the last year has been on collecting from the alpine zone because this group contains around one third of the New Zealand flora with a large number of species in the zone threatened or at risk. This situation is likely to be worsened by global warming. A total 42 species have been collecting from the alpine zone in the past year. This is nearly half of the 90 species collected in 2016. Collecting would not be achieved without the collectors. Training of collectors has continued throughout the year with workshops held in Auckland, Wanganui (Bushy Park), Cromwell and Alexandra. These workshops bring the number of trained collectors to 149. Collections are being sent to the seed bank by those collectors already trained with just over 40% of the collections made in the past 12 months sent in by trained collectors. This has been a great effort by the collectors and we thank them for all the hard work they have done to help secure New Zealand's plant biodiversity in the seed bank. In addition, the seed bank coordinator has undertaken seven collecting expeditions. These have been in the Auckland, Central Plateau, Wairarapa and Otago regions and have resulted in a further 51 species being collected. In 2016, seed of 20 species listed as threatened or at risk was collected. There are now 190 species and sub-species in the seed bank and, in total, 308 accessions with some accessions representing different populations of the same species or sub-species.

An innovation in 2016 has been to take collections to locations out of Palmerston North for cleaning, to date to Wellington and Otaki, where 13 hard-working local volunteers spend the best part of a day cleaning collections. This has been very successful in both the number of accessions cleaned and the response of those involved. This taking of collections to the cleaners will be repeated for the 2017 collecting period.

We have been very fortunate to have had two enthusiastic French interns, Héloïse Colmet-Cartraud and Anaïs Lossignol, helping in the seed bank for the past few months. Their contribution has been critical for not only the cleaning of the collections but also in the quality assessment of the collections. It has been a busy year in the seed bank but a rewarding one with new species collected and banked and the number people contributing to the project growing.

Alexandra workshop 30-31 October

The most recent seed collector training workshop took place at the end of October in conjunction with the annual Alexandra Thyme Festival. The training was held at the Alexandra Community House. A total of 19 participants attended. Participants were from a range of backgrounds including the Department of Conservation, a Lincoln University student, volunteers from Clyde Railhead Community Nursery and keen members of the public with an interest in New Zealand flora. The practical day on the Monday involved exploring and collecting from Flat Top Hill. It was a beautiful sunny day, ideal for collecting and a collection



The Alexandra seed bank workshop participants resting at lunchtime after a morning's collecting of *Pimelea aridula* subsp. *aridula* at Flat Top Hill. Photo: Dhana Pillai.

of the At Risk—Declining *Pimelea aridula* subsp. *aridula*, which seeds in October–November, was made. Thanks to Clair Higginson (Sustainable Living Program Coordinator) at Central Otago REAP (Rural Education Activities Programme) for all her help in organising the training workshop and Tim Whittaker from the Department of Conservation and Dhana Pillai whose local knowledge of Flat Top Hill was invaluable for the *P. aridula* subsp. *aridula* collection.

Wellington Seedbank workshop 5-6 December 2016

A third North Island seed collecting workshop for the New Zealand Indigenous Flora Seed Bank (NZIFSB) for 2016 will be held at Otari-Wilton's Bush Native Botanic Garden and Forest Reserve. The workshop will be at the Leonard Cockayne Centre with Otari-Wilton's Bush being used for population assessment and potential seed collection on the second day. 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.



View from Skyline Walkway, Otari-Wilton's Bush. Photo: Jessica Schnell.

Numbers for the workshop are limited to 20 people (**only** 5 **places still available**). The workshop will be led by the NZIFSB Project Leader, Craig McGill, and NZIFSB Coordinator, Jessica Schnell. The first day of training will cover theory and the second day will cover the practical side of collecting through an expedition into the surrounding environment. Full details are:

- Date and time: Monday 5 December Tuesday 6 December (9.00 a.m. 4.00 p.m. each day).
- Venue: Leonard Cockayne Centre (160 Wilton Road, Wilton, Wellington) for 5 December and Otari Wilton's Bush for 6 December.
- Refreshments for morning and afternoon tea will be provided.
- There is no workshop registration fee but you will need to bring your own lunch for each day.
- Car parking: Car parking is available on the main car park on Wilton Road (access the building via the canopy walkway).

Please register your interest early to avoid disappointment! To register or for further information, please contact the Seed Bank Coordinator, Mrs Jessica Schnell, ph: 06 356 9099 ext 83236 (or 06 951 6236); email: I.L.Schnell@massey.ac.nz by 28 November 2016.

Favourite Plant and Worst Weed vote is underway...

