

Wellington Botanical Society

Te Rōpū Manāki i Ngā Tamariki a Tāne,
o Te Whanganui a Tara



NEWSLETTER

APRIL 2023

Previous issue: December 2022

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President's message

As summer comes to an end we are still short of people on our committee. You all know that without a committee there would be no speakers or field trips, no *Bulletin* or newsletter and no representation on local council proposals affecting botany in Wellington. Anyone can be on a committee if they are eighteen or over, of sound mind and have not been convicted of an offence involving theft or dishonesty, not bankrupt (or legal equivalent), and not banned from being a trustee or company director. How will being on the committee benefit you? It will give you transferable skills such as teamwork, project management and event organising, and give you work experience for your CV. You don't need to wait for an AGM—if you are interested, please talk to a committee member today. Contact details for the committee are on this page in the newsletter.

Frances Forsyth, President

New members

We welcome Joanna Buswell, Elly Holland, Brent Hudson, India McJarrow, and Jill Vissor to our membership.

We are keen to welcome more people to the delights of botany and BotSoc. If you know someone who might enjoy our field trips, newsletters, bulletin and informative meetings, please encourage them to join. Give them our web site address, then tell them that there is a membership application form at the back of our newsletter.

Helen White, Membership Secretary

Articles for web site

We welcome articles for consideration for inclusion on our web site:

www.wellingtonbotsoc.org.nz

Please send your article to:

Richard Herbert

e-mail herbert.r@extra.co.nz

Writing for the Bulletin

Do you have a botanical observation, anecdote, or insight that you could share with others in BotSoc? If so, please consider contributing it to the Wellington Botanical Society Bulletin. There is still plenty of space in the next issue. For details and assistance, contact Eleanor Burton at esmereldadoris93@gmail.com or 479 0497.

BotSoc on Facebook

<https://www.facebook.com/groups/322939557873243/>

This is the unofficial page for Wellington Botanical Society.

Wellington Botanical Society

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Annual subscription: ordinary \$35; country \$30; student \$10;
joint / group / family \$40.

Send your subscription to our bank account 020536 0017812 00.
Particulars: Name; Code: Membership type; Reference: amount of included donation.

New subscribers: Please complete form at the back of this newsletter.

Meetings

BotSoc meetings are usually held at 7.30 p.m., third Monday each month at Victoria University, WN – Lecture Theatre MYLT101, ground floor, Murphy Building, west side Kelburn Parade. Enter building 20 m down Kelburn Pde from pedestrian overbridge. No meetings December and January. Meetings are in person and usually available on Zoom.

Field trips

Day trips to locations in the Wellington region are usually held on the first Saturday of each month.

Extended excursions are usually held at New Year, and sometimes Easter and the first weekend in December.

DEADLINE FOR COPY FOR NEXT ISSUE – 25 August 2023

Articles may be edited for clarity and length

ATTENDING FIELD TRIPS AND MEETINGS POST LOCK-DOWN

Ideas please

We welcome your ideas about:

- places to visit on field trips, and potential leaders of those field trips.
- topics and speakers for evening meetings

Please send your ideas to Sunita Singh, PO Box 10 412, Wellington 6140, ph 387 9955.

Field trips—single day

A field trip, usually lasting 4–5 hours, is an opportunity to learn how to identify native plants and adventive plants (weeds). During the trip, experienced participants record the species seen. After it, a new or updated plant list will be produced for the site. This list will be published on the NZ Plant Conservation Network web site, and copies sent to trip participants, landowners and managers.

If you intend to join a field trip, PLEASE phone or e-mail the leader at least TWO DAYS beforehand, so that he / she can tell you of any changes and / or particular requirements. If you cannot ring or e-mail in advance, you are welcome to join on the day. If you e-mail your intention, the leader will send you a copy of the draft plant list, so that you can print it out to bring with you. If you do not have a printer, tell the leader. At the meeting place, the trip leader will ask you to write on the registration form your name, e-mail address (so that you can receive the updated plant list), and a phone number for the leader to ring your next-of-kin in an emergency.

Booking on field trips: Give the leader/s your cell-phone number so that we can contact you if you are running late.

