



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 224

November 2022

Deadline for next issue:
Friday 16 December 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

Announcing NZPCN conference māngai rangatahi – youth delegate

Alex Fergus, Jesse Bythell, Joanna Smith

The NZPCN conference committee is pleased to announce our first conference māngai rangatahi/youth delegate. Our intention with supporting a māngai rangatahi to attend the conference is to provide the opportunity for a younger voice to feel supported enough to both experience the conference content and, if they wish, contribute opinion or questions. We expect that a younger voice will likely challenge many of our own assumptions and broaden our perspectives of priorities and challenges for plant conservation in Aotearoa New Zealand. We are very pleased to announce Audrey Austin as our very first, and our 2022 conference māngai rangatahi. Our conference māngai rangatahi are sponsored to attend the conference.

Seeking examples for our Queenstown Lakes District restoration pathways workshop

Alex Fergus, Adam Forbes, Ben Teele, Jesse Bythell, Rebecca Teele

The NZPCN are excited about the opportunity for our 2022 conference to generate an additional output beyond the general engagement and knowledge sharing resulting from a conference format. We are inviting all conference participants to contribute stories about their restoration experiences in the Queenstown Lakes District region before the conference. We will collate and review these stories with the goal of producing a synthesis document which focuses on restoration pathways.

We have been collating examples from published and grey literature which document restoration efforts in the Queenstown Lakes District area, but now we want to cast the net wider. If you are currently or have formerly been involved in a restoration project in the Queenstown Lakes District area, we ask you to consider submitting a restoration story. Stories can be anonymous, and while it would help to have specific locations, these details can be omitted if you provide us with specific details of local climate/terrain. If you have multiple examples, we encourage you to submit a story for each.

We want to make this process simple, and fast, hence there is a template attached to the end of this edition of *Trilepidea*. Please complete as much of the template as you can, and if you have queries, or want MS word or any other versions of the template don't hesitate to get in touch with Alex. Please submit your restoration stories before the conference, and preferably sooner rather than later.

It's important to note that we are interested in all facets of restoration, the full continuum from unassisted (natural) recovery to intensively assisted recovery (we're focusing on the intervention continuum of Chazdon *et al.* 2021 as opposed to the active/passive restoration dichotomy). Putting that in a Queenstown Lakes District perspective, perhaps you've observed the first broadleaf forest species recruit into a patch of local mānuka scrub without any help, or near the other end of the continuum, perhaps you've blocked drains, rewetted paddocks, removed willows and planted intensively to convert pasture back to wetland. Our scope is wide. Projects will also be very different in terms

of time, some may only be a few years old, some might stretch to decades. And we want to hear about both successes and failures, both are equally important.

All stories will be reviewed along with existing literature, and we will endeavor to draw out commonalities. In a workshop-style format on Tuesday afternoon of the conference we will work as a group to synthesize these commonalities, identifying areas of oversimplification or adding examples that have been missed. At this stage it's tricky to pre-empt the nature of the output of this work. One option would be to generate simple state-and-transition diagrams for different ecosystem or vegetation types, identifying transitions and the factors that did (or did not) impact on them. The broader goal would be to identify successful pathways that could guide future restoration work in the region.

No matter what the output, all NZPCN conference participants, and all story contributors will be welcomed as authors on the final synthesis document which will be published in *Trilepidea* and as a standalone document that will be available to download for free from the NZPCN website.

A template for restoration stories is on page 9 of this newsletter. Please submit your restoration stories to Alex (fergusa@landcareresearch.co.nz) or get in touch if you have any queries.

References

Chazdon, R., Falk, D., Banin, L., Wagner, M., Wilson, S., Grabowski, R. & Suding, K. 2021. The intervention continuum in restoration ecology: rethinking the active-passive dichotomy. *Restoration Ecology*. 10.1111/rec.13535.

General NZPCN 2022 conference updates

Alex Fergus, Jesse Bythell, Joanna Smith

Our conference is now only a few weeks away. By now everyone who has registered should have received a reminder detailing what components of the conference they have registered for. For those who have registered for workshops or field trips, we will send an update to participants in late November. This will include details of where, what time, what to bring, and how to get there. Given the current increase of Covid-19 in the community, we remind folks to check out our current Covid-19 protocol (<https://www.nzpcn.org.nz/nzpcn/events/conference-2022/covid-19-information/>). Note, we will send out a wellness check reminder email 72 hours before the conference and we encourage people to undertake a rapid antigen test (RAT) 24 hours before arriving at the conference. A final conference programme is also available below. See many of you soon in Queenstown. Ka kite.

Kia ora koutou, and thanks to everyone who has registered for the conference or contributed to the organisation of it to date. Many thanks to those of you who have submitted poster or spoken presentation abstracts. As this issue of *Trilepidea* goes to print, we are finalising the programme. Everyone who has submitted an abstract will receive an update before the end of November and we also intend to have the programme online via the conference webpage by that time.

