



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 233

September 2023

Deadline for next issue:
Friday 20 October 2023

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:

PO Box 147
Mangonui 0442
NEW ZEALAND

PLANT OF THE MONTH, p. 2



Hymenophyllum flabel-latum. Photo: Rowan Hindmarsh-Walls.

Announcing the recipient of the David Given Threatened Plant Scholarship 2023

Alex Fergus (fergusa@landcareresearch.co.nz)

The late David Given was a champion of plant conservation in Aotearoa New Zealand, as well as a formative member of the New Zealand Plant Conservation Network (NZPCN). In addition to David's taxonomic and conservation focused research, it was his passion for plants that strongly influenced many people both within and beyond our botanical world. To honour his legacy the David Given Threatened Plant Scholarship (DGTPS) was established in 2009 to fund research that assists the protection and recovery of New Zealand's threatened plant species and their communities.

The DGTPS committee was very pleased with the quality of the 2023 applications. The projects spanned a variety of taxa and research methods, and the panel assessing the applications thanks and commends all applicants for their efforts. We are very pleased to announce that Samiksha Patel is the successful recipient of the 2023 scholarship with her project *A conservation genomic study of threatened limestone populations of Senecio matatini (Asteraceae)*. Samiksha is a Masters student at the University of Canterbury and her project is supervised by Pieter Pelsler (University of Canterbury), alongside Peter Heenan and Rob Smissen of Manaaki Whenua – Landcare Research.

Samiksha's project was naturally of interest to the committee given the high number of threatened tag name taxa in the complex, and the conservation applications of having a better taxonomic resolution of this complex. The committee could also see value in using funds like the DGTPS to leverage or bolster existing funding as is the case with Samiksha's research. *Trilepidea* readers can look forward to an overview of Samiksha's research goals and methods in the next issue of *Trilepidea*.

My thanks also to other members of the DGTPS 2023 panel—John Barkla, Rowan Hindmarsh-Walls and Shannel Courtney—for volunteering their time and being so passionate about threatened plant research in New Zealand.

Notice of NZPCN 2023 AGM

Alex Fergus (fergusa@landcareresearch.co.nz)

The NZPCN 2023 Annual General Meeting (AGM) will be held online on Thursday 19th October at 6.30pm, either via Microsoft Teams or Zoom. Following on from the business, and in celebration of our twentieth anniversary, our very own Jesse Bythell will lead us on a floristic musing of the past two decades of the Network's achievements.

Hopefully all members have received an email or seen the news item prompting folks to register to attend the AGM. Thanks to those of you who have registered already, as this permits us to ensure we will meet quorum requirements.

Please contact the NZPCN Secretary Alex Fergus, fergusa@landcareresearch.co.nz to register. A confirmation email and meeting link will be sent in advance of the meeting.

PLANT OF THE MONTH – *HYMENOPHYLLUM FLABELLATUM*

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

The plant of the month for September is *Hymenophyllum flabellatum*, one of twenty-five native species of *Hymenophyllum* found in the New Zealand region. The species is very widespread and is found from the Kermadec Islands in the north, south down the country to the Auckland and Antipodes Islands, and west to the Chatham Islands. It is also found down the eastern side of Australia and through some of the Pacific Islands. The fern is almost strictly a forest species, often found as an epiphyte on tree trunks, but also on shaded and sheltered cliffs, overhangs and banks.

The fern is a rhizomatous creeping species, sometimes forming large, dense patches on the shaded side of tree trunks or rocks. The rhizomes are thin and wiry with villous hairs, allowing them to cling strongly to various substrates. The fronds arise individually from the rhizomes and have wiry stipes (leaf stems) that have a scattering of pale white or yellow hairs covering them. The lamina (leafy part) is generally pale yellow-green, with the pinnae (fern leaflets) being smooth edged and arranged in such a way that they look to be layered up the main stem (rachis) like the rings of branches on a Christmas tree. These pinnae (fern leaflets) are further divided once or twice into small leaflet like divisions. The sori (tiny spore holding structures) are positioned at the end of the pinnae, are smooth, and are ovoid to rotund in shape.



Hymenophyllum flabellatum, Waitutu, Fiordland, 19 October 2013: (far left) upper surface of frond with developing sori at the tips; (left) lower surface of frond and hairy stipe. Photos: Rowan Hindmarsh-Walls.