What bring—clothing

Choose from the following items, according to the weather forecast, and your personal needs: sun hat, woollen or polyprop beanie or balaclava, waterproof / windproof raincoat (parka) and over-trousers, long-sleeved cotton shirt*, singlet*, thermal or woollen top, woollen jersey or fleece jacket, nylon shorts or trousers*, polyprop long-johns, underclothes, thick socks, boots or walking shoes, gloves / mittens.

*Note: In wet, cold weather, do not wear cotton shirts, singlets, t-shirts and trousers.

What to bring—gear and food

Day pack with lunch, biscuits or scroggin, hot or cold drink, spare clothing, personal first-aid kit, note-book, pen, pencil, cell-phone, wallet. Optional: walking pole, clip-board, map or park brochure, camera, binoculars, hand-lens, sun-block, sunglasses, insect repellent, whistle, toilet paper.

Field trips—overnight

Field trips usually last two days; at Easter, three days. We may be based at a camp-ground with or without cabins, or a rented house, or a private bach. The field trip may last 4–7 hours each day.

Overnight trip gear and food

Add to the day-trip gear, food and drink listed above: breakfast, fresh fruit, torch, spare bulb and batteries, candle, mug, plate, knife, fork, spoon, small towel, soap, tooth brush. If accommodation is not provided for, bring tent, fly, poles and

pegs, groundsheet, sleeping mat, sleeping bag, sleeping-bag liner and stuff bag. Optional: matches in waterproof container, water purification tablets, pocket knife, large plastic survival bag to line pack, gaiters. Note: dinners may be 'pot-luck'—ask the leader to suggest what your contribution might be.

Summer camps

These field trips last 7–10 days. Full details will appear in the newsletter.

Postponing field trips

The committee has decided to postpone field trips affected by bad weather or other reasons, rather than to cancel them. Generally, they will be postponed until the following Saturday. However, this will not always be possible. You must register with the trip leader and provide your phone number. If the trip is postponed you can then be contacted and told about rescheduling arrangements.

Health and safety

The leader will bring BotSoc's comprehensive first-aid kit, a topographic map, a cell-phone, and give a health and safety briefing.

The leader will describe the route, and approximate times for lunch, tea breaks and the end of the trip.

Bring your own first-aid kit. If you have an allergy or medical condition, bring your own anti-histamines and medications, tell the leader of any problems you may have, and how to deal with them.

Before the trip, if you have any doubts about your ability to keep up with the party, discuss this with the trip leader, who has the right to restrict attendance.

If you decide to leave a trip early, you must tell the leader, and be confident that you know your way back to the start. Enter your name on the 'register' under a wind-screen wiper on the leader's car, or other agreed place, to record your safe return.

Fitness and experience

Our field trips are mostly on established tracks, and at a leisurely pace, but vary considerably in the level of fitness and tramping experience required. Although our main focus is botanical, our programme sometimes offers trips which, in the pursuit of our botanical aims, are more strenuous than others. Although leaders take care to minimise risks, you participate at your own risk.

Transport

When the use of public transport is practical, details will appear in the newsletter.

We encourage the pooling of cars for trips. If you need a lift, tell the trip leader.

Passengers: Pay your driver your share of the running costs. We suggest 10c per km / passenger. If a trip uses the inter-island ferry, pay your share of the ferry fare. If you change cars mid-trip, leave a written note for your driver, under a wind-screen wiper on her or his car, and check that your new driver adds you to her or his list.

Drivers: Ensure that you know the route to the start of the trip, and that you have a written list of your passengers. Zero the odometer at the start, and agree on a return time. Check from your list that all your passengers are in the car. Collect contributions towards transport costs.

Trip leaders

Draft a trip report for the newsletter, including a list of participants, then send it to the editor.

Other matters

If after your first BotSoc field trip, tell the leader if you think there is information newcomers would appreciate seeing about future trips, in the newsletter, on the web site, or on Wellington Glean Report.

If you would like to offer to lead a field trip, or be a deputy leader on a field trip, contact our programme organiser, Sunita Singh, sunita@actrix.co.nz

Meetings

Public transport to meetings

The following bus services stop on Kelburn Parade outside Victoria University's Murphy Building Lecture Theatre M101:

TO MEETINGS

No. 18e Miramar: 7.05 p.m. from Karori Park, 7.21 p.m. @ VUW.