Details continue to fall into place with the conference only six weeks away. After a delay of nine months, we're very excited to have the NZPCN conference faithful together again in Queenstown. Having reviewed the abstracts we can confirm it's going to be a really interesting, topical and enjoyable few days.

The registration desk will open at 4.30 pm on Sunday 4 December, at the QT Queenstown and Rydges Lakeland Resort, 38-54 Lake Esplanade, Queenstown. We encourage folks to join us on Sunday afternoon, as in addition to complimentary refreshments, a showcase of local botanical art will be on display, and the conference auction will take place at 6 pm.

For those who have registered for workshops or field trips, we will send an update to participants in late November. This will include details of where, what time, what to bring, and how to get there.

If you have any other queries relating to conference proceedings please don't hesitate to contact Alex at fergusa@landcareresearch.co.nz.

A reminder—conference code of conduct

He taonga rongonui te aroha ki te tāngata – Goodwill towards others is a precious treasure.

In the interests of all participants and supporters of this conference, we are dedicated to creating a positive, supportive and rewarding experience for everyone, regardless of race, ethnicity, nationality, culture, religious beliefs, gender, gender identity and expression, sexual orientation, age, status, disability, physical appearance, political affiliation, or technology choices. We will not tolerate harassment of conference participants in any form.

We believe everyone has an obligation to contribute. Here we have outlined appropriate and acceptable behaviours expected at the conference. We aim to influence helpful and constructive outcomes from the conference, and for everyone involved to feel supported to make positive choices, manage risk and have a great experience.

Everyone has a responsibility to speak up when there is, or could be, a situation that may breach or lead to a breach of this Code, or the law.

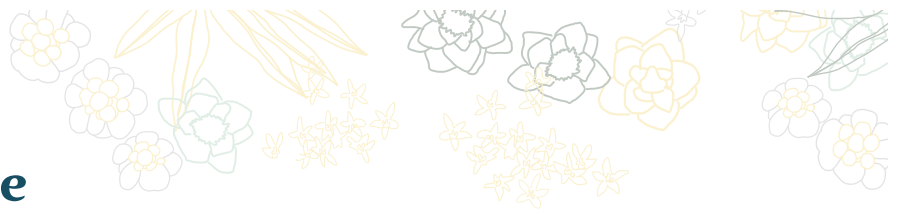
We ask everyone involved with the 2022 NZPCN Conference to:

- Look out for one another and contribute towards a safe environment where people are treated with dignity and respect, feel comfortable and encouraged, feel their opinions are valued, and can speak without fear.
- Be conscientious about how your actions and comments might be perceived or misunderstood by others.
- Be mindful of how you use social media, remembering the internet is a public place and we can't control how long something will remain on the internet, or other people's access to the content.
- Aspire to perform at your best while attending the conference. Please refrain from abusing alcohol, or any other drugs, that could prevent you from being at your best, as that could create a dangerous situation.
- Have zero tolerance for unwanted verbal or physical conduct (sexual or otherwise) or degrading and disparaging statements related to race, ethnicity, nationality, culture, religious beliefs, gender, gender identity and expression, sexual orientation, age, status, disability, physical appearance, political affiliation, technology choices, and other categories protected by the law.
- Support the use of Treaty of Waitangi principles—'partnership, protection and participation'—and te reo Māori throughout the conference.
- Embrace and value diversity so all people involved with this conference feel supported. We believe diversity of people and ideas inspires innovation, can provide alternative insights and perspectives, and help lead to our collective successes.
- Be mindful of behaviours or comments that intimidate, create discomfort, interfere with a person's participation, or reinforce social structures of domination or that might be construed as an abuse of power.

Thanks once again to all our sponsors

The NZPCN would like to once again thank our sponsors for showing their commitment to plant conservation networking by supporting our conference. This includes as principal sponsors: Wildland Consultants; Manaaki Whenua – Landcare Research; e3Scientific; RealNZ and Queenstown Lakes District Council, as session sponsors: Ahikā, as workshop sponsors: NZSki Ltd, Whakatipu Restoration Trust, along with Sherwood Queenstown and Kiwi Park Queenstown.. For more information regarding our conference sponsors please follow this link <https://www.nzpcn.org.nz/nzpcn/events/conference-2022/2022-conference-sponsors/>.





