



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 158

January 2017

Deadline for next issue:
Wednesday 5 February 2017

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



Bulbinella talbotii.

Message from the President

Kia ora koutou.

I hope you all had a safe and lovely holiday season and for those of us back at work the year looks bright.

You'll see our draft 2016–2020 Network strategy is included in this issue. Comments are welcome from members, which will be collated and discussed by NZPCN council members. Please send your thoughts and comments to info@nzpcn.org.nz. Council members are next meeting in March/April to finalise the strategy and make any changes resulting from discussion of and agreement on your comments. We look forward to hearing from you.

It is with great sadness that I heard last week of the death of Barbara Mitcalfe. Barbara was a dedicated and extremely passionate advocate for New Zealand's native flora, a founding member and on the first NZPCN council. She received the Network lifetime achievement award in 2008 along with partner Chris Horne. She will be sadly missed.

If you haven't already done it, I encourage you to visit the Network's online shop and order your very own copy of *Florae Insularum Novae Zelandiae Precursor*. This is a facsimile of Allan Cunningham's 17 articles published between 1837 and 1840 assembled into a single volume. The original 17 articles between 1837 and 1840 and were an important but often overlooked contribution to New Zealand botanical discovery. It's available for order now.

Kind regards,

Rewi Elliot
President

Correction

In last month's issue of *Trilepidea*, there was an article about the discovery and cultivation of *Sonchus kirkii*. Thanks to member Steve Benham, and confirmed by Peter de Lange, the species featured has been identified as the naturalised exotic, *Lactuca virosa*.

New Zealand Plant Conservation Network strategy 2016–2020

Vision

The rich, diverse and unique native plant life of New Zealand is recognised, cherished and restored.

How we work

By fostering plant identification and conservation skills, providing information for plant conservation practitioners, and emphasising the importance of working together, our vision can be achieved. Our role is to facilitate and advocate for plant

PLANT OF THE MONTH – *BULBINELLA TALBOTII*



Bulbinella talbotii. Photo: Simon Walls.

The plant of the month for January is Goulard Downs onion, *Bulbinella talbotii*, one of six *Bulbinella* species endemic to the New Zealand region. Like most of the other mainland New Zealand species, *B. talbotii* is found in sub-alpine habitats. This species is found on acidic impoverished penepplain ('Downs'), often among red tussock (*Chionochloa rubra*). It is found only on the Goulard, Saxon and Mt White Downs near the Heaphy Track, in Kahurangi National Park.

It is a small stature plant, mostly found as scattered individuals, growing with red tussock, bog pine (*Halocarpus bidwillii*), sphagnum and *Empodisma minus*, and can be hard to find when not in flower. The species is most similar in appearance to *B. modesta*. Both species have thin grass like leaves, but *B. talbotii* can be easily distinguished by its distribution and very compact and reduced flower spikes, which are hidden within the leaves. It flowers earlier than the other species, in spring, mostly in November. The species was named for Harry Talbot (1898–1982), a plant collector who frequented the area in which it lives.

The species is endemic to New Zealand and is currently listed as At Risk— Naturally Uncommon because it has a very restricted distribution, but is relatively common within this area. It is threatened by deer browse and gorse invasion into its habitat. It is not generally cultivated but could be easily grown from pieces of its bulbous roots potted into a peaty grit mix and kept in damp conditions in full sun.

The genus *Bulbinella* is not endemic to the New Zealand region and includes at least 25 species. All other species are found in southern South Africa. It is not closely related to onions as the common name could suggest, but rather is in the family Asphodelaceae, with one closely related to genus being *Aloe*, including species such as *Aloe vera*.

You can view the NZPCN website factsheet for *Bulbinella talbotii* at: www.nzpcn.org.nz/flora_details.aspx?ID=385

conservation at legislative and policy levels as well as providing information and support to plant conservation practitioners, landowners and managers.

Funding the network

The Network is funded through membership fees, project grants from government sources, and various sponsors who have provided financial support for aspects of the Network's conservation programme, including the website, conferences, publications, and project work. The Network will continue to explore links to the corporate sector to expand its conservation activities. The Network will utilise all opportunities to build its brand and increase funding.

What we do

Our strength is in linking plant conservation practitioners with comprehensive, accessible and accurate information to support their efforts in promoting and conserving native plants.

Our goals

- Goal 1: Enhance the Network.
- Goal 2: Raise awareness of the importance of plants, their habitats and conservation.
- Goal 3: Communicate scientific and technical information on plants and their conservation in an accessible way.
- Goal 4: Promote and support plant conservation research and education.
- Goal 5: Support legal protection and appropriate conservation status assessments for threatened plants.
- Goal 6: Promote *ex situ* plant conservation as a long-term conservation strategy.

