



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 254

August 2025

Deadline for next issue:
Friday 19 September 2025

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:
73 Stratford Drive
Cable Bay 0420
NEW ZEALAND

PLANT OF THE MONTH, p. 3



Corybas rivularis. Photo: Bill Campbell.

The sea bean *Canavalia sericea*: A new Vagrant for New Zealand

Marley Ford (mfecobotany@gmail.com) and Kevin Matthews (kble@xtra.co.nz)

On 21 May 2024, a young plant of the silky Jackbean, *Canavalia sericea* A.Gray, was found on Te Oneroa-a-Tōhē/Ninety Mile Beach in Northland by the second author. This represents the first record of *C. sericea* in New Zealand and fits the New Zealand Threat Classification System criteria for a vagrant species (Rolfe et al., 2022).

The silky Jackbean was located above the high-tide mark, nestled against the dunes alongside *Ipomoea pes-caprae* subsp. *brasiliensis* (L.) Ooststr. and *Ipomoea cairica* (L.) Sweet (Figure 1). Nearby were seedlings of *Sabdariffa diversifolia* (Jacq.) McLay & R.L.Barrett and the first noted incursions of sea spurge (*Euphorbia paralias* L.) in Northland. The plant appears to have arrived naturally, likely germinating from flotsam, as it was growing among pacific pumice, *Spirula spirula* shells, and ocean plastic (<https://inaturalist.nz/observations/222748482>). It was removed with the intention to grow it on, but unfortunately, the plant did not survive—making *Canavalia sericea* a New Zealand vagrant.



Figure 1. A plant of *Canavalia sericea* above high tide in flotsam.

The native range of *Canavalia sericea* spans from Queensland through the West and South Pacific (Royal Botanic Gardens, Kew, n.d.). It is a trailing, woody vine with red, pea-like flowers, characteristic of the Fabaceae family. Seeds in the genus are known to remain impermeable to water for at least 1.5 years (Gunn & Dennis, 1999). Another

member of the genus, *Canavalia rosea* DC., is present New Zealand's territory on the Kermadec Islands, where it grows on boulder beaches and sand dunes (New Zealand Plant Conservation Network, n.d.). *Canavalia rosea* is a common strandline plant across Pacific Islands and differs from *C. sericea* by its lack of silky, silvery hairs on the leaves and its pink rather than red flowers.

Other drift seeds observed at the Ninety Mile Beach site included the fish poison tree (*Barringtonia asiatica* (L.) Kurz), coconut palm (*Cocos nucifera* L.), matchbox bean (*Entada phaseoloides* (L.) Merr), and coastal kōwhai (*Sophora chathamica* Cockayne). The arrival of tropical fruits and seeds in temperate regions such as New Zealand is rare and typically associated with unusual ocean currents or storm events. This particular occurrence coincided with the El Niño phase that began in late 2023. The associated westerly winds and ocean currents from tropical regions brought increased quantities of sea beans, fish poison tree seeds, and coconuts to shore as flotsam over the summer months.

This group of sea-drift associates failed to establish at Ninety Mile Beach. However, at other locations such as Twilight Beach at Te Pahi, the coastal vine *Ipomoea pes-caprae* subsp. *brasiliensis* is forming dense patches in the dunes, successfully seeding and persisting. The arrival of new sand-binding species like this may contribute to future dune stability, particularly as native species such as spinifex (*Spinifex sericeus*) and pīngao (*Ficinia spiralis*) continue to decline.

The discovery of *C. sericea* adds to the small but growing list of tropical drift seeds occasionally recorded in Aotearoa New Zealand, offering intriguing insights into oceanic seed dispersal pathways. While such species have not established here in the past due to climatic constraints, climate change may increase the likelihood of naturalisation in the future—raising the potential risk of new invasive species establishing in New Zealand's coastal environment.