No. 18e Karori: 7.00 p.m. from Miramar – Darlington Rd, 7.43 p.m. @ VUW, or 6.00 p.m. from Miramar, 6.43 p.m. @ VUW.

No. 21 Courtenay Place: 7.01 p.m. from Karori Mall – Beauchamp St, 7.13 p.m. @ VUW.

No. 21 Wrights Hill: 7.00 p.m. from Courtenay Place – Stop A, 7.08 p.m. @ VUW.

No. 22 Mairangi: 7 p.m. from Wellington Station – Stop C, 7.08 p.m. @ VUW.

No. 22 Wellington Station: 7.02 p.m. from Norwich Street, Wilton, 7.17 p.m. @ VUW.

Cable Car: 00, 10, 20, 30, 40, 50 minutes past the hour from Lambton Quay terminus to Salamanca Station. Ten-minute walk to Murphy Building lecture theatre M101 at VUW.

FROM MEETINGS

No. 18e Miramar: 8.05 p.m. is the latest bus from VUW, so catch a no. 21 or No. 22 to CBD—see nos. 21 and 22 below—then a no. 2 to Miramar/Seatoun.

No. 21 Courtenay Place: 9.13 p.m. or 10.13 p.m. from VUW.

No. 22 Wellington Station: 9.38 p.m. or 10.38 p.m. from VUW.

Cable Car: No service after 8 p.m.

For further information ring Metlink, 0800 801-700.

NOTICES

Awards and Grants

6 September. Jubilee Award 2023

The Wellington Botanical Society invites applications for an Award of up to \$2,600 to encourage and assist applicants to increase knowledge of New Zealand's indigenous flora, and to commemorate the Society's Jubilee in 1989. Applications sought by **6 September**. Please see full details elsewhere in this newsletter.

6 September. Wellington Botanical Society Grant to Graduate Students

Each year the Wellington Botanical Society provides small grants to assist post-graduate students in the VUW School of Biological Sciences.

These grants can be used for travel, materials and other costs related to research projects undertaken as part of the course of study. Grants to any one student will normally be not more than \$1200.

Applications sought by **6 September**. Please see full details elsewhere in this newsletter.

Submissions called for

31 May. Regional biodiversity framework. 'Kaipupuri Taonga ki te Ao Whānui' / 'The Taonga that we Stand for Everywhere, with Everyone'. The proposed framework for te taiao in the Wellington region is also known as 'The Taonga that we Stand for Everywhere, with Everyone'. BotSoc President Frances Forsyth and Dr Paul Blaschke are on Greater Wellington Regional Council's working group that's been developing this call to change how we care for our regional natural treasures. The group is called *Mauri Tūhono ki te Upoko o te Ika – Weaving nature's vision for the Wellington region*.

The framework is about more than biodiversity. It sets a

vision and calls for some big changes in how we value and care for nature in our region. It is complementary with the regional Whaitua work on catchment management. The group wants people to comment on the proposed version. Read the framework – <https://maurituhono.org.nz/>. You can comment using the online form or any other way you want. You can also sign up directly to the mailing list to stay informed.

Events

2nd Saturday each month, except January. Ōtari-Wilton's Bush – Plant Care. **Meet:** Te Marae o Tāne Visitor Centre, 160 Wilton Rd, Wilton at 9:00 a.m. Bus: No. 14 Wilton bus, Ct Pl 8.28, Molesworth St 8.36, alight Warwick St. **Planting:** winter months. **Weed clearance:** other months.

- *Wilbur Dovey. Landline 499 1044. Mobile 027 499 1044.*

Looking for volunteers

On 8 November 2022 the Trelissick Park Group had its 200th meeting. The Group has been restoring Trelissick Park, Ngaio Gorge, to a native bush wilderness since 1991, one of the first such groups.

The park lies in the valley between Ngaio/Crofton Downs and Wadestown at the lower end of the Kaiwharawhara Stream catchment and gets the worst of everything. It has been a long battle with weeds, rubbish, slips, washouts, floods, pollution and pest animals. But the rewards of seeing the native plantings flourishing and visitors enjoying the park are great.

The Group seeks more volunteers to come to our bi-monthly working bees or to help in other ways – see Trelissick Park Group or contact trelissickparkgroup@gmail.com.