Measuring what we do

Measuring the Network's progress towards and achievement of these six goals is essential to communicate and celebrate success, and identify areas which need more work. Progress will be evaluated five years after this strategy is completed and will be reported on our website.

Working with others

Working with others, engaging, collaborating and forming partnerships is a critical aspect of the Network. We are mindful of a desire to work more closely with iwi. We have made a start by developing the marae-based training scheme.

NATIONAL GOALS

Goal 1: Enhance the Network.

Actions

- 1.1 Increase awareness of the NZPCN and promote networking and sharing of knowledge.
- 1.2 Facilitate networking of like-minded agencies (in NZ and internationally) and encourage data sharing (if beneficial) with allied citizen science organisations, e.g. NatureWatch NZ.
- 1.3 Develop promotional materials for the Network that can be used nationwide at events and conferences.
- 1.4 Take opportunities to promote the Network.

Measures

Increased membership, established networks with agencies/other groups, number of citations in the literature.

Goal 2: Raise awareness of the importance of plants, their habitats, and conservation.

Actions

- 2.1 Maintain and moderate a web forum.
- 2.2 Deliver an annual favourite plant and worst weed poll and other promotional events, e.g., competitions.
- 2.3 Take opportunities for media releases and invite media to attend events.
- 2.4 Embrace social media to promote items of interest to members.
- 2.5 Promote best practice and recognise excellence through annual awards.
- 2.6 Grow the Endowment Fund to financially support plant conservation action.

Measures

Forum traffic, media releases, increasing website usage.

Goal 3: Communicate scientific and technical information on plants and their conservation in an accessible way.

Actions

- 3.1 Provide and maintain a website.
- 3.2 Complete factsheets for all native and naturalised plants on the website.
- 3.3 Develop resources on the website including plant communications information.
- 3.4 Hold a biennial national conference.
- 3.5 Communicate regularly with members (e.g., newsletter).

Measures

Conference held, factsheets completed, website functional and up-to-date, scientific names regularly updated.

Goal 4: Promote and support plant conservation research and education.

Actions

- 4.1 Maintain on the website a list of all native and naturalised plants, including non-vascular plants.
- 4.2 Publish a list of indigenous vascular plants every five years that is consistent with the threat classification list.
- 4.3 Grow and award the David Given Threatened Plant Research Scholarship fund to foster and sponsor research.
- 4.4 Disseminate new research to members.

Measures

Lists published, increasing funds.

Goal 5: Support legal protection and appropriate conservation status assessments for threatened plants.

Actions

- 5.1 Advocate to DOC and others for changes to policy and legislation that would legally protect plants.
- 5.2 Support assessment of national and regional conservation status of all plant species by soliciting submissions and through representation on the threat assessment panel.
- 5.3 Advocate for regional and district plan rules that recognise and protect native flora.
- 5.4 Promote to local body staff and councillors the needs of and protection mechanisms for, New Zealand's threatened flora.

Measures

Submissions made, changes communicated to members.

Goal 6: Promote *ex situ* plant conservation as a long-term conservation strategy.

Actions

- 6.1 Support and promote *ex situ* plant conservation.
- 6.2 Ensure Network representation on the Seed Bank Steering Group.

Measures

Steering Group representation, seed bank support provided.

New Zealand Indigenous Flora Seed Bank (NZIFSB)

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

A new international connection for the Seed Bank

At the start of the year, the seed bank welcomed Marianela Aichele López to New Zealand. Marianela is an agronomy student from the Universidad Austral de Chile in Valdivia, Chile. Marianela contacted the seed bank in May 2016 after she discovered the New Zealand project while searching for an overseas internship position related to her university study. Completion of an overseas internship is part of Marianela's agronomy degree requirements. Marianela has a strong interest in all plants and has discovered more about seeds through a curso de cultivos anuales (course on annual crops) at the Universidad Austral de Chile. From the course on annual crops, Marianela has learnt the importance of good seed health, germination and viability for crop production and, now working in the seed bank, for the preservation of biodiversity.

In the two weeks that Marianela has been here, she has learnt the finer details of seed processing including seed cleaning, x-raying, tetrazolium testing, setting up germination tests and mounting herbarium specimens which are collected at the same time as the seed collection is made (provided there is enough plant material available to do so). The herbarium specimen provides a connection between the plant *in situ* and the seed in the seed bank. The herbarium specimen is important if, for example, there is a taxonomic revision of the species.



Marianela and Anaïs mounting herbarium specimens of mānuka (*Leptospermum scoparium*) at the Dame Ella Campbell Herbarium, Massey University. Photo: Jessica Schnell.