Detailed Programme

NZPCN 2022 biennial conference - Hauropi whakahou ki Aotearoa / Restoration Ecology in New Zealand

Sunday 4th December – Workshops and registration

- 10:00am – 12:00pm: **Workshop 1 - Starting your own community nursery** - Jean Malpas Community Nursery, Kelvin Peninsula
- 1:00 – 4:00pm: **Workshop 2 - Propagation of native plants** - Jean Malpas Community Nursery, Kelvin Peninsula
- 10:00am – 12:00pm: **Workshop 3 - Plant Identification course - New Zealand grasses (Poaceae)**, Coronet Peak
- 1:00 – 4:00pm: **Workshop 4 - Plant Identification course - New Zealand sedges (Cyperaceae)**, Coronet Peak
- 9:00am – 4:00pm: **Workshop 5 - Botanical illustration** - Sherwood
- 10:00am – 12:00pm: **Workshop 6 - Botanising with iNaturalist** - Kiwi Park
- 1:00 – 4:00pm: **Workshop 7 - Lichens workshop** - Kiwi Park
- 1:00 – 4:00pm: **Workshop 8 - Using direct seeding for large-scale native afforestation** - Crown Range
- 4:30 – 7:00pm: **Registration, Akaaka art showcase, charity auction** - Clancy's Room, QT Queenstown and Rydges Lakeland Resort

Monday 5th December – Presentations and bowling and botanical mingle

- 8:00 – 8:30am: **Registration**, Clancy's Room

All Plenary sessions are located in Queenstown and Wakatipu Rooms of QT Queenstown and Rydges Lakeland Resort

- 8:30 – 8:50am: **Whakatau - Welcome**

Session 1: Restoring threatened native plant populations

Session chair: John Barkla

- 8:50 – 9:30am: **Session 1 keynote address, Geoff Rogers** - Self-help or life support: triaging recovery of threatened plants of Queenstown Lakes District
- 9:30 – 9:50am: **Robyn Smith** - Preventing the extinction of *Leptinella nana* in Whitireia Park, Porirua - following in the footsteps of Tom Moss
- 9:50 – 10:10am: **Emma Simpkins** - From regional to national scales: local council approach to plant conservation
- 10:10 – 10:30am: **Carlos Lehnebach** - Orchid conservation in New Zealand: the challenges and recent breakthroughs
- 10:30 – 11:00am: **Morning tea** - 5th floor pre-function area



Session 2: Monitoring Restoration Projects

Session chair: Alex Fergus

- 11:00 - 11:20am: **Rebecca Teele** - Restoration monitoring in the Queenstown Lakes District
- 11:20 - 11:40am: **Anita Benbrook** - Monitoring Wellington City Councils restoration sites - developing a new tool

Other topics included within session 2

- 11:40am - 12:00pm: **Luke Liddell** - Wild harvested tōtara berries as an incentive for conservation on private land
- 12:00 - 1:00pm: **Lunch** - Bazaar restaurant

Session 3: Iwi/hapū led restoration processes and case-studies

Session chair: Jesse Bythell

- 1:00 - 1:40pm: **Session 3 keynote address, Estelle Pērā-Leask** - Te Korowai kia uru ora o Te Taurapa o te Waka O Maui - PF2050 Leading edge technology supports kaitiaki o Murihiku to restore the mauri (life force) of Bluff Hill Motupōhue.
- 1:40 - 2:00pm: **Lisa Forester, Stephanie Tong, Winiwini Kingi** - Successful partnerships for restoration outcomes
- 2:00 - 2:20pm: **Mike Thorsen** - Using Pākehā information to inform Māori restoration projects
- 2:20 - 2:45pm: **Poster Session** - Clancy's Room
- 2:45 - 3:10pm: **Afternoon tea** - 5th floor pre-function area

Session 4: Engagement and education

Session chair: Sarah Beadel

- 3:10 - 3:30pm: **Kerri Lukis** - Protecting the gains: securing enduring outcomes for Jobs for Nature projects through legal protection
- 3:30 - 3:50pm: **Philip Smith** - Transmission
- 3:50 - 4:10pm: **Brooke Clark** - Collaborating to achieve conservation goals
- 4:10 - 4:30pm: **Taylor Davies-Colley** - Ngā Taonga ki te Ngahere o Tāne: the treasures of the forest of Tāne
- 5:00 - 7:00pm: **Bowling and botanical mingle** - Queenstown Bowling Club, 19 Park Street (Queenstown Gardens)

Tuesday 6th December – presentations and NZPCN 2022 Awards Ceremony

- 8:30 - 8:35am: **Conference Updates**

Session 5: Ecosourcing

Session chair: Shannel Courtney

- 8:35 - 9:15am: **Session 5 keynote address, Peter Heenan** - The myth of 'local' ecosourcing and the paradigm of eco-evolutionary regions to provide resilient conservation outcomes
- 9:15 - 9:35am: **Tom Ferguson** - The fun and challenges of ecosourcing in lowland Canterbury

- 9:35 – 9:55am: **Matt Ward** – Ecosourcing in practice

Other topics included within session 5

- 9:55 – 10:15am: **Marley Ford** – What are the Mycorrhizal communities' role in restoration?
- 10:15 – 10:50am: **Morning tea** – 5th floor pre-function area

Session 6: Valuing natural regeneration

Session chair: Melissa Hutchison

- 10:50 – 11:10am: **Robyn Simcock** – Accelerating regeneration in planted areas using canopy gap makers and seedling-friendly substrates
- 11:10 – 11:30am: **Cara-Lisa Schloots** – Mahu Whenua transects: over two decades of vegetation change in Central Otago tussock grasslands
- 11:30 – 11:50am: **Alex Fergus** – Facilitating natural woody regeneration