Peter Reimann

TRIPS & EVENING MEETINGS

The following programme IS SUBJECT TO CHANGE. If you wish to go on a field trip, PLEASE help with planning by giving the leader 2 days' notice before a day trip, MORE notice before weekend trips, and SEVERAL WEEKS' notice before the New Year's trip.

Non-members are welcome to come to our meetings and to join us on our field trips.

MAY – SEPTEMBER 2023

Saturday 6 May: Field Trip

Trelissick Park, Ngaio Gorge

Botanise this pre-European and regenerating native forest with plantings in Kaiwharawhara Stream's impressive valley. The forest has had pest-animal and pest-plant control for thirty years by the Trelissick Park Group*, WCC and GWRC. **Access:** Johnsonville Line train 9.32 a.m. from Wellington Station to Crofton Downs Station. **Meet:** Station car park 9.45 a.m. **Maps:** NZTopo50-BQ31 Wellington; WCC's Trelissick Park brochure. **Co-leaders:** Michele Dickson 04 972 2350, Julia Stace 04 385 4606. **Species list:** ask co-leaders to e-mail you a list. (* See article by Trelissick Park Group in this newsletter).

Monday 15 May: Evening meeting

Members' evening

Share a pre-meeting bring-your-own supper: a flask of hot drink, cup and a small plate of 'nibbles' to be followed by a few speakers—limit up to 10 minutes/person. For a gold-coin koha, or even 'folding money', buy one or more of the books we put on display to help build up the Jubilee Award Fund which supports research on NZ plants. Room opens at 7 p.m.

Bring:

- your botanical slides and photographs taken on BotSoc trips. Slides on a USB stick—limit 20/person;
- favourite botanical readings—your paintings;
- any spare botanical or other natural-history books you have and don't want any more to have them auctioned. Take them home if they don't sell;
- plant specimens to sell or to discuss;
- botanical art—paintings, drawings, ceramics—to add to a memorable evening.

Saturday 10 June: Field Trip

Reikorangi Road Bush D

NOTE: AFTER LABOUR WEEKEND

Visit a small example of riverside tawa-tītoki-kohekohe forest with emergent podocarps that is part of a series of fragments near the Waikanae River. A very small area of wetland present on the floodplain. The forest provides habitat for the regionally uncommon bellbird / korimako and also for maire tawake / *Syzygium maire*, kererū and common forest birds. Mostly protected by QEII Covenant and part of the Waikanae River Complex Key Native Ecosystem. **Map:** NZTopo50 BP32 Paraparaumu. **Train:** 8.14 a.m. train on Kāpiti Line from Wellington Station to Waikanae Station. **Meet:** 9.30 a.m. Waikanae Station north end car park from where we will travel in convoy sharing transport. **Co-leaders:** Andy McKay 027 555 653, Eleanor Burton 021 0588 324.

Saturday 17 June: Field trip workbee

Te Mārua Bush, Upper Hutt

In partnership with Greater Wellington, BotSoc has been committed since 1989 to do weed control and revegetation in this important mataī / tōtara / black maire remnant in Kaitoke Regional Park. Our biennial workbees must continue so that we keep ahead of re-invasion by weeds, particularly around the plantings, so *please* come to help with this important work. Bring weeding gear: gloves, kneeler and your favourite weeding tools, e.g., trowel, hand fork, grubber, loppers, pruning saw. There may also be some planting. **Meet:** 9.30 a.m. at Te Mārua Bush. (250 m north of Te Mārua Store and then left off SH2 for 50 m on Twin Lakes Rd, Kaitoke Reg. Pk. **Train:** 8.05 a.m. Hutt line train WN to Upper Hutt, then Bus no. 112 to Te Mārua terminus then walk 250 m along SH2 to Twin Lakes Rd site. **Maps:** NZTopo50-BP32 Paraparaumu; street map. **Co-leaders:** Glennis Sheppard 526 7450, Sue Millar 526 7440.

Monday 19 June: Evening meeting Ecological impacts of fire in Canada and Aotearoa New Zealand

Speaker: Dr Nicola Day, Senior Lecturer, Plant & Microbial Ecologist, VUW. The talk will cover the ecological impacts of fire on plants and soil fungi in boreal forests of Canada and the tussock grasslands of Aotearoa New Zealand.