Hymenophyllum flabellatum is most similar in appearance to *H. rufescens*, which also has smooth edged pinnae and noticeably hairy stipes, and lives in the same kind of habitat as *H. flabellatum*. *H. rufescens* is generally a smaller plant and differs by having a scattering of reddish hairs over the leafy parts of the frond as well as the stipe and rachis. The two species are sometimes found growing together in montane forest, especially in Westland, but overall *H. flabellatum* is a far more common and widespread species.

In New Zealand *Hymenophyllum flabellatum* has a threat status of 'Not Threatened', as it is still widespread and common in many damp forested areas of the country.

The genus *Hymenophyllum*, 'filmy ferns' is large, with around 400 species worldwide that are scattered all over the damper parts of the globe. The New Zealand native species are mostly damp forest dwellers, due to their proneness to desiccation. All *Hymenophyllum* species are prone to desiccating in non-humid conditions due to the fact that their fronds are only one cell thick, and so lose water easily.

The genus name *Hymenophyllum* or "membranous plant" is derived from the Greek *hymen*, membrane, and *phyllon*, leaf. The species epithet means "fan-shaped" and is derived from the Latin *flabellum*, fan. It refers to the fan shape of the pinnae on the fronds.

You can view the NZPCN website factsheet for *Hymenophyllum flabellatum* at:

<https://www.nzpcn.org.nz/flora/species/hymenophyllum-flabellatum/>

No loss of genetic diversity evident in severely bottlenecked *Veronica armstrongii* population

Debra Wotton^{1,2}, Ben Gibbons², Pieter Pelter² and Dave Kelly²

The Nationally Endangered shrub *Veronica armstrongii* (Armstrong's whipcord hebe) is known from only two extant populations in Canterbury, one of which has undergone a severe reduction in size (also known as a population bottleneck). Like many threatened species, *V. armstrongii* may face long-term challenges due to loss of genetic diversity and inbreeding depression. These genetic challenges are common in small and isolated populations, and can reduce resilience against environmental changes such as global warming. Nevertheless, our recently completed research shows that, surprisingly, genetic diversity was as high in the bottlenecked population as in the large population, and we found no evidence of inbreeding in either population.

Veronica armstrongii was first described from the upper Rangitata catchment, where it is now presumed extinct. The largest remaining *V. armstrongii* population is at Mt White Station (in the Pūkio Valley), and numbered more than 1,700 adult plants in 2001 (Hustedt 2002). The second extant population, at Enys Scientific Reserve, had only six plants in 1974 (Molloy 1990), but has since increased to 83 adult plants and 279 juveniles, following nursery-raised restoration plantings using seed collected from the reserve (Nelson et al. 2018).



Strongly leached terraces with bog pine (*Halocarpus bidwillii*) vegetation at Mt White Station, home to the only remaining large population of *Veronica armstrongii*. Photo: Pieter Pelter.

We collected leaf samples from the two wild populations and cultivated plants, and used genomic analyses to assess how genetically distinct the two extant populations are. We also compared the genetic diversity of the severely bottlenecked Enys Reserve population with the large Mt White population, and investigated whether cultivated plants (potentially descended from Rangitata populations that are now extinct) contain genetic material that is no longer found in the wild.

¹ Moa's Ark Research

² School of Biological Sciences, University of Canterbury



Ben Gibbons and Dave Kelly collecting *Veronica armstrongii* leaf samples for genetic research at Mt White Station, Canterbury. Photo: Jane Gosden.

Despite recently undergoing a severe population size bottleneck, the genetic diversity of the Enys Reserve population is similar to the Mt White population. This result was entirely unexpected. We found no evidence of inbreeding in either population. Our research shows that the Enys Reserve and Mt White populations are genetically distinct, and are currently most likely reproductively isolated from each other. Enys Reserve is about 40 km southwest of the nearest plants at Mt White, so north-west gales cannot blow either seeds or insects carrying pollen from one population to another. There is some evidence of historical gene flow from the Enys Reserve population to the population at Mt White, but we found no sign of recent gene flow between the two.

At Enys Reserve, we found two groups of plants that are genetically distinct from each other. This was unexpected, because all plants in this population are the offspring of only six plants, grow in close proximity to each other, and our studies revealed no sign of gene flow from the Mt White population. These may represent different chromosomal races, but this remains to be verified.