Other topics included within session 6

- 11:50am – 12:10pm: **Richard Ewans** – How do we prioritise where restoration happens and maximise the value of native revegetation and natural regeneration in Otago? Recent GIS mapping tools at ORC
- 12:10 – 1:10pm: **Lunch** – Bazaar restaurant

Session 7: Restoration after conifer removal

Session chair: John Barkla

- 1:10 – 1:50pm: **Session 7 keynote address, Adam Forbes** – Restoring the damaged lands – An overview of clear-fell restoration in Aotearoa/New Zealand
- 1:50 – 2:10pm: **Benjamin Teele** – What follows after – the challenges of restoration in Central Otago
- 2:10 – 2:30pm: **Briana Pringle** – Coronet Forest
- 2:30 – 2:50pm: **Rhys Millar** – Lessons from a large-scale project to transform *Pinus radiata* forest into indigenous forest
- 2:50 – 3:20pm: **Afternoon tea** – 5th floor pre-function area

Session 8: Challenges to scaling up restoration projects

Session chair: Jesse Bythell

- 3:20 – 3:40pm: **Caitlin Daley** – Challenges to using one size fits all approaches in wetland management
- 3:40 – 4:00pm: **Janice Lord** – Challenges to seed-based restoration
- 4:00 – 4:25pm: **Queenstown Lakes District restoration pathways workshop**
- 4:25 – 4:30pm: **Conference closing**
- 5:00 – 7:00pm: **NZPCN 2022 Awards Ceremony** – Clancy's Room

Wednesday 7th December – Field trips

Participants of field trip 1 will meet at Steamer Wharf, 88 Beach Street, Queenstown, outside the REALnz visitor centre. Participants of field trips 2, 3, and 4 will depart from the bus stop on Athol Street. (See map on pages 14-15)

- 8:30am – 5:00pm: **Field Trip 1 Islands** - Walter Peak and Wāwāhi Waka/Pigeon Island
- 9:00am – 5:00pm: **Field Trip 2 Mountains** - Lake Alta and the Remarkables ski area
- 8:30am – 5:00pm: **Field Trip 3 Drylands** - Crown Range, Hikuwai Conservation Area – Albert Town, Butterfield Wildlife Management Reserve, Māhaka Katia (Pisa Flats) Scientific Reserve, Cromwell Chafer Beetle Scientific Reserve, Roaring Meg
- 8:30am – 5:00pm: **Field Trip 4 Restoration sites** - Lake Hayes, Whitechapel, Feehly Hill, Slope Hill, Treespace/Coronet Forest, Morning Star Reserve, Tucker Beach.



NZPCN conference 2022 – Queenstown Lakes District restoration pathways workshop

Restoration stories template

Story name/site name	Record anonymous if preferred.
Contributor name	Record anonymous if preferred.
Story location	Record anonymous if preferred—but please include where possible details of altitude, aspect, climate (especially rainfall) and terrain. If not anonymous, addresses or coordinates of the central point of restoration project site would be very useful, we can assist with collating or identifying location details.
Motivation or goal for your restoration project	
Start point for your restoration project	The ecosystem or vegetation type.
Current/end point for your restoration project	The ecosystem or vegetation type. Your take on how successful the project has been. What has worked. What has not. Include the length of time of time the project has been running to date.
Restoration methods	Restoration methods (e.g. weed control, fencing, planting, using plant guards etc.) and the species (either those used in planting, or those that responded or didn't respond to the methods you used).
Modifiers to restoration outcomes	Additional details relating to pests, weeds, climate, terrain etc. if not captured above.
Social aspects	The roles (both positive and negative) of social networks, advisors, points of social tension, specific social barriers or enablers.

Contact Alex Fergus with any stories/queries: fergusa@landcareresearch.co.nz

We need your help! Your observations can help improve our understanding of the New Zealand white sun orchid (*Thelymitra longifolia*).

Hayden Jones (Massey University – Palmerston North) and Carlos Lehnebach (Museum of New Zealand Te Papa Tongarewa - Wellington)

Introduction

Thelymitra longifolia, also known as the white sun orchid or māikuku, is a variable and widespread species of sun orchid native to New Zealand (NZ). Since its original description, many new species and tag names have been created to reflect variation. However, these have all ultimately ended up lumped back under the epithet *longifolia*, which refers to the single long leaf on each plant. Today the Checklist of the New Zealand Flora by Schönberger *et al.* (2021) lists seven species names and two varieties as synonyms of *T. longifolia* (Table 1).

Table 1: List of names synonymised with *Thelymitra longifolia* according to the Checklist of the New Zealand Flora and tag names.

