



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 215

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Deadline for next issue:
Friday 18 March 2022

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 info@nzpcn.org.nz

Postal address:

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NEW ZEALAND

PLANT OF THE MONTH, p. 4



Euchtiton ensifer. Photo: Rowan Hindmarsh-Walls.

Chasing an elusive local endemic: the Mt Peel edelweiss (*Leucogenes tarahaoa*)

Melissa Hutchison (Ecologist, Christchurch, melissa@tenax.co.nz)

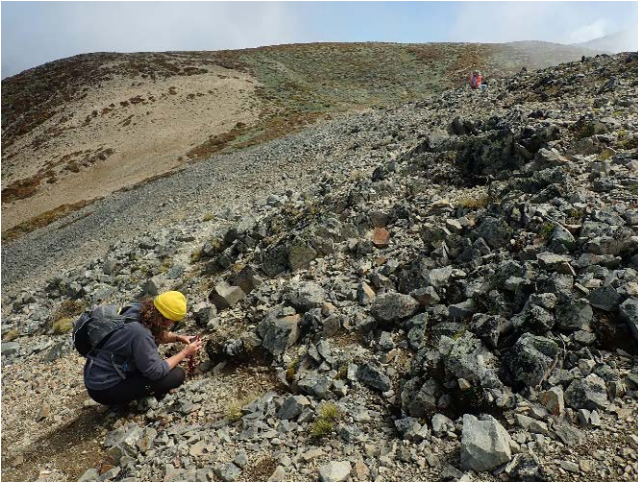
The forecast was looking good for Sunday, and I'd managed to persuade my family and some energetic botanists (Tayla Hooker and Tom Ferguson) to join me on a mission to look for the enigmatic Mt Peel edelweiss (*Leucogenes tarahaoa*)—a native plant species that grows only on Mt Peel in South Canterbury (Molloy 1995, NZPCN 2022). The species occupies broadly similar alpine habitats to the common and widespread South Island edelweiss (*L. grandiceps*), but because of its extremely localised distribution and relatively small population size, it is classified as Threatened-Nationally Vulnerable (de Lange *et al.* 2008). For some reason I had only cottoned on (excuse the pun) to the existence of this charming species last year, but as soon as I discovered it, and realised that there was only one observation of it on iNaturalist from way back in 2005 (iNaturalist 2022), I was determined to make a pilgrimage to see it.

We set off at 8.00 am and raced up through Peel Forest to the shelter at Little Mt Peel (1113 m) in just over two hours, after having made a conscious decision not to stop and photograph any plants or lichens on the way (which was quite an achievement for an avid iNatter like myself). After a series of ups and downs through subalpine shrubland and tussocks along the rocky ridge (still trying hard to ignore all the interesting plants and lichens on the way) we finally reached Middle Mt Peel (1583 m) by early afternoon. By this time the 10 year-old was losing enthusiasm for the never-ending climb (and maybe some of the botanists were flagging a bit too), so some of us had to call it a day and be content to botanise on Middle Mt Peel.



Left: Boardwalk to Little Mt Peel, with Peel Forest and the Canterbury Plains below.

Right: Looking NW along the Tara Haoa range toward the distant summits of Middle Mt Peel (1583 m) and Big Mt Peel (1743 m).



Left: Botanising on Middle Mt Peel (1583 m). Here we found the common South Island edelweiss (*Leucogenes grandiceps*), but not our elusive target.

Right: One of my favourite graminicolous/terricolous lichens (i.e. it grows on dead leaf bases or soil), *Lecanora epibryon* subsp. *broccha*, on Middle Mt Peel.



Left: On the way up Tayla spotted the very cryptic scree buttercup, *Ranunculus crithmifolius*, perfectly camouflaged in amongst the grey-brown scree.

Right: It felt like a very long way down and up to Little Mt Peel (1113 m) again.

Sadly only one of us was lucky enough to see the local endemic, found just below the summit of Mt Peel, but at least Felix (the most determined peak-bagger of our party) got some great photos of it in flower. The rest of us had to make do with seeing the common South Island edelweiss (*Leucogenes grandiceps*). Although my body is telling me that forcing it to ascend 2000 metres in one day just to look at a plant is a crazy idea, the pull of the elusive Mt Peel edelweiss has me wanting to slog up that peak and chase after it again sometime very soon... who wants to join me?