At Mt White, we found two genetically distinct sub-populations that are geographically isolated from each other. The sub-population at Hebe Island is about 5 km from the nearest plants of the second sub-population, and the two sub-populations have had only limited gene flow between them. This suggests that *V. armstrongii* currently does not commonly disperse over distances that are larger than a few kilometres.

We were able to test nine cultivated *V. armstrongii* plants from a range of nurseries and gardens, but none of these had genetic diversity that was absent in the wild populations.



A native fly covered in pollen visiting *Veronica armstrongii* flowers at Enys Scientific Reserve, Canterbury. Genetic material can potentially move between populations via seeds or pollen, but we found no sign of recent gene flow between Enys Reserve and Mt White. Photo: Debra Wotton.



The field team collecting samples for genetic research on Hebe Island, home to one of the two subpopulations of *Veronica armstrongii* at Mt White Station. Photo: Pieter Pelsler.

Based on our findings, the Enys Reserve and Mt White populations should be treated as separate conservation management units. The genetic diversity of the two Mt White sub-populations and the two groups at Enys Reserve should also be maintained. Further research is needed on the genetic structuring found within the Enys population, and may help explain why a population that was reduced to only six plants still has a similar amount of genetic diversity as a population that did not undergo a bottleneck. The cultivated *V. armstrongii* plants included in our study should not be relied on as a source of additional genetic diversity when planning conservation management.

Our findings are good news for the conservation of *V. armstrongii*, suggesting that loss of genetic variation in the bottlenecked Enys Reserve population is not currently a concern. However, the health and population trends of plants at Mt White are less rosy—we will report those findings in a future article.

Acknowledgements

Genetic analyses were carried out as part of Ben Gibbons MSc thesis, supervised by Pieter Pelsler, Dave Kelly, and Debra Wotton. Research was funded by Brian Mason Scientific and Technical Trust, NZ Plant Conservation Network (David Given Threatened Plant Scholarship), and Wellington Botanical Society (Jubilee Award). We thank Mt White Station and Department of Conservation for permission to collect samples from wild populations, and Otari Native Botanic Garden (Eleanor Burton), Christchurch Botanic Gardens (Luke Martin), Edinburgh Botanical Gardens, and Matai Nursery for providing samples of cultivated plants. Jane Gosden assisted with field work at Mt White Station.

References

- Hustedt S. 2002. The ecology and conservation of a threatened shrub: *Hebe armstrongii* (Scrophulariaceae), Canterbury, New Zealand. MSc thesis, School of Forestry, University of Canterbury.
- Molloy B. P. J. 1990. Enrichment of rare plants, Enys and Castle Hill reserves. DSIR, Lincoln. Pp. 87
- Nelson N. J., Briskie J. V., Constantine R., Monks J., Wallis G. P., Watts C., and Wotton D. M. 2018. The winners: species that have benefited from 30 years of conservation action. *Journal of the Royal Society of New Zealand*: 1–20.

Preliminary notice of the 2024 NZPCN Conference

The 2024 NZPCN Conference will be held at Forum North in Whangarei from Sunday 6 October to Wednesday 9 October 2024. The Sunday will consist of various workshops, with a drinks and nibbles welcome function in the evening. Monday and Tuesday will consist of conference sessions, with a buffet dinner and auction on Tuesday evening. There will be a range of field trips on the final day, Wednesday, with at least one half day option available for those who have to leave early.

Mark your calendars/diaries now for this not to be missed event. More details will follow in subsequent issues of *Trilepidea*.

An online guide to planting natives in Otago

Richard Ewans (rewans@doc.govt.nz)

What should I plant? What do you mean Chatham Island akeake and pohutukawa aren't native to Otago? Advising on native revegetation species lists and public queries is a regular task when working as a botanist in central and local government. There are some resources available to assist, but they are not always accessible or up to date, and often people don't have a one stop shop for advice. This contributes to the same 10 or so common species getting planted everywhere, which can include non-local natives (some of which are weedy, I'm looking at you *Coprosma autumnalis* on Rakiura!).

Otago Regional Council (ORC) has recently released an online guide for people interested in planting natives to help the public to be better informed about planting the right things in the right place.