Name	Tag name
<i>Serapias regularis</i> Banks & Sol. ex G.Forst.	<i>Thelymitra</i> “Whakapapa”
<i>Thelymitra alba</i> Colenso	<i>Thelymitra</i> “Fusca”
<i>Thelymitra angustifolia</i> Hook.f.	<i>Thelymitra</i> “tholinigra”
<i>Thelymitra forsteri</i> Sw.	<i>Thelymitra</i> “Mangawhai”
<i>Thelymitra grandis</i> F.Muel. ex Benth.	
<i>Thelymitra longifolia</i> var. <i>alba</i> (Colenso) Cheeseman	
<i>Thelymitra longifolia</i> var. <i>forsteri</i> (Sw.) Hatch	
<i>Thelymitra megacalyptra</i> R.D.Fitzg.	
<i>Thelymitra nemoralis</i> Colenso	
<i>Thelymitra purpureo-fusca</i> Colenso	

Despite some obvious differences in the shape and size of plants and their flowers (Fig. 1), and the previous attempts to split up *T. longifolia* into multiple species or varieties, genetic studies, conducted by the first author as part of a summer research scholarship at Te Papa and Massey University, showed that little to no genetic difference exists among forms. As part of the same project, a number of statistical analyses were conducted on measurements from specimens stored at Te Papa’s and Massey University’s herbaria. Although these specimens were useful for our preliminary analyses, our dataset was limited in geographical representation and, because of the drying process, some floral structures were difficult to observe.

To overcome these limitations we are calling upon your help to build a larger and more comprehensive dataset. This would enable us to further investigate *T. longifolia* and properly categorise the variability this species exhibits in its fresh state. Understanding what is

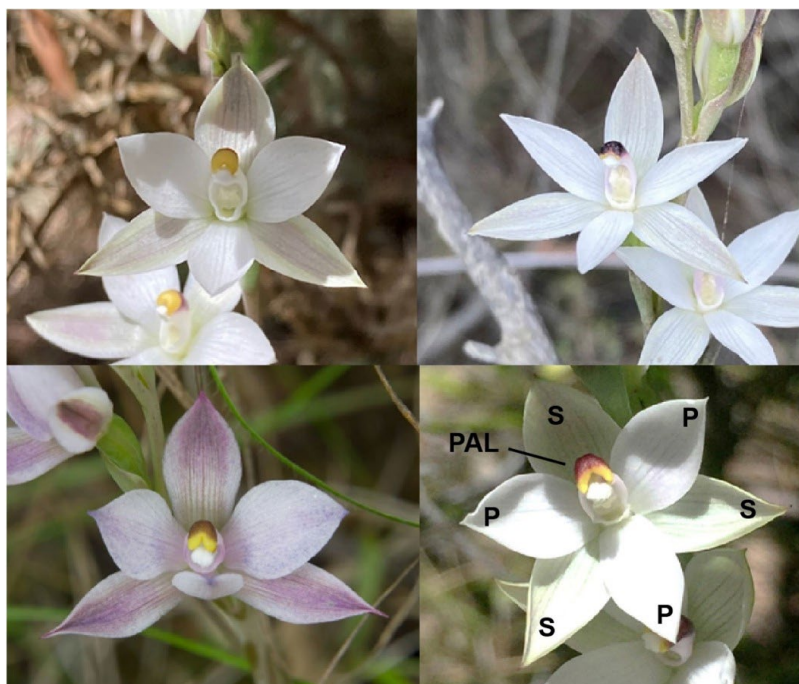


Figure 1: Diversity in flower colour and shape commonly observed in the white sun orchid (*Thelymitra longifolia*) across New Zealand. S: sepals; P: petals, PAL: post anther lobe.

behind this variability is important from a conservation point of view. For instance, some of the forms associated with *T. longifolia* are uncommon, restricted to only a few sites in the country, and already of conservation concern. Understanding their uniqueness can help to focus research efforts and resources on the conservation of these potentially new species that could otherwise go extinct before they are properly recognised. Resolving the taxonomic status of these orchids, and other native orchids, is the main goal of a larger project led by the second author and funded by the Australia Pacific Science Foundation.

Objectives

The main objective of our project is to map and categorise the variation in morphology that we see within *T. longifolia*. To achieve this, we plan the following:

1. To use citizen scientists and crowd sourcing to build a comprehensive morphological dataset of *T. longifolia* that is broad in both the number of individual plants studied and in geographic scope.
2. To analyse this dataset using manual and statistical methods to identify and characterise potential morphological groups within *T. longifolia*.
3. To identify the distribution of these groups within NZ and detect whether they are restricted to specific geographic regions or widespread.
4. To communicate our results to a wider audience by publishing our findings in the NZ Native Orchid Journal, social media, and suitable peer-reviewed journals.

Data collection

To aid in data collection, we will make resources available to people who are interested. This will include but is not limited to: Data collection sheets, tutorials, and guides on data collection.