References

- Gunn, C. R., & Dennis, J. V. (1999). *World guide to tropical drift seeds and fruits* (reprint). Krieger Publishing Company.
- New Zealand Plant Conservation Network. (n.d.). *Canavalia rosea*. Retrieved July 11, 2025, from <https://www.nzpcn.org.nz/flora/species/canavalia-rosea/>
- Rolfe, J., Hitchmough, R., Michel, P., Makan, T., Cooper, J. A., de Lange, P. J., ... & Molloy, J. (2022). New Zealand threat classification system manual 2022. Part, 1. Department of Conservation, Wellington. 45 p. <https://www.doc.govt.nz/globalassets/documents/science-and-technical/new-zealand-threat-classification-system-manual-2022-part-1-assessments.pdf>
- Royal Botanic Gardens, Kew. (n.d.). *Canavalia rosea* (Sw.) DC. Plants of the World Online. Retrieved July 11, 2025, from <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:60453823-2>

Conservation status of mosses in Aotearoa New Zealand, 2025

Pascale Michel, Department of Conservation

The data supporting the 2025 NZTCS assessment of mosses has been published on the NZTCS database at <https://nztcs.org.nz/reports/1155>. A report is being prepared that analyses and discusses the assessments and will be published by the Department of Conservation in the *New Zealand Threat Classification Series*.

This is the first complete assessment of all known species of mosses found in the wild in Aotearoa New Zealand with a total of 560 species being assessed. The conservation status of mosses, published today in the NZTCS database, replaces all previous assessments of mosses.

Summary of moss assessments

No of taxa per NZTCS category		Status changes	
Data Deficient	36	Improved	1
Threatened	36	Worsened	18
At Risk	156	Neutral (into or out of Data Deficient)	20
Not Threatened	285	No change	67
Non-resident Native	5	Assessed for the first time	454
Introduced and Naturalised	42		

PLANT OF THE MONTH – *CORYBAS RIVULARIS*



Bill Campbell (billcampbell@xtra.co.nz)

The plant of the month for August 2025 is *Corybas rivularis*, one of Aotearoa New Zealand's many spider orchids. Its distribution is still not fully understood, as there are several well-known but yet to be formally described entities aggregated with the described species. It is known to be present in Northland at several locations, with Kaeo being the type locality. This species may also be present in Taranaki and elsewhere, but further work is needed to establish whether populations outside of Northland are indeed *Corybas rivularis* s.s. The species is an Aotearoa New Zealand endemic, although the genus is not.



Corybas rivularis flowering at Otangaroa, 5 November 2011.

Corybas rivularis is generally found growing within a couple of metres of the water on the banks of streams flowing through native forest, although plants are occasionally observed some distance from the water's edge or on boulders within a stream. Where large populations occur, the distinctive roundish leaves can blanket riverbanks for many metres. These round leaves immediately distinguish this species from the spider orchids in the *Corybas trilobus* aggregate, which all have trilobate leaves. This species generally flowers in November and has quite large flowers for its size. It can flower prolifically at times and a colony in full flower is quite a sight to behold.

Corybas rivularis is unlikely to be confused with any other spider orchid species, given its habitat preference, although it can be challenging to separate it from the undescribed entities currently aggregated with the species. It is not believed to be under any immediate threat but has a 2023 conservation status of At Risk – Naturally Uncommon. The only potential threat to known colonies is the felling of stream-side vegetation, although most known colonies are in areas having some form of legal protection.

The genus name *Corybas* means 'helmet flower' and the species epithet *rivularis* means 'of streams'.

You can view the NZPCN website factsheet for *Corybas rivularis* at <https://www.nzpcn.org.nz/flora/species/corybas-rivularis/>

Erratum

Contrary to what was stated in the President's report in the July issue of *Trilepidea*, the NZPCN did not make a submission on the Regulatory Standards Bill in May 2025, although the President and several NZPCN Council members made personal submissions. We sincerely apologise for this error and for any confusion it may have caused.

Book Review: “Indigenous and Naturalised Exotic Vascular Plants in the Rotorua Lakes Ecological District 2025” by John Hobbs. Special Issue No. 3. Rotorua Botanical Society Rotorua. 311 pp.

Sarah Beadel (sarah.beadel@wildlands.co.nz) August 2025

The latest special issue of the Rotorua Botanical Society is a must have collector’s item for all who are interested in the field botany of the Rotorua Lakes or who collect important texts on New Zealand botany.

This book has been many years in preparation and is an update to the 1990 Rotorua Botanical Special Issue No. 1 which was an annotated list of the vascular plants of the Rotorua Lakes Ecological District.

John “accidentally” started work on this book in 2007 when he was inspired during a field expedition looking at a potential cycleway near Ngongotaha. He then set about botanising the district systematically and later researching all available information and herbarium records.