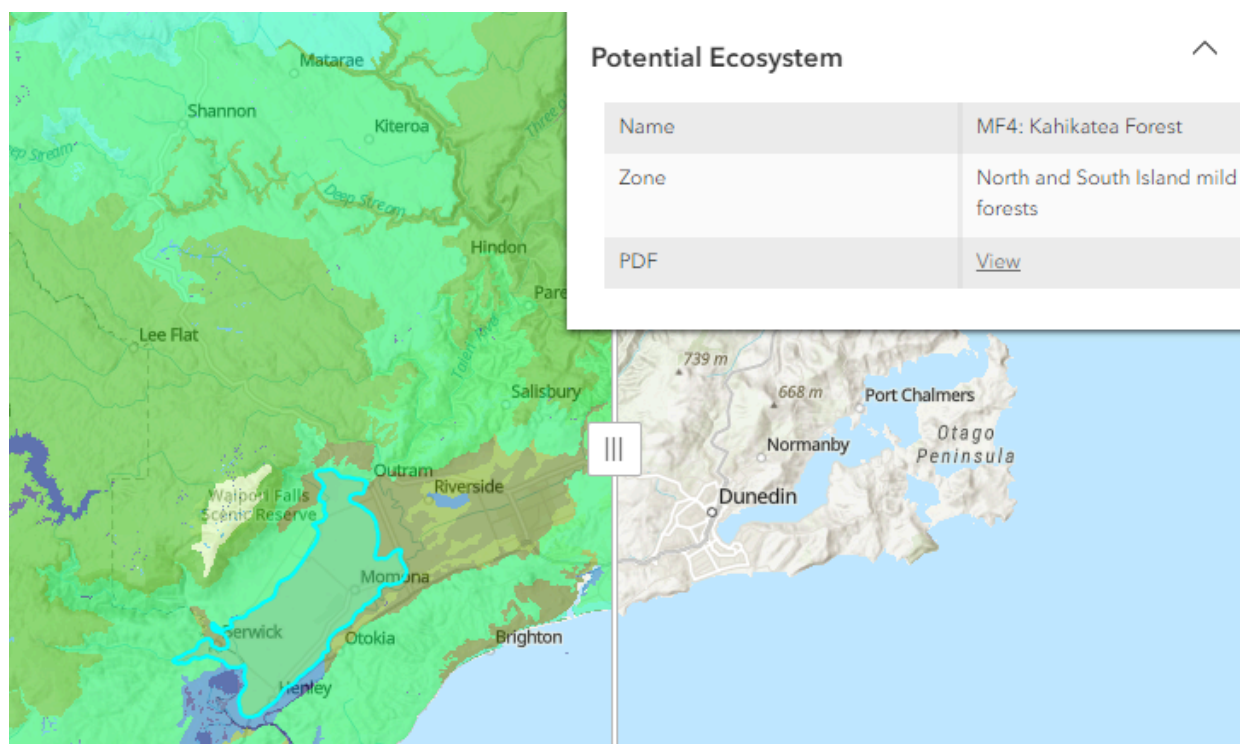
The [Otago Native Planting Guide](#) is an online resource to help with species choice. The guide has downloadable species lists matched to mapped potential ecosystems for the Otago ecosystems and native vegetation types most likely to be the subject of restoration efforts – forest, wetlands, and coastal ecosystems. It also has species lists for riparian sites and central Otago shrublands.

Key features include an address look up option, a slider map where you can turn on and off the potential ecosystem layers, species lists that include some Threatened and At Risk plants, and links to many other helpful resources, including other local native planting guides.

The potential ecosystem mapping and associated species lists were completed by external consultants with in-depth knowledge of Otago ecosystems. Their reports are available in the guide for those with an interest in the methodology. Inevitably, not everyone will agree with the lists or potential ecosystem approach but the guide represents a positive step for more ecologically appropriate and diverse native planting.

Public feedback so far has been largely very positive. We encourage readers to have a look and advocate for something similar in their regions if there are similar issues around native revegetation. The exercise is straightforward for those regional councils where potential ecosystem mapping has been done already.

A big thanks to the ORC GIS team who put this together when I was employed at ORC, and to Kelvin Lloyd for leading the work underpinning the guide. Questions or comments about the guide can be directed to Anna Molloy (anna.molloy@orc.govt.nz).



NZPCN website taxonomy update

Alex Fergus, Marley Ford, Peter de Lange

The NZPCN has a small subcommittee (the above authors) to approve any taxonomic changes proposed by the subcommittee or the wider NZPCN committee. Below is a summary of changes that have been accepted in the period between the last issue of *Trilepidea* being published and the current one. This purpose of this monthly update is to foster transparency and flag taxonomic changes that have been actioned on our website.