Matt Ward, Network Council Member (mattdavidward@gmail.com)

The New Zealand Plant Conservation Network's annual favourite plant and worst weed poll opened on 1 November and will run until 30 November. The winners will be announced on the NZPCN website and in the December newsletter.

Launched in 2002, the Network has annually asked New Zealanders to vote for their favourite plant. In 2012, the worst weed category was added to the mix; it also proved popular. Last year's favourite plant was the enigmatic, "At Risk—Naturally Uncommon", found only on Subantarctic islands, *Pleurophyllum speciosum*, giant emperor daisy. The most despised weed title in 2015's vote went to the particularly troublesome pest, a much deserved winner for the third time in four years, *Tradescantia fluminensis*, wandering Jew.

With voting having been underway for 18 days at the time of writing, there are some expected contenders and a few not so expected candidates; many featured are rare and in trouble. The early leader was the uncommon southern dwelling sow thistle, *Sonchus novaezelandiae*, currently sitting safely in second place. This "Threatened—Nationally Vulnerable" herb species has never been common in the



Sonchus novae-zelandiae, Ahuriri Valley, Canterbury. Photo: John Barkla.

wild; having a rosette of 150 mm leaves makes it susceptible to competition from invasive species, which has led to it residing in clifftop refuges or rocky outcrops. A late contender for the 2016 title has now moved into third place, a personal favourite, the "At Risk—Naturally Uncommon", *Caladenia bartlettii*.



Caladenia bartlettii, Plimmerton, Wellington. Photo: Matt Ward.

This minute orchid is an often overlooked species mainly because its tiny 15 mm flower and minimal 100–150 mm stem, is in flower for a only few days; a difficult species to note and enjoy. Currently leading the pack, a past winner and worthy of as much support as possible, a very rare and troubled species, *Metrosideros bartlettii*, rātā Moehau ot Bartlett's rātā. Since winning the title in 2014, more research has been undertaken to try to better understand the status of this species in both propagation and remnant wild populations. Its future is not looking too bright and comments posted so far sum up the situation:

"The 'Doomsday Clock' is ticking. Rata Moehau is now down to 12 wild plants, with five effective genotypes (two in cultivation), and so already functionally extinct. It will be a

long haul to bring it back from the brink. Raising its profile will help—this tree needs all the friends it can get."

"It may have featured before as the favourite native plant, but the plight faced by Metrosideros bartlettii is serious and urgent. It's also extremely beautiful, has a fascinating story, and has the potential for widespread appeal. It is particularly important at this point in time that M. bartlettii receives as much attention as possible."

"A beautiful tree on the brink of extinction. Need to act fast to save this tree. With the threat of myrtle rust arriving in New Zealand, we don't know how this rust will affect it, so active conservation is key right now."

"I chose rata Moehau to highlight this species' plight and that of other critically rare plants in New Zealand



Metrosideros bartlettii, Te Paki. Photo: Peter de Lange.

because they serve as indicators that important processes and relationships in the ecosystem are being disrupted and that attention is needed to correct those disruptions for the sake of the entire system."

Another newcomer and worthy species, which currently sits in ninth place, is Surville Cliffs resident *Pittosporum serpentinum*, kohuhu tangihua or Surville Cliffs kohuhu. Like many of the species present in this unique location it is "Threatened—Nationally Critical". A species that few people will have met, like all residents of the Surville Cliffs, and a habitat that is under threat from multiple angles: aggressive invasive plant species, browsing by introduced mammals, lack of genetic variation, and fire. This sprawling shrub is not flashy or bold, it has unusual brown/orange hairs all over its foliage and tiny crimson fragrant flowers. The comment



Pittosporum serpentinum, Surville Cliffs, Te Paki. Photo: Jeremy Rolfe.

from an initial voter sums up the species' predicament thoroughly:

"This is the most beautiful plant of Aotearoa/New Zealand but is nationally critical. Sadly it has been driven out of its home by possums who view it as a delicacy so it has retreated to the side of steep cliffs in the North Cape Scientific Reserve where it is hanging on

precariously to life. If this was a cute feathered bird with quirky habits then people would be lining up to save it, like they do for the kiwi, takahe and other other rare endemic birds of NZ. It should be the national plant of New Zealand as it is a symphony of colour with the yellow, green, white and golden leaves highlighted by the splashes of red flowers which I see as symbolic of all the nationalities that call New Zealand home. "

Like the favourites there has been some fluctuation at the lead of the race to become 2016 most scorned weed. As you would expect those garnering much attention are species most gardeners and conservationists are familiar with: *Tradescantia fluminensis* wandering Jew, was an early leader but has since dropped to third place, giving way to the table topping *Clematis vitalba* old man's beard. A relevant comment by Anthony worthy of mention for being bang on is:

"Old man's beard is OMG, outrageous. Its vines climb up to the canopy, and out compete native species by strangling or shading them out. It started around the Mokai Canyon and its vines can get as thick as strainer fence post; at that point it no longer is a concern to individual host trees, but entire areas as the seed is disperse via the wind."