The subject matter of the book is a list of all vascular plants, both indigenous and exotic, that are present, or which have been previously found (herbarium records and plant species lists and articles) in the Rotorua Lakes Ecological District. For each species, information is presented in the following fields:

Species with authority

*common name(s)

Synonym(s):

Conservation status:

Voucher/Reference:

Herbaria statistics

NVS/Taxon code

Records:

Record years

Occurrence:

Altitude range:

Phenology

Habitat:

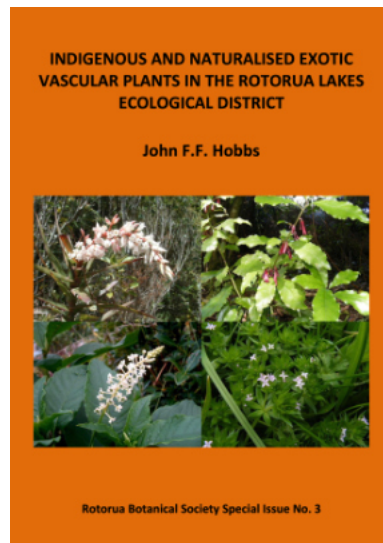
Comments:

Whilst not recorded for all species, the most interesting information can occasionally be found in the comments or habitat fields, which sometimes identify exactly where the species is known to be present in the district. For example, for *Luzula sylvatica* the following information is given: “Noted in planter boxes near the main entrance to Te Puia, Whakarewarewa”.

This book is an amazing resource for all botanists interested in exploring the botany of the Rotorua Lakes Ecological District. For budding botanists out for a day in the field and who want to learn more plants and identify the plants that they see, there is an extremely high likelihood that the species they see will be listed in this book.

The format (A5) and binding (robust spiral binding) of the book have been carefully designed to ensure that it is robust, and small enough to easily carry it in the field as a working reference. My copy will undoubtedly be used during many field expeditions with annotations added as we learn more about the district’s botany.

For the purposes of this book, the Ecological District has been divided into five major lake catchments, and the likelihood of finding a particular taxon within each of the catchments is given as a percentage of the number of sites within a catchment where that taxon has been found.



Species are grouped by families within the following groups: pteridophytes, gymnosperms, dicotyledons, and monocotyledons, with each species then listed alphabetically. If you want to find a specific species, it's best to check the index for the page number. Whilst there is no overall index, an index for species and families in each group (in alphabetical order) is provided at the start of that section in the book. The contents page (Page iii) is a good place to start to orientate yourself on the layout of the contents. The map on Pages iv-v is also essential, to orientate yourself as to the geographic coverage and the location of the five catchments (shown in dashed lines).

The book also contains an impressive array of tables summarising the information presented, including the number of species in each of the groups present in each catchment, and comparisons of the 10 largest (numerically) families and genera in the district.

A total of 1,460 species are covered in the book, of which (disappointingly) 46% are indigenous and 54% are exotic. Of these 1,460 species, there are voucher species for 91.4% in herbariums in New Zealand and around the world.

If you love a challenge, then check out Pages 301 and 302 where there is a list of species for which there are no vouchered specimens from the district. The Scion herbarium (and John) would be grateful for these gaps to be filled.

This is not a comprehensive review, but I hope that it whets your appetite. If you are a keen field botanist in the central North Island or a collector of NZ botanical books, then this book is for you. If you would like to purchase a book then it is available from the Rotorua Botanical Society (rotorua-botanicalsociety@gmail.com) (\$30 per copy plus \$10 postage and packaging).

Thank you, John, for this legacy publication. I and many other local botanists have been treated royally with your diligent and adventurous documentation of the district's botany.

NZPCN Website updates

Jesse Bythell, NZPCN Webmaster

Our relevant species page now link to these new lucid keys—we love these interactive keys and encourage everyone to have a go using them:

- [Key to indigenous and naturalised species of New Zealand Carex](#) recently published and prepared by Kerry Forde.
- [Key to *Celmisia* in New Zealand](#) by David Glenny, Jane Gosden, and Rowan Hindmarsh-Walls
- Note also the [Key to the grasses of New Zealand](#) has been recently updated

Sharp-eyed users may have noticed links on species pages highlighting former Plant of the Month articles in back-issues of *Trilepidea*. It's amazing to consider how much effort has been put into writing these insightful and interesting articles over the years and we thought users could get more value out of this information. Early articles were written by John Sawyer, then Rowan Hindmarsh-Walls and currently by Bill Campbell. Thanks also to kaiāwhina Joseph Knight who went back through more than 200 back-issues of the magazine to compile a list of taxa which have featured in Plant of the Month. You can find the links near the bottom of the page.