Old name: *Helichrysum selago* var. *acutum*

New name: *Helichrysum simpsonii* var. *acutum*

Reason: Replacement name, as was pointed out in the June version of this article, the name *Helichrysum intermedium* is illegitimate for the New Zealand taxon, as the name had already been applied to another taxon occurring around the Cape of Good Hope, Africa. While this resolved the species rank name, it still left *Helichrysum selago* var. *acutum*, a widely accepted intraspecific taxon, without a valid name in *H. simpsonii*. *Helichrysum simpsonii* var. *acutum* is provided as a new valid combination for *Helichrysum selago* var. *acutum*.

Old name: *Helichrysum selago* var. *tumidum*

New name: *Helichrysum simpsonii* subsp. *tumidum*

Reason: Replacement name, as was pointed out in the June version of this article, the name *Helichrysum intermedium* is illegitimate for the New Zealand taxon, as the name had already been applied to another taxon occurring around the Cape of Good Hope, Africa. While this resolved the species rank name, it still left *Helichrysum selago* var. *tumidum*, a widely accepted intraspecific taxon, without a valid name in *H. simpsonii*. *Helichrysum simpsonii* subsp. *tumidum* is provided as a new valid combination for *Helichrysum selago* var. *tumidum*.

Reference

de Lange P.J., Blanchon D.J. 2023. New combinations in *Helichrysum simpsonii* Kottaim. for the taxa described as *H. selago* var. *acutum* Cheeseman and *H. selago* var. *tumidum* Cheeseman (Asteraceae) from Aotearoa / New Zealand. Ukrainian Botanical Journal, 80 (4): 301–305. <https://doi.org/10.15407/ukrbotj80.04.301>

NZ Native Orchid Group new website launch

The NZ Native Orchid Group (NZNOG) is pleased to announce the launch of its new website on Monday 25 September. The new website can be accessed via the following link <https://www.nativeorchids.co.nz> or by searching “native orchids”. If the old website loads up you’ll need to click the refresh button on your device to clear the cached version.

You are encouraged to take the time to check it out and to have a good browse. Your feedback (positive and critical) to the President gaeldonaghy@gmail.com and/or the Webmaster billcampbell@xtra.co.nz regarding the new site will be very much appreciated.

It is noted that this website is still a work in progress and the NZNOG is aware of certain aspects of it still requiring some attention, particularly in the journals section. Known issues will continue to be addressed as time and resources allow. Right now, enjoy!

Otago botanical hotspot—Sandymount Recreation Reserve

John Barkla (mjbarkla@xtra.co.nz)

About 10% of the Otago Peninsula is protected for conservation purposes and one of the larger protected areas is the 192 ha Sandymount Recreation Reserve. Situated on the rugged southern coast, it adjoins the Sandfly Bay Conservation Area (176 ha) immediately to the west.

The coastal margins of Sandymount Reserve comprise dramatic steep basalt cliffs and include the well-known collapsed sea chasms of ‘Lovers’ Leap’ and ‘The Chasm’. Hillslopes above culminate in one of Otago Peninsula’s highest points, Sandymount/Pikiwhara, 319 m above sea level.

As is true elsewhere on the Otago Peninsula, a significant number of rare and special plant species occur on cliffs and coastal banks (Peat & Patrick 2014), where their inaccessibility to grazers and browsers affords some degree of protection (Fig. 1). Such sites support coastal forest, shrublands, short tussockland, and herbfields. More accessible and gentle terrain is grazed by sheep under a DOC concession and comprises exotic grassland and silver tussock dominated tussockland.



Figure 1: Many rare and special plants occur on steep coastal hillslopes. Photos: John Barkla.

One particularly inaccessible site is occupied by a small population of thick-leaved scurvy grass (*Lepidium crassum*). This is one of four extant sites for this nationally endangered species on the Otago Peninsula and associated islets. Another species occupying precarious sites is the small and nationally vulnerable buttercup *Ranunculus recens* (Fig. 2). It occupies two sites on exposed slopes of dry, gritty basaltic soil, a somewhat atypical habitat for this species.