Left: Looking back down the ridge to Middle Mt Peel from Big Mt Peel. Photo: Felix Collins.

Right: Rocky summit of Big Mt Peel (1743 m) – habitat for Mt Peel edelweiss, *Leucogenes tarahaoa*. Photo: Felix Collins.



Left: The mysterious and beautiful Mt Peel edelweiss, *Leucogenes tarahaoa*. Photo: Felix Collins.

Right: Severe animal browse was observed on Mt Peel edelweiss flowers—combined with its very localised distribution and small population size, its Threatened-Nationally Vulnerable status is no surprise. Photo: Felix Collins.

References

- de Lange P.J.; Rolfe J.R.; Barkla J.W.; Courtney S.P.; Champion P.D.; Perrie L.R.; Beadel S.M.; Ford K.A.; Breitwieser I.; Schonberger I.; Hindmarsh-Walls R.; Heenan P.B.; Ladley K. 2018: Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington. 82 p.
- iNaturalistNZ 2022: Observation of *Leucogenes tarahaoa* on the iNaturalistNZ website. <https://inaturalist.nz/observations/42524116>. Date accessed: 21 February 2022.
- Molloy B.P.J. 1995: Two new species of *Leucogenes* (Inuleae: Asteraceae) from New Zealand, and typification of *L. grandiceps*. *New Zealand Journal of Botany* 33(1): 53-63.
- NZPCN 2022: Factsheet for Mt Peel edelweiss, *Leucogenes tarahaoa*. <https://www.nzpcn.org.nz/flora/species/leucogenes-tarahaoa/>). New Zealand Plant Conservation Network. Date accessed: 21 February 2022.

Enhanced flora search feature on NZPCN Website

Jesse Bythell, NZPCN Webmaster (jesse.bythell@gmail.com)

The NZPCN flora search now has an enhanced feature which suggests possible scientific name matches when you begin to type in a word in the Flora Search. For example, if you wish to search for *Corynocarpus laevigatus* you can begin typing the first part of this name and the system will find twenty closely matching scientific names. Continue typing and the matches will become more specific. You can choose to click on these suggested matches and go straight to the species fact sheet. This new function sits alongside the previous search system which you can still use, ie. type in the plant name (common or scientific) and hit 'Enter' or click 'Search' and the system will return several results for you to browse through or it may suggest possible alternatives if your search returns "no exact match is found".

Another way to use this new search function is to put in the first part of the genus and first part of the species epithet with a space between, for example 'cor aus' will return *Cordyline australis*.

PLANT OF THE MONTH – *EUCHITON ENSIFER*

Rowan Hindmarsh-Walls (rowan.hindwalls@gmail.com)

The plant of the month for February is *Euchiton ensifer*, one of at least twelve native species of *Euchiton* found in the New Zealand region. The species is found on the North and South islands but has a patchy and localised distribution. It is known from the Kaimanawa Ranges and the Kaingaroa Plain in the North Island, and from Nelson south to Southland, excluding Westland. This species is found in wet places from the montane zone to the alpine zone and is often found growing around tarns or seepages.

The plant is stoloniferous (produces horizontal stems that periodically re-root) and perennial. It forms loose mats over wet ground. The leaves are quite narrow and almost glabrous (hairless) on the upper side, while the under sides are covered in fine white hairs. The flowering stems are laterally positioned (starting from below the main leafy rosette) and contain multiple capitula (flowering structures) per flower head. The flowers are fairly non-descript and coloured green to brown.

Euchiton ensifer is comparable in appearance to many other *Euchiton* species which grow in similar habitats. *E. traversii*, *E. paludosus* and *E. lateralis* differ by their single capitula and hairier grey leaves. *E. delicatus* also has multiple capitula and looks similar but is very hairy on both sides of the leaves. The other species of *Euchiton* either have much broader leaves or live in different environments.

Euchiton ensifer has a conservation status of 'Threatened – Nationally Endangered', as it has a very scattered distribution and is threatened by habitat loss and competition from exotic weeds across all of its range. Inland Marlborough is a stronghold for the species and it is relatively often found in montane wetlands in this area, which have been less modified by intensive agriculture than in other areas. Weeds such as *Carex leporina*, *Juncus squarrosus* and *Juncus articulatus* can smother wetlands where this species occurs.