Based on previous analysis of morphological data, mostly from herbarium specimens, we have selected the following morphological characters as being the most important to distinguish among forms:

- Length and width of the stem bract and floral bract (mm) (Fig. 2)
- Leaf width (mm) (Fig. 2)
- Stem width (mm) (Fig. 2)
- Column length and width (mm) (Fig. 3)

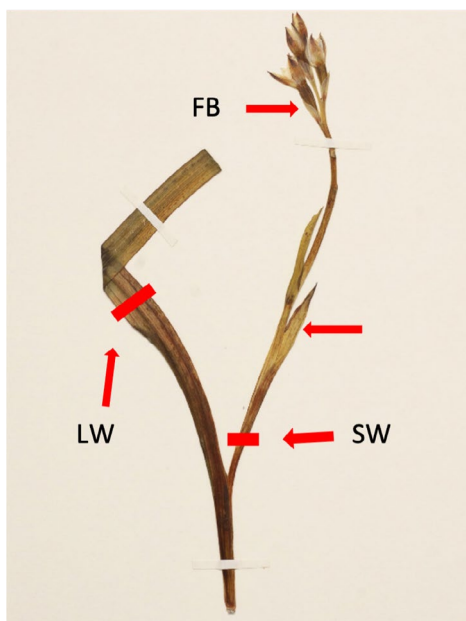


Figure 2: Herbarium specimen of the white sun orchid (*Thelymitra longifolia*) indicating structures to be measured. LW: leaf width; SW: stem width; SB: stem bract; FB: floral bract. Length and width are measured always at the longest/widest point.

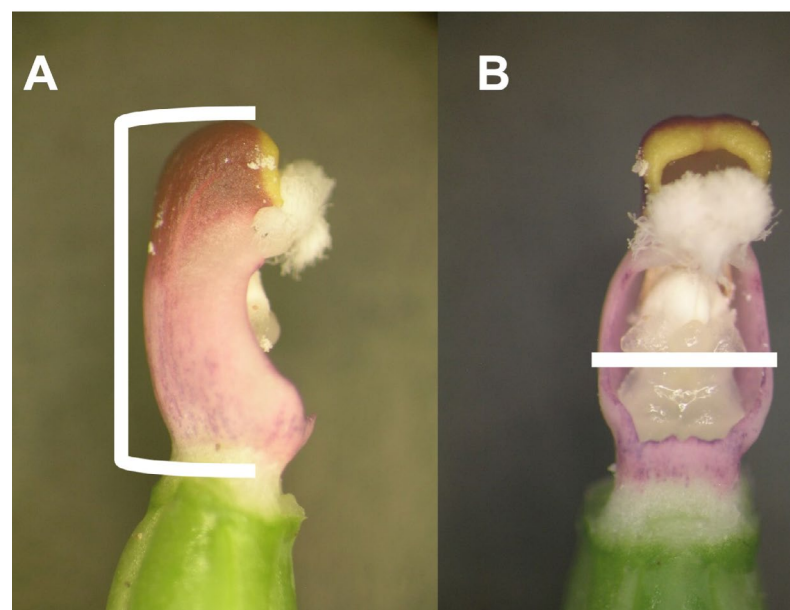


Figure 3: Side (A) and front view (B) of the column of the white sun orchid (*Thelymitra longifolia*). Bars in white indicate the section of the column to be measured for height (A) and width (B).

The characters below are also of interest; however, their value remains untested:

- Number of flowers
- Presence or absence of scent
- Features of the post anther lobe (PAL) (Fig. 4)

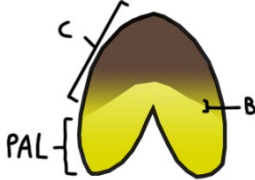



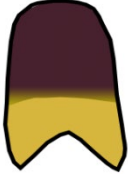
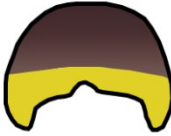
Lobed type		Arched type	
L1	 <p>Two distinct lobes with rounded ends. Border between the top of the PAL and column poorly defined.</p>	A1	 <p>PAL undivided and arched rather than split. Column colour variable. Border can be well defined.</p>
L2	 <p>Similar to L1 although PAL split almost entirely and border better defined. Lobe ends are pointy.</p>	A2	 <p>Similar to A1 but less arched and margin somewhat rough. Border very well defined.</p>
L3	 <p>Typically quite small. Lobes less defined but drawn to a point at the end. Border flat and well defined</p>	A3	 <p>Similar to A2 but PAL margin stepped and symmetrical. Border flat and well defined. (Pseudo-lobed)</p>

Figure 4: Illustrations and descriptions of the variation in shape seen in the post anther lobe (PAL) of *Thelymitra longifolia*. These have been broadly grouped into Lobed and Arched types. In this figure, border (B) refers to the point at which the top of the PAL meets the column (C).

In addition to taking these measurements, participants would also need to take photos of the entire plant and measured parts. A photographic record is necessary; as it will give us something to refer to if we do identify trends or an odd data point within the dataset that needs double checking. Having a photograph of the plants you study is like having a voucher specimen to back up your observations.