Other information

PLANT OF THE MONTH

This plant has been featured as a Plant of the Month – see [Trilepidea: NZPCN newsletter for December 2016](#) for the full story.

Game Animal Council (Herds of Special Interest) Amendment Bill—oral submission to Select Committee

Presented by Jesse Bythell, with input from Jane Gosden, New Zealand Plant Conservation Network

Thank you for the opportunity to speak on this important matter. I am the President of the New Zealand Plant Conservation Network formed in 2003 to promote the recognition and conservation of our indigenous flora. We are an NGO with nearly 1,000 members representing professional botanists, ecologists, researchers, horticulturalists, students, community members and plant conservation practitioners.

We strongly oppose the Bill. Our primary reason for this is that National Parks are for the preservation of indigenous species. We do not believe that introduced species should be afforded any level of protection inside our National Parks. We believe that this Bill sets a dangerous precedent for our National Parks.

Deer and other introduced ungulates species in a National Park context derive the majority if not all of their nutritional needs from eating our indigenous plants and causing damage to our indigenous ecosystems. Our ecosystems evolved over 80 million years with avian browsers and it is well documented how ungulate impact is driving significant negative changes for indigenous plant species and their ecosystems. Differences in ungulates tongues, teeth and jaws, their metabolic capability and breeding process means they eat a wider range of indigenous species at a different rate to what moa did.

Many people are not aware of just how unique our indigenous plant species are. We have over 80% endemism (i.e. found only in Aotearoa) and this is even higher when looking at alpine species. Over 46% of our vascular (higher) plants are classified as either Threatened or At Risk and in the recent assessment several species previously classified as Not Threatened have been relegated to At Risk specifically because of pressure from ungulates.

The real crux of this issue is: how much damage to our indigenous ecosystems are we as a society willing to accept from introduced species? Or indeed how much cost we are willing to bear in terms of lost carbon sequestration services and erosion mitigation as our indigenous ecosystems fail to maintain themselves and or even collapse from excessive ungulate pressure? Some in the hunting community and Game Animal Council (GAC) are essentially asking for New Zealanders to let an introduced and demonstrably damaging suite of species be legally privileged over our endemic flora and the fauna inside National Parks, areas which are legally designated for the protection of our indigenous species. We recognise total removal of pest ungulates inside National Parks may not be possible in all cases, but the numbers need to be substantially lower in order to ensure the healthy functioning and longevity of our native ecosystems and the diverse range of species they contain.

This is an argument about values but it also needs to involve evidence. We have clear evidence of the harm of ungulates and limited evidence of the efficacy of hunter-led management of ungulates. Indeed, we have evidence showing how ineffective this can be in the case of the hunter-led tahr management, which has not been able to deliver relief for fragile alpine ecosystems.

There is clear evidence that the Fiordland Wapiti Foundation's efforts to manage wapiti and red deer in Fiordland has so far failed to provide sufficient recovery of indicator species in the monitored areas. Removal of between 900 and 1,200 animals per annum from a 175,000 area is a nice number to report, but when the total number of animals is not also reported, this achievement lacks meaningful context.

We recognise recreational hunters can be part of the solution for reducing impact of feral ungulates inside National Parks, indeed I am a hunter myself and know many hunters with a deep understanding of our unique natural heritage. However, NZPCN fails to see how changing the legal status of what are clearly harmful species within National Parks is necessary for conservation-minded hunters to be able to do their bit.

Most recreational hunting activity is easier to access areas like privately owned native forest and other public conservation land cannot keep up with deer replacement levels. We have seen a year-on-year increase of ungulates across Aotearoa New Zealand over the last decade. It therefore seems unlikely that recreational hunting can make significant gains for our indigenous ecosystems in National Parks which are more rugged, remote and costly to access.