Species in the genus *Euchiton* (cudweeds), are widespread around the Western Pacific with approximately seventeen species scattered from Japan to New Zealand. Of these, twelve are either native or naturalised in New Zealand.

The name *Euchiton* comes from the Greek 'eu' meaning good and 'chiton' meaning tunic or covering; referring to the close-fitting clusters of bracts surrounding the flower structures. The epithet *ensifer* comes from "ensis" (sword) and "-fer" (carrying)—it is not clear what this refers to but the leaves are long and narrow which could be seen to be sword-like.

You can view the NZPCN website factsheet for *Euchiton ensifer* at: <https://www.nzpcn.org.nz/flora/species/euchiton-ensifer/>



Euchiton ensifer, Clarence River flats, Maukuratawhai 13 January 2022: (left to right) flowering plant, basal leaves, flower heads. Photos: Rowan Hindmarsh-Walls.

Update on the postponement of the NZPCN 2022 conference

Alex Fergus, Jesse Bythell and Jo Smith

As per the announcement on our website on 31 January, the NZPCN conference committee made the decision to postpone the 2022 conference which was to take place in Queenstown in March. We can now see how quickly the Omicron variant has spread and stand by our decision that the timing was not right. We also had more than 100 participants and hence the gathering was not permitted under the government's COVID-19 red setting

As announced in January, full refunds remain available for anyone not able to attend the conference on the new dates. We are very pleased to observe that, so far, the new dates appear to work for the great majority of those registered. We are even more pleased to see the continual trickling in of new registrations. Below are the revised dates associated with the conference:

Friday 14 October: abstract submission closes

Friday 11 November: registration closes

Sunday 4 December: workshops & registration and welcome event (evening)

Monday 5 December: talks/presentations & botanical bowls (evening)

Tuesday 6 December: talks/presentations and awards ceremony (evening)

Wednesday 7 December: field trips

All planned workshops, conference sessions and field trips will go ahead on these new dates. Please contact Alex if you have any questions (fergusa@landcareresearch.co.nz).

Thank you to our conference sponsors!

We would like to thank our sponsors for showing their commitment to plant conservation networking by supporting our conference. For more information regarding our conference sponsors please follow this link <https://www.nzpcn.org.nz/nzpcn/events/conference-2022/2022-conference-sponsors/>.

If you or your organisation is in a position to show your support please contact us now for a sponsorship package at fergusa@landcareresearch.co.nz.



Manaaki Whenua
Landcare Research



Brief notes on the vegetation of Spit Islands and associated beaches, southwest Fiordland

John Barkla (mjbarkla@xtra.co.nz)

If like me, your impression of the Fiordland coast is one of mostly steep forbidding forested slopes that plunge into the sea, it comes as a surprise to discover sweeping golden-sand beaches. During January 2022 I had the pleasure of visiting one such beach complex in Rakituma/Preservation Inlet, the southernmost fiord in Fiordland National Park. Spit Beach is located on the mainland c. 3 km north of Coal Island and has a south and west aspect.

The southern-most beach here is separated from the ubiquitous coastal forest by a low bank that supports an interesting array of short-statured plants. *Gunnera monoica* forms extensive mats with clusters of pale fruits almost hidden amongst the leaves. *Lobelia angulata* is also common, with both star-shaped flowers and purple fruits in abundance. Other plants of interest include flowering leek orchid (*Prasophyllum colensoi*) and adder's tongue (*Ophioglossum coriaceum*) with its conspicuous sporophores.



Gunnera monoica is common on coastal banks. All photos: John Barkla.

A small forested headland at the north end of this beach separates it from an even larger and more impressive beach. This beach sweeps around in an arc, and is tenuously connected to the Spit Islands by a narrow, tidal sand spit. The larger of the two islands, Matauirā, was a Kati Mamoe Pā that was the scene of fierce battles with Ngai Tahu warriors in the 1700s (Beattie 1916).

The smaller island, first reached by the spit, has impressive rock spires emerging from otherwise gentle terrain. These have a sparse shrubby vegetation that includes wharariki (*Phormium cookianum* subsp. *hookeri*), inaka (*Dracophyllum longifolium*) and *Olearia oporina*.