All the top 10 weeds would be worthy winners; most of them you will know. Have a look at the site if you have not done so already and vote!

Leader Board 18 November

Favourite Plant	Worst Weed
1. Metrosideros bartlettii, rātā Moehau	1. Clematis vitalba, old man's beard
2. Sonchus novae-zelandiae	2. Ehrharta erecta, veldt grass
3. Caladenia bartlettii	3. Tradescantia fluminensis, wandering Jew
4. Agathis australis, kauri	4. Asparagus scandens, climbing asparagus
5. Vitex lucens, puriri	5. Araujia sericifera, moth plant/vine

Regularly, New Zealanders' general knowledge of their native plants is that of iconic, bright flowered and common species that most people are familiar with and can name. We remind the world that all that we are is thanks to plants; we eat them or things that eat them, they provide environmental services like clean air and water, shelter and soil stability, yet they continue to be taken for granted. Native plants in trouble is unfortunately common in New Zealand because our flora receives little attention or legal protection, "She'll be right!" just doesn't cut it, I'm afraid.

The New Zealand Plant Conservation Network website has over 27,000 images of native and weed species you may wish to have a look at. Any species featured on the site can be voted for including: native and non-native orchids, ferns, trees, shrubs, vines, herbs, grasses, sedges, bryophytes, lichens and algae. The Network's focus is to promote and highlight the protection of threatened plants and their environs. The more knowledge about plants we as a Network can share can only advantage people and plants in the future.

So far, there have not been many votes cast during this year's poll. With plenty of time still left to vote, we invite members as well as non-members you know to vote for New Zealand's favourite plant and worst weed of 2016. Simply select the species you wish to vote for using the "Search Flora" window on the NZPCN homepage or, alternatively, support a species' already voted for by hitting the "Vote for New Zealand's Favourite Plant & Worst Weed" button also featured on the homepage. Voting closes at midnight on the 30 November. Take five minutes to have your say, vote today!

For more information contact: Matt Ward, email: mattdavidward@gmail.com, ph: 021 189 1062.

Lucy Cranwell 2017 student grant for botanical research: call for applications

Applications are invited for the Lucy Cranwell Grant of \$2,500 from the Auckland Botanical Society to assist a student studying for the degree of PhD, MSc, BSc (Hons) or BApplSci at 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 9 December 2016.

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, PO Box 26391, Epsom, Auckland 1344.

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):

Auckland Botanical Society

Field trip: Saturday 17 December for the Christmas picnic/	Contact: Maureen Young,
fieldtrip to North Head. Organisers: Mike Wilcox and Steve	email: <u>youngmaureen@xtra.co.nz</u>
Benham.	

Waikato Botanical Society

Field trip: Sunday 4 December to Lake Hiwiroa, Kaimai-Mamaku Forest Park.	With: Rotorua Botanical Society – for details, see below).
Field trip: Saturday 28 January to Monday 30 January (Auckland Anniversary Weekend) for Whareorino Revisited.	Leader: Thomas Emmitt, ph: 07 878 1050; email: temmitt@doc.govt.nz

Rotorua Botanical Society

Field trip: Sunday 4 December to Lake Hiwiroa, Kaimai-Mamaku Forest Park (combined with Waikato Botanical Society). **Meet:** the car park, Rotorua, at 9:00 a.m. or corner of SH5 and Galaxy Rd North at 9.30 a.m. Please let the trip leader know by Monday 28 November if you are coming because vehicle permits may be required for forestry roads; 4WD or vehicles with high clearance preferred. **Grade:** medium. **Bring:** gumboots for the wetland.

Leader: Paul Cashmore, ph: 07 349 7432 (wk) or 027 650 7264; email: pcashmore@doc.govt.nz.

Whanganui Museum Botanical Group

Field trip: Saturday 3 December (option to stay over to 4	Contact: Colin Ogle,
December) to Paengaroa Scenic Reserve, Mataroa, via Taihape.	email: robcol.ogle@xtra.co.nz.
Meet: Whanganui Police Station at 8.00 a.m. Leaders: Colin and	
Esther (please advise Esther if you plan to stay Saturday night).	