A key challenge is constrained resources, and it is tempting to think for example in the case of the Fiordland Wapiti Foundation that our only choices are ‘no support from hunters’ or ‘legally change the status of ungulates and get 900-1,200 deer removed from Fiordland annually by the FWF’. We argue that the problematic precedent set by changing the legal status of a pest animal is a greater cost to pay than 1,000 or so deer shot for free. Will changing the status of deer in the National Park obstruct effective conservation management actions? We acknowledge the trapping efforts of various hunting groups (e.g. FWF’s 500 stoat traps in 175,000 ha area), but we know at scale 1080 is a more effective and efficient tool which also targets rats and possums. To be clear, we are not advocating removal of deer using 1080 (this is not effective or humane) but 1080 is an effective and efficient conservation tool which most hunting groups consistently oppose.

We challenge this select committee to think more creatively about the key issue of how to solve the ungulate problem in our National Parks. We know the Department of Conservation is insufficiently funded (currently it receives about \$75 per ha per annum and much of this is spent on visitor assets and not directly on conservation). Could there be a better way to get the job done than legally changing the status of the pests because recreational hunters are lobbying for this (and in some cases are threatening to withdraw their hunting efforts if they don’t get what they want)? How about a biodiversity credit scheme where Wild Animal Recovery Operators are paid for the pest animals they remove from National Parks instead of having to make ends meet with the variable value of the carcasses? For example, there could be a payment schedule based on density of deer – when populations are dense each deer is worth a certain amount and as density decreases the value of each animal increases, or perhaps female animals are worth a bigger payout than male animals. I urge you to read the independent review of Wild Animal Recovery Operations conducted by Phoenix Facilitation in 2023 on behalf of DOC and GAC. This review clearly lays out the problem and some possible solutions for coordinating WARO efforts more effectively. We know that the forestry industry spends significant amounts on deer control to establish new forests because of the commercial benefits. This approach could also be brought to bear on conservation land in the context of a biodiversity market.

I would like to note also, that changing the legal status of a pest animal inside our National Parks and UNESCO World Heritage Areas is bad for our reputation as a global leader in conservation and likely exposes us to legal risk. Will the hunting lobby front up to cover the costs of impacts from sanctions or litigation?

If the select committee does decide to recommend changing the legal status of pest ungulates inside National Parks, we ask for a strong set of safety rails. These are outlined in our submission in more detail, but briefly here are some of them:

- HOSI status should be time-bound—any herd or species with HOSI status is subject to review and status is not permanently conferred. Indeed, we would recommend it is only temporary and will expire after a pre-set date, and HOSI status would need to be sought again.
- Robust monitoring of ecosystem outcomes—we ask for positive proof of the efficacy of hunter-led management to be provided if HOSI status is conferred and this evidence should be collected by a suitably qualified and independent organisation.
- Transparency—all data associated with hunter-led management needs to be available publicly – this includes flight paths/hunting effort spatial data, pest animal population data and eco-system monitoring results.
- Not impede effective conservation management—HOSI status should not interfere with proper conservation management of other pest species.
- Prioritise indigenous species—where an indigenous species has its global stronghold within a National Park and is known to be directly affected by ungulate browse their protection should take precedence over any HOSI status being sought.
- Recreational equity—HOSI status of a herd should not limit other recreational users of National Parks at any time.

Petals and Threads: Patterns in Nature and Needle Exhibition, Online Auction, Workshops & 2026 Calendar



Ecologist and artist Kate McAlpine has organised a collaborative project with the Wellington Embroiderers' Guild (WEG), inviting Guild members to reinterpret her plant-based artworks through embroidery. The result is *Petals and Threads: Patterns in Nature and Needle*—a creative fundraiser celebrating the intersection of nature, art, science and stitch.

Event Summary:

- **Exhibition**
18–27 September 2025, Te Auaha Gallery, 65 Dixon Street, Wellington
A joint display of original artworks by Kate McAlpine and stitched interpretations by members of WEG.
- **Online Auction 27 August – 27 September**
43 art works available for bidding. Scan QR code below or go to <https://ptpnn.betterworld.org/auctions/petals-threads-patterns-nature-n>



- **Workshops at Te Auaha, 65 Dixon St, Wellington.** Limited spots available –register by emailing petalsandthreads2025@gmail.com
 - Embroidery workshop: 1:00-3:00 pm, Saturday 20 September
 - Plant Art workshop: 1:00-3:00 pm, Saturday 27 September
- **2026 Calendar**
2026 calendar featuring selected paired artworks from the project, available for purchase for \$30 on Trade Me from 18 Sept (search Petals and Threads on Trade Me).