Lyall's carrot (*Anistome lyallii*), Spit Islands.

Shoreline vegetation on the island includes knobby clubrush (*Ficinia nodosa*) interspersed with the 'At Risk – Declining' (de Lange et al. 2018) shore spurge (*Euphorbia glauca*). This, and other Fiordland populations, constitute some of the largest and most secure sites for the species. More open sandy sites have shore bindweed (*Calystegia soldanella*), and two 'At Risk – Declining' taxa, *Pimelea prostrata* subsp. *ventosa* and short-flowered cranesbill (*Geranium sessiliflorum* var. *arenarium*). Some rock outcrops support 'At Risk – Relict' Lyall's carrot (*Anistome lyallii*).

Where the spit joins the mainland, and running north on a beach called Te Oneroa, there are well developed and extensive dunes dominated by the native sand-binding pīngao or pīkao (*Ficinia spiralis*). Clumps of shore spurge are dotted amongst the pīkao (as it's more commonly known in the south)

along with the glaucous short-flowered cranesbill. Another 'At Risk-Declining' species, sand tussock (*Poa billardierei*), occurs occasionally in the fore dunes and sand hollows.



Pikao (*Ficinia spiralis*) dominate the foreground dunes of Te Oneroa, with the sand spit and Spit Islands in the mid-ground.



(Left) Shore spurge (*Euphorbia glauca*), Te Oneroa dunes. (Right) Short-flowered cranesbill (*Geranium sessiliflorum* var. *arenarium*), Spit Islands.

Summary

Intact sequences of indigenous coastal vegetation such as those present at Spit Islands and associated beaches are now rare in New Zealand. Such vegetation communities provide secure habitat for several taxa that are ranked 'At Risk' under the New Zealand threat classification system (Townsend 2008).

References

- Beattie, H 1916. Traditions and legends. Collected from the natives of Murihiku. (Southland, New Zealand). The Journal of the Polynesian Society. Vol. 25, No. 98 p 53-65
- de Lange, P.J.; Rolfe, J.R.; Barkla, J.W.; Courtney, S.P.; Champion, P.D.; Perrie, L.R.; Beadel, S.M.; Ford, K.A.; Breitwieser, I.; Schonberger, I.; Hindmarsh-Walls, R.; Heenan, P.B.; Ladley, K. 2018. Conservation status of New Zealand indigenous vascular plants, 2017. New Zealand Threat Classification Series 22. Department of Conservation, Wellington. 82 p.
- Townsend, A.J.; de Lange, P.J.; Duffy, C.A.J.; Miskelly, C.M.; Molloy, J.; Norton, D.A. 2008: New Zealand Threat Classification System manual. Department of Conservation, Wellington. 35 p

Impact of recent fires at Kaimaumau and Lake Ohia

Bill Campbell (billcampbell@extra.co.nz)

There has been a lot of doom and gloom reported in the media regarding the recent devastating fires at Kaimaumau and Lake Ohia. The way these fires have been reported strongly suggests that rare native orchids and other wetland species have been totally decimated and that they may never recover.

My own experience of a similar fire at Lake Ohia a number of years ago, and more recently of a fire at Tahanga Road (Lake Ohia Scientific Reserve) suggests that rare and threatened native orchids and other threatened native plants actually proliferate and prosper for a number of years following such fires. The additional concern that exotic weeds will replace native plants at such fire sites is also not borne out by personal observation. The anticipated invasion of weeds following a fire appears to be more conjecture than fact, particularly in wetland environments.

A fire on Inland Road, Lake Ohia, some time prior to 2011, razed the wetland vegetation over a significant area and destroyed healthy populations of *Brownseya (Lycopodiella) serpentina* (Threatened – Nationally Vulnerable). It has been suggested that this fire was deliberately lit to destroy evidence of an illegal cannabis growing operation.



Left: Fire ravaged area at Lake Ohia 24 February 2022. Right: *Brownseya (Lycopodiella) serpentina*, Lake Ohia 9 October 2019. All photos: Bill Campbell.