Two endemic Otago Peninsula shrub taxa are found only at Sandymount and Cape Saunders to the north-east. The Cape Saunders rock daisy, for which the new combination *Helichrysum simpsonii* subsp. *tumidum* was recently made (de Lange & Blanchon 2023) drapes itself over cliffs and rock



Figure 2: *Ranunculus recens*.

outcrops, producing pale yellow flowers in summer (Fig. 3). This nationally vulnerable taxon is much stouter than its inland relatives. The second shrub is a genetically distinct *Melicytus* (*M. aff. obovatus* “Cape Saunders”) with dioecious flowers that have a purplish tinge. Due to its relatively recent discovery and recognition, this taxon is un-ranked in the NZ threat classification system (Townsend 2008). It forms stiff, tightly interlaced mounds up to 4 m across, often as part of coastal shrubland.



Figure 3: Cape Saunders rock daisy, Harakeke Point, Sandymount Reserve.

Two native forget-me-nots are notable. The large southern forget-me-not *Myosotis rakiura* was recently found on steep slopes here (Barkla 2021) at what was then thought to be its most northern extent. Early this year however, it was found at Cape Saunders, slightly further north. Its tiny relative, *Myosotis antarctica* subsp. *traillii*, is found at several locations in herbfields at the base of basalt outcrops and coastal banks (Fig. 4). It shares these sites with *Plantago raoulii*, *Colobanthus muelleri*, *Epilobium komovarianum* and *Acaena microphylla* var. *pauciglochidiata*.

Of the vascular flora present in the reserve, 23 taxa have been assessed as ‘Threatened’ or ‘At Risk’ (Townsend et al. 2008), representing c. 37% of the plant taxa in those categories on the Otago Peninsula (Johnson et al. 2019). They are listed, with their most recent threat status (de Lange et al. 2018) in Table 1.

Sandymount Recreation Reserve can be accessed by turning off Highcliff Road (along the spine of the Peninsula) onto Sandymount Road. The track begins at the end of the road, initially through a ‘tunnel’ of historic macrocarpa trees. A prominent viewpoint has stunning views to the northeast over Allans Beach, Hoopers Inlet, Poatiri/Mt Charles and inland to Hereweka/Harbour Cone. Continuing on a marked coastal circuit takes about an hour, with an option to access Sandymount summit. There are plenty of opportunities to explore beyond the marked routes too but caution is required around steep slopes and cliffs. The reserve is closed for lambing from 1 September to 15 October.



Figure 4: *Myosotis antarctica* subsp. *traillii*.

The reserve is closed for lambing from 1 September to 15 October.

Table 1. ‘Threatened’, and ‘At Risk’ taxa recorded from Sandymount Recreation Reserve.

Threat Division	Taxon	Conservation Status (de Lange et al. 2018)
Threatened	<i>Atriplex buchananii</i>	Nationally Vulnerable
	<i>Helichrysum simpsonii</i> subsp. <i>tumidum</i>	Nationally Vulnerable (as <i>Helichrysum</i> aff. <i>intermedium</i> (c) (<i>Helichrysum selago</i> var. <i>tumidum</i> Cheeseman; WELT SP058412)
	<i>Kunzea robusta</i>	Nationally Vulnerable
	<i>Lepidium crassum</i>	Nationally Endangered
	<i>Ranunculus recens</i>	Nationally Vulnerable
At Risk	<i>Acaena microphylla</i> var. <i>pauciglochidiata</i>	Naturally Uncommon
	<i>Carmichaelia petriei</i>	Declining
	<i>Chaerophyllum</i> (a) (CHR 364086; “minute flower”)	Naturally Uncommon
	<i>Chenopodium allanii</i>	Naturally Uncommon
	<i>Coprosma acerosa</i>	Declining
	<i>Coprosma virescens</i>	Declining
	<i>Drymoanthus flavus</i>	Declining
	<i>Ficinia spiralis</i>	Declining
	<i>Geranium sessiliflorum</i> var. <i>arenarium</i>	Declining
	<i>Linum monogynum</i> var. <i>monogynum</i>	Declining
	<i>Myosotis antarctica</i> subsp. <i>traillii</i>	Declining (as <i>M. pygmaea</i>)
	<i>Myosotis rakiura</i>	Naturally Uncommon
	<i>Olearia fragrantissima</i>	Declining
	<i>Pseudopanax ferox</i>	Naturally Uncommon
	<i>Pterostylis tristis</i>	Declining
	<i>Raoulia australis</i>	Declining
	<i>Senecio biserratus</i>	Declining
<i>Senecio matatini</i> subsp. <i>basinudus</i>	Naturally Uncommon	