Saturday 1 July: Field Trip

Moana Road – Korimako Track Loop, East Harbour Regional Park

A moderate loop walk starting at the Moana Rd route entrance, and leading up and along the ridgeline, before descending Korimako Track. The route through this diverse area of broadleaf/beechn forest would generally take 2 hours to complete, but as usual allow plenty of 'extra time, perhaps double, for botanising. **Map:** BQ32 Lower Hutt, or Northern Forest Trail Map available on GWRC website. **Meet:** Corner of Moana Road & Marine Drive at 9.45 a.m. **Bus:** No. 83 Eastbourne, to 'Days Bay at Moana Road' arriving at 9.41 a.m. **Co-leaders:** Laura Girvan West, phone 021 583 934, laurajgwest@gmail.com, Lynne Pomare 021 0549 699.

Monday 17 July: Evening meeting

Further insights into our fern diversity – what the new electronic Fern Flora has revealed

Speaker: Patrick Brownsey, Research Associate in Botany, Museum of New Zealand Te Papa Tongarewa. Patrick will outline the work that went into writing the *Flora of New Zealand: Ferns and Lycophytes*, what the online *Flora* offers, some of the new knowledge that has resulted, and what still remains to be done.

Saturday 5 August: Field Trip

Stratton Street-Korokoro Stream, Belmont Regional Park

Botanise regenerating streamside and ridge-top forest. Be prepared for some shallow stream crossings - boots recommended. **Meet:** 9.30 a.m. at Stratton Street entrance to Korokoro Stream. **Catch:** 8.05 a.m. Hutt Valley Line train from Wellington to Petone Station, then 8.31 a.m. no. 150 Kelson bus from Stop A to bus stop near Dowse Dr – Stratton St intersection: advise leaders if you want to be met there, or walk 2 km north to end of Stratton St. **Map:** NZTopo50-BQ32 Lower Hutt. Information: Brochure—*Belmont Regional Park*; Greater Wellington Regional Council web site www.gw.govt.nz. **Co-leaders:** Leon Perrie, leon.perrie@tepapa.govt.nz / 027 419 1378; Lara Shepherd, lara.shepherd@tepapa.govt.nz / 027 363 5854.

Saturday 21 August: Evening meeting

1. Annual General Meeting

2. The trail from Tony Druce to the power of Lichens

Speaker: Dr Allison Knight, Research Associate, Department of Botany, University of Otago. Allison first met Tony Druce on a Wellington BotSoc summer trip in the early 1990s. She was in awe of his willingness to share his exceptional botanical knowledge. On the same trip, Bill Malcolm reawakened her interest in lichens. Following Tony's example, Allison has shared her increasing knowledge of lichens in many ways. We now know that the lichen symbiosis is a powerful ecosystem in miniature. Some lichens are so resilient they can survive in outer space - others make antibiotics with great potential. Lichens have much to offer as sensitive indicators of pollution and of climate change. With the upcoming guide to urban lichens, your input could help document some of these changes.

Saturday 2 September: Field trip Introduction to Bryophytes, Tāne's Track, Remutaka Forest Park

The focus of the trip will be on Bryophytes but will also provide the opportunity to botanise more widely. Bring hand lens for up-close work. Meet: 9.30 a.m. at Tunnel Gully car park, off the end of Plateau Rd, Te Mārua. Train: 8.05 a.m. Hutt Line from Wellington to Upper Hutt then Bus no. 112 to Te Mārua terminus. Co-leaders: Leon Perrie, leon.perrie@tepapa.govt.nz / 027 419 1378; Lara Shepherd, lara.shepherd@tepapa.govt.nz / 027 363 5854. **Map:** Parkmap Rimutaka & Haurangi Forest Park, or NZTopo BP32, BP33 and BQ32.