I walked through the fire area during the season following and also on several subsequent occasions. The last time I visited the area in October 2019 it was hard to determine where the fire had been and the natural vegetation appeared to have fully recovered, with little evidence of weed incursions. Small populations of *Utricularia australis* (Threatened – Nationally Endangered) had disappeared, with the pools they had been in populated instead by the extremely invasive *Utricularia gibba*. This species is now widespread at Lake Ohia and appears to be expanding its range at an alarming rate. There is no evidence, however, to create a link between the fire and the loss of this particular *U. australis* population.



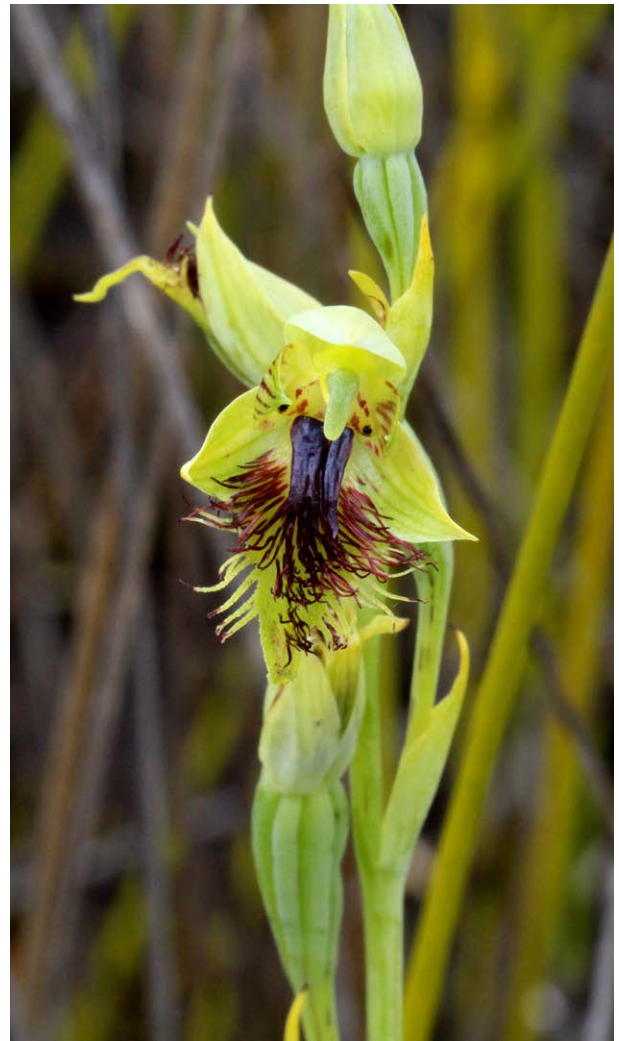
Utricularia gibba in flower, Lake Ohia 13 December 2008.

In the season following the fire, the fern ally *Phylloglossum drummondii* (Threatened – Nationally Critical) was abundant and widespread throughout the burnt area. However, I was unable to locate it during visits in subsequent years. It would appear that the fire triggered widespread germination of this species, but its presence was very short lived.

Other threatened or unusual species exposed by the fire were *Calochilus herbaceus* (Threatened – Nationally Critical), *Cryptostylis subulata* (Non-resident Native – Coloniser) and an unusual form of *Thelymitra longifolia*. Numbers of these species declined with each passing year and in 2019 I was unable to locate any plants of *Calochilus herbaceus* in the previously burnt area. The *Cryptostylis* and *Thelymitra* had also declined significantly, suggesting that the early years after a fire are best to look for threatened species or species not known to be present in an area.



Thelymitra longifolia, Lake Ohia 9 October 2019.



Calochilus herbaceus, Lake Ohia 9 November 2013.

The fire in gumland scrub at Tahanga Road about five years ago also revealed a previously unknown population of *Calochilus herbaceus*. This population appeared to be holding its own when visited in October 2021. *Acacia longifolia* (Sydney golden wattle) is prevalent in the area but doesn't appear to be having any impact on the *C. herbaceus* population and there is no evidence to suggest it has spread significantly since the fire.

Based on personal observation at these and other fire sites over the past dozen or so years, it would appear that native orchids and other light-seeking species do very well in the first few years after a fire but then decline as the native vegetation regenerates. Visiting sites in the first year or two after a fire seems therefore to be a practical way of determining the real impact of fires on threatened or uncommon native plants. It could yet prove to be that the impact of fires is more beneficial than negative and that such fires are necessary from time to time to ensure the long term survival of certain species.