References

- Barkla, J 2021. The rediscovery of *Myosotis rakiura* on the Otago Peninsula. *Trilepidea* 206. Newsletter of the New Zealand Plant Conservation Network
- de Lange P.J., Blanchon D.J. 2023. New combinations in *Helichrysum simpsonii* Kottaim. for the taxa described as *H. selago* var. *acutum* Cheeseman and *H. selago* var. *tumidum* Cheeseman (Asteraceae) from Aotearoa / New Zealand. *Ukrainian Botanical Journal*, 80(4): 301–305. <https://doi.org/10.15407/ukrbotj80.04.301>
- 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.
- Johnson P; Barkla J; Lyttle D. 2019. Otago Peninsula Plants. A revised, annotated list of vascular plants growing in wild places. Save The Otago Peninsula (STOP) Inc.
- Peat, N & Patrick B 2014. Wild Dunedin. The natural history of New Zealand's wildlife capital. Rachel Scott Publisher.
- 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. 35p.

Wilding Pines Conference 2023

18–20 October 2023, Memorial Hall, Queenstown

Wildings in the Backyard



Timetable of events:

- **Day One** – Conference plus optional WCG Reporting to the Community evening (numbers limited)
- **Day Two** – Field Trips plus Mix n Mingle Canapé Evening
- **Day Three** – Conference

To register or to find out more click here <https://wildingpinenetwork.org.nz/wilding-pines-conference-2023/>

36th John Child's Bryophyte and Lichen Workshop—Arthurs Pass

Friday evening 24 November to Wednesday morning 29 November 2023

Organiser: David Glenny glennyd@landcareresearch.co.nz

Where: The venue is the Cass Field Station that belongs to the University of Canterbury. Field trips will be to Arthur's Pass, Otira, Cave Stream and Craigieburn Range.

When: Friday evening 24 November to Wednesday morning 29th November 2023

Friday afternoon is arrival and setting up, the workshop starting that evening. Another group will be leaving by midday on Friday. Packing up will begin Tuesday night 28 November with departure by 10 am Tuesday 29 November.

Who: The workshop is open to anyone interested in bryophytes and lichens from novice amateurs to professional botanists. The aim is to gain and share knowledge of, and to encourage an interest in, the mosses, liverworts, hornworts, and lichens of New Zealand. Regular attendees are friendly and willing to help beginners. Microscopes will be available to share.

Accommodation: The Cass field station is a big place with two storeys and bunkrooms taking about 6 or 8 people in each, total capacity at least 45 people. There is no bedding or towel hire available so you will need to bring a sleeping bag, pillow, and towel.

There is plenty of space in the field station for tables and chairs, both for dining and microscope work. The only disadvantage of the field station is it is quite a noisy building and sound carries between the rooms. We don't have exclusive use of the field station, it is likely there will be students using the smaller buildings nearby.

The nearest alternative accommodation is at Bealey Hotel and Arthur's Pass should you not want to stay at the field station.

Meals: We will make our own breakfasts and lunches with food I will bring from Christchurch. I have not arranged a caterer yet. If you have a good suggestion in that regard please let me know. It's a long way for a caterer to come from Christchurch each day and it would be more practical to pay say a student to stay at the field station to do cooking.

Clothing and footwear: Be prepared for all weather conditions. The usual list of field gear also applies—warm clothing, waterproof clothing, day pack, lunchbox, water bottle, etc. River crossings are all bridged.

Getting there: There is an airport in Christchurch. Intercity buses stop at the bus terminal in the centre of Christchurch. I will pick up anyone arriving by bus or plane. The usual car rental companies have pick-ups available at the airport.

Those coming from within New Zealand may organize car pooling arrangements. In the second circular I will ask who would like to provide and take transport from Christchurch to Cass and from further afield.

Field Trip Options: Arthur's Pass is 35 km from Cass. Arthur's Pass tracks: Bridal Veil Falls walk, Bealey Chasm walk, Otira Valley walk, Avalanche Peak track, Temple Basin and Paratu Stream near Otira. Cave Stream Scenic Reserve for limestone. Craigieburn Range alpine zone via skifield roads. The area is one of the best collected parts of New Zealand so the purpose of the workshop is to teach beginners and a chance to socialise with others with similar interests, not to increase the number of herbarium collections. However, there will be a workshop collecting permit.