During her time in the seed bank, Marianela will join seed collecting expeditions and research that will help fill gaps in our knowledge around the storage requirements of some of New Zealand's indigenous species—knowledge that is needed to successfully store seed and the biodiversity it contains.

It is great to have Marianela working with us in the seed bank. Marianela's willingness to learn new techniques and the help she is providing with processing the seed is very much appreciated. We look forward to achieving more over the coming two months and also the opportunity to go on seed collecting adventures.

The main seed collecting season will soon be here so it is also a good time to ask the trained seed collectors amongst you to let Jessica Schnell know your seed collecting plans so any collecting permits needed can be organised and the arrival of the seeds at the seed bank planned. The Department of Conservation has asked that collecting Myrtaceae seed be a priority because of the looming threat of myrtle rust and rapid 'ohi'a death arriving in New Zealand.

The New Zealand Plant Conservation Network Biennial Conference and the John Child Bryophyte and Lichen Workshop 2017

Location: Hokitika

Theme: Back to basics, core botanical themes

Sessions

- Taxonomic updates
- Distribution and population updates
- Bryophytes and lichens
- Plant ecology
- Community and iwi engagement and successes
- Conservation tools and successes
- Weed research
- Student colloquium

A call for abstracts for sessions will be made on 30 April 2017.

The organizing committees of the New Zealand Plant Conservation Network (NZPCN) Biennial Conference and the John Child (JC) Bryophyte and Lichen Workshop are delighted to announce we are joining forces in November 2017, in Hokitika. The NZPCN biennial conference will include a plenary session on bryophytes and lichens and our joint day of workshops will focus on getting the vascular botanist off the side lines and on all fours bravely keying out some magnificent *Hyptoterygium* (umbrella moss). Joint field trips will provide a great opportunity to learn from each other while out and about in beautiful and diverse West Coast habitats. The JC Bryophyte and Lichen Workshop will kick off the day after our joint field trips. Our hope and intention is that by combining our energies we can bring a fantastically odd group of people together to share their passion and knowledge while efficiently bolstering participation in both events.

There is no obligation to attend both the NZPCN conference and the JC Bryophyte and Lichen Workshop, but we strongly recommend that you do! A student discount for attendance will be available.

Please send NZPCN conference specific queries to: Alex Fergus (afergus@doc.govt.nz), Jane Marshall (jmarshall@doc.govt.nz) and Jane Gosden (jgosden@doc.govt.nz).

Please send John Child Bryophyte and Lichen Workshop specific queries to: Paula Warren (pwarren@doc.govt.nz) and Jon Terry (jon@jonterryecology.com).

Tuesday 14 November: arrive Hokitika.

Wednesday 15 November: NZPCN Biennial Conference (sessions 1, 2, 3), NZPCN AGM.

Thursday 16 November: NZPCN Biennial Conference (sessions 4, 5, 6), conference dinner.

Friday 17 November: workshops, evening exhibition

Saturday 18 November: field trips.

Sunday 19 November: JC Bryophyte and Lichen Workshop

Monday 20 November: JC Bryophyte and Lichen Workshop

Tuesday 21 November: depart Hokitika.

Hoping to see you all on the West Coast!

UPCOMING EVENTS

If you have important events or news that you would like publicised via this newsletter please e-mail the Network (events@nzpcn.org.nz):

Auckland Botanical Society

Field trip: Friday 27 to Monday 30 January for the Auckland Anniversary Weekend camp at Pukeiti Forest, Northland.

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

Field trip: Saturday 18 February to Motutapu Island.

Leader: Mike Wilcox,
email: mike.wilcox@xtra.co.nz.
Contact: Maureen Young,
email: youngmaureen@xtra.co.nz.

Meeting: Wednesday 1 March at 7.30 p.m. for the AGM followed by a talk by the Lucy Cranwell Grant recipient, Stevie Noe, titled 'Nectar yield in manuka' (TBC). **Venue:** Unitec Room 115-2017.

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

Waikato Botanical Society

Field trip: Saturday 28 to Monday 30 January for the Auckland Anniversary Weekend trip to Whareorino Revisited (combined with the Rotorua Botanical Society).

Leader: Thomas Emmitt,
ph: 07 878 1050;
email: temmitt@doc.govt.nz

Rotorua Botanical Society

Field trip: Saturday 28 to Monday 30 January for the Auckland Anniversary Weekend trip to Whareorino Revisited (combined with Waikato Botanical Society). **Meet:** corner of Fraser Smith Road and Manganui Road, Awakino on Saturday 11.00 a.m.
Grade: medium-hard. **Accommodation:** tents and shearers quarters. **Bring:** camping things good boots, wet weather gear.