Wellington Botanical Society

Field trip: Saturday 3 to Sunday 4 December to Palliser Bay, South Wairarapa. **Meet:** 9.30 a.m. at Dorset Square, Featherston, corner of Moore St and SH2. **Accommodation:** at Sunita's bach, Ocean Beach, near Corner Creek, 2 tent sites, 4 bunks, plus DOC campsite 300 m away (alternatives: Featherston Motels & Camping, 4 Fitzherbert St, Featherston ph: 06 308 9852; Race Track Ranch, SH2, Tauherenikau, ph: 06 308 9026 / 021 271 0364.

Co-leaders: Pat Enright and Chris Hopkins, ph 04 528 5195, email hopkinschris@xtra.co.nz so he can e-mail you a species list; Sunita Singh 03 387 9955, 027 405 2987, email: sunita@actrix.co.nz.

Field trip: Wednesday 11 to Wednesday 18 January 2017 for the Summer Camp to North-West Nelson in a DOC reserve between Kahurangi National Park and Tai Tapu Marine Reserve. **Base camp:** "The Outpost", Mangarakau, sleeps 28 indoors and has plenty of camping space; approximately 5 hours drive from Picton, one hour west of Collingwood. Full details and booking form at http://theoutpost.kiwi.

Leader and Contact: Chris Moore, booking essential, ph: 04 479 3924, or 027 4313 789; email: moore.c@xtra.co.nz

Nelson Botanical Society

Field trip: Friday 9 to Sunday 11 December for the camp at Mangarakau. Leader: Shannel Courtney.	Registrations: to Susan Cook, ph: 03 544 6175 (registrations close 4 December).
Field trip: Sunday 18 December to Mt Arthur. Meet: Church steps at 8.00 a.m.	Leader: Don Pittham, ph: 03 545 1985 to register.

Canterbury Botanical Society

Meeting: Monday 5 December at 7.30 p.m. Venue: Upper Riccarton Library community meeting room, 71 Main South Road.	Contact: Alice Shanks, ph: 03 337 1256, email: alice@caverock.net.nz.
Field trip: Saturday 10 December, details to be advised.	Contact: Alice Shanks, ph: 03 337 1256, email: alice@caverock.net.nz.

University of Canterbury summer course: Practical Field Botany

Practical Field Botany (BIOL305): an intensive, short summer More information: course designed to meet the need for training in the collection, Dr Pieter Pelser, email: preparation, and identification of botanical specimens. **Venue:** pieter.pelser@canterbury.ac.nz; ph: 03 364 2987, ext 45605. University of Canterbury Cass Mountain Research Area, Canterbury. Dates: 19 – 27 January 2017. This course will be of interest to amateur botanists, members of the workforce (e.g., Crown Research Institutes, Department of Conservation, local and regional councils, botanic gardens, horticulturists and teachers) and biology students who need to acquire or upgrade taxonomic skills and are interested in field ecology, conservation, biodiversity and biosystematics. The course is targeted at participants with various entry levels: from students with a limited plant knowledge to experienced career professionals. Enrolment: started 4 October 2017.

Otago Botanical Society

Meeting: Wednesday 7 December at 6.00 pm for End of Year dinner at Buddha Stix, 678 George Street.	Book: with Robyn Bridges before 5.00 p.m. on Monday 5 December; ph: 021 235 8997; email: robyn.j.bridges@gmail.com.
Field trip: Saturday 10 to Sunday 11 December to the Mavora Lakes Park. Accommodation: the Department of Conservation campsite at Mavora Lakes; cost \$8.00 per person per night. Bring: own tent, sleeping bag, cooking gear, food, sand fly repellent, etc.; be prepared for adverse weather at both the campsite and in the field.	Contact and Leader: David Lyttle ph: 03 454 5470; email: djlyttle@ihug.co.nz.

AVAILABLE EARLY 2017

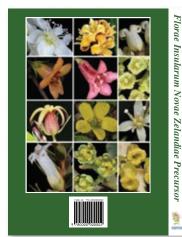
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Allan Cunningham's

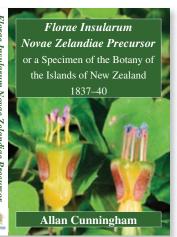
Florae Insularum Novae Zelandiae Precursor

In 1826, Allan Cunningham became New Zealand's first resident botanist, a role that led to the creation of the *Precursor*, the forerunner of our modern Flora of New Zealand. Cunningham published 17 articles in four volumes of two journals between 1837 and 1840, providing descriptions of 639 species of vascular and non-vascular plants including several new genera and species. The articles contained many innovations for the time such as the inclusion of ecological information. Particularly novel, was Cunningham's use of Māori words in his scientific names.

Despite their importance to New Zealand botany, these works are rarely seen. For the first time, they have been collated and presented in full, along with the addition of colour photos that depict many of the species described by or named to honour Allan Cunningham.



Telephone:







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