Proceeds from all activities will be donated 50/50 to the New Zealand Plant Conservation Network and the Wellington Embroiderers' Guild.

Any questions, email Kate at petalsandthreads2025@gmail.com

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.

Iwitahi Working Bee & Native Orchid Weekend

Friday, December 5th - Sunday, December 7th
At the Iwitahi Reserve off SH5 (Napier - Taupo)



Starts Friday after 4pm
Ends Sunday Lunchtimeish



Includes Meals and 2 Nights' Accommodation at Sika Lodge
(bunk room style)

Light /Moderate Track Maintenance, Weeding etc.
Orchid Identification, Photography, And Discussions On Site

\$120+/-PP

[THE MORE THAT COME](#)
[THE CHEAPER IT GETS](#)

We would expect to see *Calochilus*, *Chiloglottis*, *Gastrodia*,
Thelymitra and *Pterostylis* species in flower or bud

If you are unable to attend for the full weekend but would like to join us at the reserve or prefer to organise your own accommodation, please let me know so we can keep an eye out for you

To register your interest, contact me by FB Messenger me or email - tobymarris@hotmail.com



NZPCN 2026 Conference

The NZPCN 2026 Conference will be held in Te Whanganui-a-Tara/Wellington from 12–15 October 2026. Mark these dates in your diary now for an exciting few days of botanical knowledge sharing, networking and local exploration.

More information will be included in future issues of *Trilepidea*, as details are finalised.

Auckland Botanical Society

Meeting: Wednesday 3 September at 7.30pm. **Speaker:** Dr Wendy Nelson. **Topic:** Seaweeds.

Venue: Unitec, School of Natural Sciences, 139 Carrington Road, Mt. Albert (Gate 4, Building 115, Level 2, Room 2005).

Field Trip: Saturday 20 September to Seaforth's property, north of Hatfields Beach. **Leader:** Maureen Young.

See website <https://sites.google.com/site/aucklandbotanicalsociety/> for further details.

Waikato Botanical Society

Field Trip: Saturday 13 September to Waipapa Dam Cycle Trail South. (Combined with Rotorua Botanical Society)
Meet: Rotorua carpark at 9.00am or at Waipapa Dam at 10.15am. **Grade:** Medium.

Leader: Angela McQuillan,
email simpson.angela1@gmail.com,
ph. 021 239 2554.

Rotorua Botanical Society

Field Trip: Saturday 13 September to Waipapa Dam Cycle Trail South. (Combined with Waikato Botanical Society)
Meet: Rotorua carpark at 9.00am or at Waipapa Dam at 10.15am. **Grade:** Medium.

Leader: Angela McQuillan,
email simpson.angela1@gmail.com,
ph. 021 239 2554.

Wellington Botanical Society

Field Trip: Saturday 6 September to Innes Bush, Wainuiomata. **Meet:** 353 Moores Valley Road, Wainuiomata at 9.30am.

Co-leaders: Laura Girvan-West, email wellingtonbotsocsecretary@gmail.com,
ph. 021 583 934 and Paul Bell-Butler,
email paul.bellbutler@vuw.ac.nz,
ph. 021 126 9088.

Nelson Botanical Society

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

Canterbury Botanical Society

Field Trips/Meetings: Please refer to the website: <https://canterburybotanicalsociety.org.nz/canterbury-botanical-meetings-field-trips> for current details.

Botanical Society of Otago

Meeting: Wednesday 10 September at 6.00pm. **Speakers:** Dr Ilse Breitwieser and Dr Rob Smissen, Allan Herbarium, Lincoln. **Topic:** Geoff Baylis Lecture – Why we're obsessed with *Craspedia*.

Venue: Archway Lecture Theatre, University of Otago.

Field Trip: Saturday 13 September to Dunedin Botanic Gardens. **Meet:** Botany Department carpark at 9.00am.

Contact: Lydia Metcalfe, ph. 027 726 5556.