Once measurements and photos have been collected, data could be submitted directly to us. Your photos will be collected through our supporting inaturalist project (<https://inaturalist.nz/projects/thelymitra-longifolia-survey>). More information on how to submit your observations along with other supporting resources will be made available soon by social media or by email.

If you are keen to participate, please sign up either using this link (<https://forms.gle/3JAxKDjMDDJh1Qr9>), scanning the adjacent QR code, or emailing us to thelymitra.survey@gmail.com

Thanks!



Sign-up sheet

References

Schönberger I, Wilton A, Boardman Kate, Breitwieser I, de Lange P, Pauw B, Ford K, Gibb E, Glenny D, Greer P, Heenan P, Maule HG, Novis P, Prebble J, Smissen R, Tawiri K. (2021). Checklist of the New Zealand Flora - Seed Plants. DOI: 10.26065/ax7t-8y85.

Oioi restoration strategy questionnaire

Have you ever worked with oioi/jointed rush (*Apodasmia similis*) either propagating it or using it in a restoration project?

Angelina Young and Henrik Moller would much appreciate your guidance on how to maximise survival and spread of oioi, which they are about to plant in Te Hakapupu (Pleasant River Estuary) next month.

If you can spare 20 minutes, could we please talk by telephone or Zoom? If so, please email either Angelina or Henrik to fix a time for a korero:

Angelina: 021 0706466, “Angelina Young” nursery@puketeraki.nz

Henrik: 027 2268688, henrik.moller@otago.ac.nz

If you prefer, you could insert notes against each of the following questions in this [questionnaire](#) and email the file to us at henrik.moller@otago.ac.nz.



Oioi/jointed rush (*Apodasmia similis*). Photo: John Barkla.

Passion, talent and hard graft—Remembering Jan Riddell

Prepared by Jesse Bythell, with help from Mark Sutton and Maurice Rodway.

The QEII Trust staff and reps are privileged to meet many people who care deeply about our environment and who actively work towards its protection. Over the years these links can form into productive collaborations and deeply felt connections as shared goals are achieved and lengthy projects brought to fruition. Jan Riddell is a person who was held in high esteem by everyone who worked with her and it is with sadness we reflect on her recent death due to cancer at the age of 67.

Jan was a fourth-generation farmer who was always keen to roll up her sleeves and get stuck in, whether the task involved physical labour (she was no slouch!) or slogging through long meetings or technical data. She had a very clear sense of service to her community and her strong voice allowed others to feel confident to speak up as well. While sensitive to others' views, Jan was able to clearly present her point which was reliably backed up by solid data and this steady approach allowed her to work with a wide range of people with diverse interests. Her training was in physical geography, hydrology, botany and geology, so it was natural that she became involved in wetland research and protection from an early stage in her career, later going on to achieve many things for conservation at a regional and national scale. Family life on the farm also helped her develop her skills as gatherings were often characterised with robust family debates, not arguments, which laid a good foundation for tough negotiating in other fora.

Jan brought a rare combination of farming know-how, conservation and resource management concern, practical skills, technical knowledge, good people skills, hard work and quiet determination to all her



Jan Riddell.

many projects. For over twenty years Jan worked for the Waiiau Trust, an organisation which has collaborated productively with the QEII National Trust. Jan also protected a remnant of limestone forest with a QEII covenant at her own farm at Limehills. The covenant protects dry forest on limestone, which is very rare (less than 2% of this remains in the Southland Plains Ecological District), along with an interesting near monoculture of strongly regenerating Nationally Critical heart-leaved rōhutu (*Lophomyrtus obcordata*). The forest contains populations of fierce lancewood (*Pseudopanax ferox*, At Risk – Naturally Uncommon) and *Streblus heterophyllus* (regionally uncommon in Southland) along with one very large Hector's tree daisy (*Olearia hectorii*, Threatened – Nationally Endangered) on the forest edge near a wet face prone to erosion.



Heart-leaved rōhutu (*Lophomyrtus obcordata*) growing on a dry limestone face.



Massive Hector's tree daisy (*Olearia hectorii*) growing near a tiny stream on wet limestone face prone to low levels of erosion.

Jan packed a lot into her lifetime, and we shall continue to remember her ready smile and steadfast approach to getting things done. She leaves behind her husband Dave and daughter Emma, and an incredible legacy of achievements for nature and the people of Southland and Aotearoa New Zealand.

Listing all of Jan's achievements is a big task, but here are some of the key roles she held:

- The Nature Heritage Fund (NHF) Committee 2001–2022, (Chair 2017-mid 2022)
- New Zealand Conservation Authority (NZCA) member 2013–2020; Minister for Local Government nominee
- Southland Conservation Board member 1990–2001 (several as Chair)
- Environment Southland Councillor 1989–1995 and 2010–2016
- Waiiau Fisheries and Wildlife Habitat Enhancement Trust planner 1996–2020
- Gamebird Habitat Trust 2020–2022
- Forest Hill Foundation secretary—working on pest eradication in Forest Hill Scenic Reserve
- Enthusiastic supporter of (and weeder for) DOC's direct seed drilling project.