Reference

de Lange, P.J.; Rolfe, J.R.; Barkla, J.W.; Courtney, S.P.; Champion, P.D.; Perrie, L.R.; Beadel, S.M.; Ford, K.A.; Breitwieser, I.; Schonberger, I.; Hindmarsh-Walls, R.; Heenan, P.B.; Ladley, K. 2018. Conservation status of New Zealand indigenous vascular plants, 2017. *New Zealand Threat Classification Series 22*. Department of Conservation, Wellington. 82 p.

OMB-Free Wellington

Astrid van Meeuwen-Dijkgraaf (avmdijk@gmail.com)

With the explosive growth of *Clematis vitalba* or old man's beard (OMB) in Wellington right now, a social media campaign has been launched by the community to improve awareness of OMB. This group aims to connect the community to progressively control Old Man's Beard across Wellington. They want to encourage and help volunteers tackle the easier stuff on public land and in their own backyards, so the Wellington City Council can tackle more of the hard-to-get OMB. Our aspirational goal is to free Wellington of Old Man's Beard!

For info on how to identify, report and control old man's beard, see our website at www.ombfree.nz.

Please like our Facebook page <https://www.facebook.com/ombfreewelly> or follow us on <https://www.instagram.com/ombfreewelly>.

Share our content with your pages. Get involved and share photos of your OMB!

UPCOMING EVENTS

If you have events or news that you would like publicised via this newsletter please email the Network (info@nzpcn.org.nz).

Please note that evolving Covid-19 Omicron responses may impact on some advertised events. Please check with the appropriate Botanical Society beforehand.

Auckland Botanical Society

Meeting: Wednesday 2 March 7.30pm (via Zoom—<https://auckland.zoom.us/j/94762278163>) AGM followed by speakers Marley Ford and Thilago Mahalingham.

Subject to confirmation.

Field Trip: Saturday 19 March to Orangihina Park and Harbour View Beach Reserve, Te Atatu. **Meet:** Parking area off end of Harbour View Road, Te Atatu at 10.00am.

Leaders: Ben Goodwin, Mike Wilcox and Beth Gibbs.

Waikato Botanical Society

Field Trip: Sunday 27 March to Mt Tarawera (Combined with Rotorua Botanical Society and Forest and Bird). **Meet:** At DOC Ashpit Road campground, Lake Rerewhakaaitu at 9.00am. **Grade:** Medium to hard.

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

Rotorua Botanical Society

Field Trip: Sunday 27 March to Mt Tarawera (Combined with Waikato Botanical Society and Forest and Bird). **Meet:** At DOC Ashpit Road campground, Lake Rerewhakaaitu at 9.00am. **Grade:** Medium to hard.

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

Wellington Botanical Society

Field Trip: Saturday 5 and Sunday 6 March to Wairarapa

Postponed.

Meeting: Monday 21 March at 7.30pm. **Speaker:** Lara Shepherd, Research Scientist, Te Papa. **Topic:** New Research into NZ flaxes (harakeke and wharariki).

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

Nelson Botanical Society

Field Trip: Sunday 20 March to a Takaka Hill property. **More details:** <https://www.nelsonbotanicalsociety.org/trips-meetings>.

Leaders: Nicola Harwood and Don Morrisey, email morrisey_harwood@value.net.nz.

Canterbury Botanical Society

Meeting: Monday 7 March at 7.30pm. **Speaker:** India McJarrow-Keller. **Topic:** Penwiper (*Notothalaspis rosulatum*).

Venue: By Zoom, with possibly a small gathering.

Field Trip: Saturday 12 March to the Stour shrublands, Mt Somers.

Botanical Society of Otago

Meeting: Wednesday 9 March at 5.20pm. **Speaker:** Matt McGlone, Manaaki Whenua Landcare Research. **Topic:** What's cooking with kanuka.

Venue: Otago Pioneer Women's Association Inc. building, 362 Moray Place, Dunedin Central.

Field Trip: Saturday 12 March to Kiakia Beach, Heyward's Point.
Meet: Botany Department carpark (464 Great King Street North) at 9.00am.

Contact: Robyn Bridges, ph. 021 235 8997.