PUBLICATIONS

- Parliamentary Commissioner for the Environment.**
 - Are we building harder, hotter cities? The vital importance of urban green spaces.
 - Estimates of environmental expenditure 2022/23
 - pce@parliament.govt.nz
- Open Space.** 103 11/22: Chair, Bruce Wills – highlights of 2022; Te Ana o Te Atua – The Cave of the Spirit, Waitomo – a QE2 covenant; celebrating registering the 5,000th Open Space Covenant; Annual Report; Lou Hagger—new Tararua Regional Representative; palaeoecology—study of pollen fossils in covenanted wetlands on East Coast; remembering Queen Elizabeth II; sustaining care for covenants; Brian Molloy—1930–2022; Jan Riddell—1955–2022; supporting stewardship in covenants—the Stephenson Fund & Auckland Council Fund; covenants registered 1.4.2022–30.9.2022 including in Carterton (3), Pirinoa, Kāpiti Coast (3), list of Regional Representatives.
 - qei.org.nz, info@qei.org.nz. Ph 04 472 6626. PO Box 3341, Wellington 6140.
- Te Papa blog.** From farm to forest – the transformation of Mana Island
- What's up DOC.** Monthly newsletter.
 - <https://www.doc.govt.nz/news/newsletters/whats-up-doc/>
- Heritage NZ – Pouhere Taonga.** Autumn 23: Kaimanawa horses – population ca. 300 on tussock grasslands on Kaimanawa Range, central North Island; etc.
 - heritage.org.nz
- April stamp issue.** Four stamps featuring native fauna & flora to mark centenary of Forest & Bird Protection Society.
 - NZ Post outlets*
- Tō Tātou Rohe.** Bi-weekly Greater Wellington Regional Council newsletter.
 - comms@gw.govt.nz
- Chilean Needle Grass Ute Guide.** A6, spiral bound, 30 p, colour—re nasella tussock.
- A guide to freshwater pest plants of the Wellington region.** A5 50 p, colour illustrations.
 - www.gw.govt.nz/biosecurity, pest.plants@gw.govt.nz, ph 0800 496 734.
- NZ Plant Conservation Network.** Hauropi whakahou ki Aotearoa – Restoration Ecology in NZ. NZPCN Biennial Conference, Queenstown 4–7.12, 2022.
 - www.nzpcn.org.nz
- Glean Report.** Upcoming science and knowledge events in Wellington.
 - <https://www.gleanreport.com/wellington/>

**Help raise funds for BotSoc's Jubilee Award Fund –
bring named seedlings/cuttings for sale at each evening meeting**

10. **NZ Botanical Society Newsletter.** 12/22: *Sophora fulvida*; President's speech at presentation of Allan Mere to Dr Carol West; news from regional botanical societies; *Gastionella chaerophylla*—new to Auckland; identification of NZ's small-leaved *Hydrocotyle* species; *Fuchsia fulgens*—a new naturalised plant in NZ; Murdoch Riley 1927–2022; John Renwick 1860–1936; Redwood Bush, TAWA by Gilbert Roper—160 p, A4, colour illustrations (see WN BotSoc December 2022 newsletter).
• www.nzbotanicalsociety.org.nz
11. **Auckland Botanical Society.** Newsheet 4.23: genetics of *Strebilus banksii*; reduced fruit production in tawa; *Nature in the City*—book launch; NZ Native Forest Restoration Trust; 2023 AGM; etc.
• aucklandbotanicalsociety@gmail.com PO Box 266391, Epsom, Auckland
- 12a. **Canterbury Botanical Society newsletter.** No. 4 4/22
- 12b. **Canterbury Botanical Society.** Journal 53 2022: Information re CBS; Viscount Bledisloe & CBS trophies; ecological values & cultural significance—should they be combined?—an opinion piece; early colonisation of slips on Hinewai Reserve, Banks Peninsula; braided river berm transition, a climate resilience project; monitoring native regeneration after frilling of macrocarpa plantations at Waipuna Bush, Banks Peninsula, 2017–2022; an observation of *Aciphylla aurea* recovery following the exclusion of lagomorphs in the Canterbury High Country; forty-two years of wild gardening; *Solanum villosum* in NZ; *Carex kirkii* var. *elatio* KùK (Cyperaceae), a grass-like and little known sedge from the South Island; additions to *Plant Life on Banks Peninsula*; CBS Sixty-ninth Annual Report June 2021–May 2022.
• <http://www.canterburybotanicalsociety.org.nz/>
13. **Nelson Botanical Society: Quarterly newsletter.** Autumn 23.
• nelsonbotanicalsociety@gmail.com.
14. **Forest & Bird.** 387 Autumn 23. Celebrating F&B's first century; hope for ending new mining on conservation land; restoring wetlands; kauri in Waikato; restoring Ngaruroro River; Canterbury Plains *Craspedia diversicolor* saved from extinction; impacts of forestry slash; restoring mana of Lake Rotoiti's scenic reserves; global "peace pact" for nature signed by ca. 190 countries including NZ; plague skinks; the degrowth revolution; etc.
• www.forestandbird.org.nz
15. **Friends of Baring Head.**
• pwarren@doc.govt.nz
16. **Gorge Gazette: 3/23.** News re Trelissick Park & Ngaio Gorge. *Note:* Wellington BotSoc's Saturday 6 May field trip is to Trelissick Park—see Programme section page 4.
• www.trelissickparkgroup.com & Facebook
17. **Native Forest Restoration Trust.** 73, Autumn 23.
• admin@nfrt.org.nz
18. **Backcountry.** 231, 3.23: Willow-Jean Prime—new Minister of Conservation; Te Urewera management (p 4 & pp 18–23; West Coast Stewardship Land Section 62 review (p 5 & pp 30–38); threat of wilding pines to our backcountry; zero carbon dreams; wild rivers; backcountry public access; etc.
• daniilo.hegg@fmc.org.nz ph 027 339 269 <https://fmc.org.nz/>
19. **Moths & Butterflies NZ Trust.** Quarterly newsletter.
• <https://nzbutterflies.org.nz> jacqui@nzbutterflies.org.nz