Leader: Thomas Emmitt (WBS),
ph: 07 878 1050 (wk),
07 280 7142 (hm),
0275405762 (mob),
email: temmitt@doc.govt.nz.

Field trip: Saturday 11 February to Karangahake (Warren Coffey Property) combined with Waikato Botanical Society. **Meet:** the car park, Rotorua, at 7.15 a.m. or at the 'bottle' in Paeroa at 9.00 a.m.
Grade: medium.

Leader: Yanbin Deng.

Field trip: Sunday 5 March to Ottawa Forest Sanctuary Kauri, Te Puke. **Meet:** the car park Rotorua at 8.00 a.m. or at 1254 No. 3 Rd, Te Puke, at 9.00 a.m. **Grade:** medium-hard.

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

Field trip: Saturday 18 March to Mt Tarawera combined with Forest and Bird and the Waikato Botanical Society (Sunday 19 March reserve day if Saturday is wet). **Meet:** DOC Rotorua Office, 99 Sala St, Rotorua, (go in Scion (Forest Research) north entrance and turn left before the locked gates) at 8.30 a.m. or DOC Ashpit Road campground, Lake Rerewhakaaitu at 9.15 a.m. **Grade:** medium-hard and in particular confident walking on steep mobile scoria slopes and along high and sharp ridges.
Registration: minimum age 14 years; a maximum of 30 people on trip on a first come basis so must register with Paul Cashmore by Monday 13 March at latest. **Cost:** free. **Bring:** minimum 2 litres water, lunch and snacks, wet weather and warm gear, sun hat, sunblock, boots or sturdy shoes, gaiters and/or leggings an advantage for loose scoria, gloves for pulling out pines.

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

Wellington Botanical Society

Field trip: Saturday 11 February to Barry Hadfield Nikau Reserve, Paraparaumu. **Meet:** 9.30 a.m. at the reserve's parking area, immediately east of SH1. If you would like a lift from Wellington, or to be met at Paraparaumu Station, please phone the leader.

Leader: Chris Horne,
ph: 04 475 7025,
mobile 027 474 9300.

Meeting: Monday 20 February at 7.30 for a talk by Melanie Dixon, Consultant Ecologist, Trustee of the National Wetland Trust, titled 'Wetlands in the Wellington Region'.

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

Field trip: Saturday 4 March 'Seaweeds for beginners'. **Meet:** at 10.00 a.m. near the toilet block, Te Raekaihau Point (between Island Bay and Lyall Bay). **Bring:** sturdy shoes.

Leader: Leon Perrie,
ph: 027 419 1378.

Nelson Botanical Society

Field trip: Sunday 19 February to Mt Starveall. **Meet:** at Church Steps at 8.00 a.m. Please register with leader by Friday 17 February in case of cancellation.

Leader: Andy MacDonald
ph: 021 105 590.

Canterbury Botanical Society

Field trip: Thursday 9 – Sunday 12 February for the Summer Camp now in Danseys Pass. **Accommodation:** Danseys Pass camp, 3 cabins for 12 people. **Cost:** \$60 first 2, 18 each extra sleep 4 (exclusive cabin, \$40/night, book privately 03 431 2564). **Bring:** sleeping bag, breakfast, lunches and snacks and drinks; crockery and cutlery provided. **Shared meals:** Friday and Saturday, \$20.

Enquiries: Alice Shanks,
ph: 027-366-1246, 03 337 1256,
email: alice@caverock.net.nz.

Meeting: Monday 13 February for a talk by Peter Bellingham.
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 February 18 to Cooper Lagoon to see Te Waihora orchids (*Spiranthes*).

Contact: Alice Shanks,
ph: 03 337 1256,
email: alice@caverock.net.nz.

Otago Botanical Society

Field trip: Saturday 4 February to Herbert Forest. **Meet:** Botany Department car park at 8.00 a.m.

Contact: John Steel,
ph: 021 2133 170,
email: john.steel@otago.ac.nz

Meeting: Wednesday 22 February at 5.20 p.m. for a talk by John Barkla titled 'Botanical gems of Stewart Island/Rakiura'. **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.

Contact: Robyn Bridges,
ph: 03 472 7330.

Meeting: Wednesday 8 March at 5.20 p.m. for a talk by Dr Barbara J. Anderson, Ecologist and Research Scientist, Landcare Research, titled 'Breaking down decomposition: Using teabags to investigate decomposition rates along aspect and elevation gradients'. **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.

Contact: Robyn Bridges,
ph: 03 472 7330.