Jan's most significant achievements while on the NHF Committee, include the permanent protection of:

- Large areas of South Island high country natural ecosystems and catchments
- Lowland wetland ecosystems including estuarine wetlands, peat domes; and recently parts of the Upper Taieri Scroll Plain
- Biodiversity values in Waitutu forest and the surrounding Fiordland National Park.

"I knew her as a conservation legend from the south. Someone with a deep love and knowledge of land, of water, rivers, streams and wetlands. A conservationist who knew and understood farming, hydrology, planning and local government. Jan was thoughtful, resolute and very humble. She was ambitious for people and nature and not herself. Jan may not have had a towering physical presence, but you always listened to what she said. She was strategic, astute, clear-sighted, staunch, and

plain spoken in her desire for healthy nature. Jan was undaunted by obstacles, either by individuals or some of DOC's weird processes. She was dogged and just kept going, navigating around unhelpful people with grace or finding another option to reach the outcome for nature that she and others wanted. One of Jan's many strengths on the Fund and the Authority was being able to see issues from different perspectives and use these to frame her contribution. As Conservation Minister I always appreciated her advice, it was always wise and thoughtful."

– Eugenie Sage, former Minister of Conservation

"Jan had a wonderful smile. When you saw her, her eyes and her whole face would light up and she made you feel you were the highlight of her day. Jan was very proud of the farm she worked with Dave and where Emma was brought up. She had a large vegetable garden and was very proud to serve meals, comprising meat from the farm and vegetables from the garden, to her many friends and wider family. She spent many hours growing native seedlings and planting them around the river and in shelter belts on the farm. In the last two years she planted out the ground around their new home."

– Marian Allen, farmer and Jan's neighbour.

Plants Hawke's Bay botanical calendar fundraiser

Plants Hawke's Bay, have kindly offered to donate profits from the sale of their 2023 nursery calendar towards a threatened plant project in Southland. Nursery owner Marie Taylor is a former QEII rep and her sister Jude Taylor is an artist based in Southland. Jude has lovingly painted portraits of New Zealand botanical stamps for the 2023 calendar.

Funds raised are to be used towards the 'Hector's Tree Daisy Lonely Hearts Club', a small QEII National Trust project to enhance fragmented populations of *Olearia hectorii* (Threatened – Nationally Endangered) found in the Southland region. Seed has already been collected this spring from six sites in Southland. The aim is propagate

Hector's tree daisy and then provide young plants back to the collection sites to enhance genetic diversity and create a broader age-range in populations. Any surplus plants will be gifted to the landowners and their local catchment groups for planting in nearby suitable sites to help raise awareness of this species and pressures it faces.

Follow this link to purchase calendars:

https://secure.lglforms.com/form_engine/s/3PfJzSVtcj_VvkdVGYA

2022 Lucy Cranwell Student Field Grant for Botanical Research

Applications are now open for the Lucy Cranwell 2022 Student Field Grant for Botanical Research. The Auckland Botanical Society is pleased to announce that applications are now open for this field grant – with awarded grants consisting of up to \$2,500.00 per student enabling assistance in fieldwork towards Botanical Research.

Further details and application forms are on our website <https://sites.google.com/site/aucklandbotanicalsociety>. Applications will close on 11 December 2022 at 5.00pm and should be submitted to the Secretary Kirsty Myron by email at aucklandbotanicalsociety@gmail.com.



Hector's tree daisy (*Olearia hectorii*).

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 are intending 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

Field Trip: Saturday 3 December Christmas Pot Luck Picnic at Parry Kauri Park, Warkworth. **Meet:** At Parry Kauri Park at 10.00am.

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

Rotorua Botanical Society

Field Trip: Sunday 4 December to Okere Falls Scenic Reserve and Te Akau Reserve. **Meet:** At the Rotorua carpark at 9.00am or at the Okere Falls Scenic Reserve parking area, Okere Falls Road at 9.30am. **Grade:** Easy.

Leaders: Elizabeth and Nick Miller, email elizabeth.miller@scionresearch.com, ph. 07 362 4747.

Wellington Botanical Society

Field Trip: Saturday 3 December for rata walk, Lower Hutt. **Meet:** Oxford Terrace side of Waterloo Railway Station at 9.30am.

Leader: Kate Jordan, email kateljordan@gmail.com, ph. 027 899 0018.

Nelson Botanical Society

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

Canterbury Botanical Society

Meeting: Monday 5 December at 7.30pm. **Speaker:** Paul Maurice. **Topic:** In the Steps of the Great Plant Hunters of China.

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

Field Trip: Saturday 10 December to Boundary Creek Reserve, Motunau.

Leader: Alice Shanks, contact fieldtrips@canterburybotanicalsociety.org.nz if you intend to participate or have any questions.