Hazel Murphy 1938–2023

We are sad to report Hazel's recent death. A long-term member, in recent years she sometimes walked to our evening meetings from her home on The Terrace, then when we began Zooming our meetings she would ask her son to set up the zoom link so she could be involved that way.

The committee

Wellington Botanical Society Grant to Graduate Students

Each year the Wellington Botanical Society provides small grants to assist post-graduate student in the VUW School of Biological Sciences.

These grants can be used for travel, materials and other costs related to research projects undertaken as part of the course of study. Grants to any one student will normally be not more than \$1200.

Application should be made initially through your supervisor to Nicola Nelson by **6 September 2023**.

Applications should be brief and to the point. (Say two A4 pages).

They should state:

- Your name and email address
- Your current education qualifications.
- The course of study being undertaken.
- The nature and aim of the research project.
- The name of your supervisor for this project
- The budget for this project.
- The expenses that the grant is proposed to cover.

You will be advised of the results of your application by **6 October 2023**.

Grants will be made through the Research Trust of Victoria University of Wellington.

Names of successful applicants will be published in the Society's newsletter.

It is condition of the grant that you make a short presentation to the Society on your project and / or provide a one-page summary on the nature and results from the project to be included in the Society's newsletter or bulletin.

Eleanor Burton

The small print

1. Grants will normally be to post graduate students. Consideration may be given to applications by undergraduates where the supervisor considers that there is a special case to be made because the nature of the project is similar to that undertaken by graduate students.
2. Priority will be given to projects involving native New Zealand vascular plants and cryptogams. Consideration may be given to those projects involving other vegetation. With the anticipated competition and limited funds it is unlikely that applications for projects involving algae, fungi and coral would be successful.
3. The primary purpose of the grant is to cover field expenses – transport and accommodation but not rations. Financial assistance towards the cost of chemicals and chemical and DNA analysis will be entertained. The Society is reluctant to fund capital items but will consider applications for these.
4. Applications for grants made after the closing date may be entertained if the Society has not already allocated the funds available for the Student Grant. Priority will be given to applications received before the close-off date.
5. The funds available are limited and priority will be given to those applications and those expenditures that agree with the main criteria set out above and are most in line with the aims of the Wellington Botanical Society.

Jubilee Award 2023

Applications sought by **6 September**

The Wellington Botanical Society invites applications for an Award of up to \$2,600 to encourage and assist applicants to increase knowledge of New Zealand's indigenous flora, and to commemorate the Society's Jubilee in 1989.