Costs: The University charges \$31 per person night. Breakfast and lunch \$10–\$15/day. Dinner maybe \$25 per day. For those riding in other vehicles, a mileage charge will apply, and for those who bring their own car and offer transport to others while at the workshop, a subsidy will be offered. The workshop will cost about \$350 plus mileage charges.

Tom Moss Award: Students who give a 15 minute talk at the workshop are eligible for this award which amounts to \$500 for the best speaker.

Estimate of likely numbers

To help with planning, please select one or more from the list of options below

Send your email response to: glennyd@landcareresearch.co.nz

1. Yes I'll definitely be coming
2. I am hoping to come but can't be sure at present
3. No, I'm sorry I can't come this year, but keep me on the mailing list for future years.
4. I will be staying at the field station.
5. I would prefer to find my own accommodation.
6. I will/not be bringing a vehicle. If you are, please indicate whether or not you can offer transport on field trips.
7. I will be bringing my own microscope(s) please indicate whether dissecting or compound.
8. Please take my name off your mailing list.

A second circular will be sent out next month to those who have expressed interest.

UPCOMING EVENTS

If you have events or news that you would like publicised via this newsletter please email the Network (info@nzpcn.org.nz), prior to the published copy deadline, with details of meetings, field trips or other events taking place during the following month or later. The deadline for copy for the following month's *Trilepidea* is at the top of the front page of each issue.

If you intend to participate in one of the advertised botanical society meetings or field trips please check with the relevant society beforehand to confirm that the published details still stand.

Auckland Botanical Society

Meeting: Wednesday 3 October at 7.30pm. **Speaker:** Peter J. de Lange. **Topic:** Chatham Islands flora.

Venue: Unitec, School of Natural Sciences, 139 Carrington Road, Mt. Albert (Gate 4, Building 115, Room 1028).

Field Trip: Saturday 21 October orchid trip to Conical Hill.

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

Waikato Botanical Society

Field Trip: Saturday/Sunday 28–29 October to Marokopa for weekend trip.

Leader: Kerry Jones, email km8j1s@gmail.com, ph. 027 747 0733.

Rotorua Botanical Society

Field Trip: Saturday/Sunday 7–8 October to Motu River mouth and upstream. **Meet:** At Motu Bridge around 9.00am Saturday (to be confirmed). **Grade:** Easy-medium/hard.

Contact: Paul Cashmore, email pcashmore@doc.govt.nz, ph. 027 205 1922. **Leader:** Clarke Koopu, email ckoopu@icloud.com, ph. 027 232 9960.

Field Trip: Saturday 14 October to Okareka Mistletoe Restoration Project weed control/plant releasing work day. **Meet:** Corner of Summit and Loop Roads, Okareka (lake end) at 8.45am. **Grade:** Medium-hard.

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

Wellington Botanical Society

Field Trip: Saturday 7 October to Remutaka Hill. **Meet:** Remutaka Hill summit carpark at 10.00 am.

Co-Leaders: Eleanor Burton, email esmereldadoris93@gmail.com and Frances Forsyth, email francesmj-forsyth@gmail.com.

Meeting: Monday 16 October at 7.30pm. **Topic:** Student presentations from Stacey Pekelaar, Paul Bell-Butler and Riccardo Ciarle.

Venue: Victoria University, Wellington, Lecture Theatre M101.

Nelson Botanical Society

Field Trip/Meeting: Please refer to the website: <https://www.nelsonbotanicalsociety.org/trips-meetings>.

Canterbury Botanical Society

Meeting: Monday 2 October at 7.30pm. **Speakers:** Greg Stanley, Miles Giller, Edith Smith and Nick Head. **Topic:** Lowland kanuka regeneration trials.

Venue: St Albans Community Centre, 1049 Colombo Street, Christchurch.

Field Trip: Saturday 7 October to Harris Reserve, Ashburton district.

Email: fieldtrips@canterburybotanicalsociety.org.nz if you intend to participate.

Botanical Society of Otago

Meeting: Wednesday 11 October at 5.200pm. **Speaker:** Marley Ford, private consultant. **Topic:** New Zealand's amazing diversity of Lichens—ways to enrichment!

Venue: Main seminar room, Manaaki Whenua Landcare Research, 764 Cumberland Street, Dunedin.

Field Trip: Saturday/Sunday 14–15 October to Knights Bush.

Contact: Allison Knight, email allison.knight.nz@gmail.com. Bookings by 10 October please.