Purpose of the award

The Award is open to anyone working in New Zealand. It will be granted for: fieldwork; artistic endeavour; publication; research; propagation or cultivation of NZ native plants for educational purposes and/or other studies which promote the better understanding of NZ's indigenous flora and vegetation. The interpretation of these conditions will be flexible, except that the main criterion will be the furtherance of knowledge or promotion of the intrinsic value of NZ's indigenous flora and vegetation. The Award may be used to defray costs such as travel, accommodation, materials or publication.

Applications for the Award

Applications should be made in typescript to: Secretary, Wellington Botanical Society, PO Box 10 412, Wellington 6140, or by e-mail to esmeraldadoris93@gmail.com, by 6 September 2023.

There is no prescribed application form, but the following must be provided:

1. the applicant's name,
2. postal address, telephone number and e-mail address.
3. any relevant position held
4. a summary statement of the applicant's accomplishments in the field of botany—no more than one page
5. an outline and timetable for the proposed project for which the Award is sought
6. a proposed budget for the project

Selection

The Award will be made to one or more applicants selected by a subcommittee nominated by the general committee of Wellington Botanical Society. Award(s) will be made and applicants informed of the results in writing, by 6 October 2023.

Successful applicants will be required to provide, at an agreed time, a short report on what they have achieved, and an account of their expenditure of Award funds. The names of the Award recipients, the value of the Award(s), and a synopsis of the project(s) will be published in the Annual Report of Wellington Botanical Society.

Eleanor Burton

Percy Scenic Reserve News

On 2 March John Van den Hoeven and I gave a talk in Christchurch to the NZ Alpine Gardening Society about Percy Scenic Reserve and in particular the alpine collection. This described its history, how we collect our plants, plant propagation and maintenance. The talk proved to be popular with our audience. On 3 March we visited some of the members' gardens and the Christchurch Botanical Garden. We visited some outstanding gardens.

On 4 and 5 March we went on our annual seed / cuttings material / divisions collection trip. We went to Mt Hutt on 4 March. The weather wasn't great with light rain all day and low cloud, so not much of a view. As usual the biodiversity was amazing - it's inspirational to see the plants we grow at Percy Reserve in their natural habitat. For some reason there didn't

seem to be much seed available, but we did collect some, plus some cuttings material and small divisions. These included *Ranunculus crithmifolius* and *Celmisia spectabilis* var. *magnifica*. On 5 March we went to Foggy Peak. The weather was even worse with heavy rain. We still managed to collect some seed, although again there was not much available. We also collected some cuttings material and small divisions. Among these were *Geum cockaynei* and *Kelleria viscosa*.

We and Ōtari-Wilton's Bush received some seed of *Plantago aucklandica* and *P. triantha* from Dr Heidi Meudt from Te Papa, who is a *Myosotis* expert. She collected them on a recent trip to Auckland Island for us to sow and grow on.

We have finished potting-on our propagated plants from the last two years. Some will be planted out this winter or added to the alpine collection - the rest will be grown on for another year. We are now about to start potting up our seedlings and cuttings from our trays. Everything is doing very well in the new houses—we are finding they stay more weed-free and pest-free in there—they also flower better.

Cliff Keilby, Gardener

QEII National Trust update

QEII National Trust is an independent charitable trust that partners with private landowners to protect natural and cultural heritage sites on their land. Landowners retain ownership of their property and special areas are protected with legally binding agreements called covenants, which remain on the land title forever.

As of March 2023, QEII has a total of 5,071 registered covenants protecting 183,111 hectares throughout New Zealand. There are 376 Open Space Covenants registered, protecting 6,468 hectares in the Greater Wellington region. The largest registered covenant in the Greater Wellington region is 824 hectares and the average size is 17 hectares.

New covenants in the Wellington region

Woodward and Forster

2.5 hectares—Korokoro, Lower Hutt

Registered in February 2023



Named Puketiroiro by the landowners, this newly registered covenant protects regenerating secondary forest on the outskirts of a residential area on Titiro Moana Rd. The block consists of advanced native regenerating forest typical of the area with a closed canopy of mainly māhoe, five-finger and māpou. The understorey contains a diverse assemblage of indigenous forest species including ground ferns and tree ferns, kawakawa, rātā, hangehange and rangiora.

The covenant will allow for public access, with a well-formed walking track and seating for the enjoyment of locals and visitors. There are plans for a lookout and signage to be erected to inform visitors of the values protected and the directions will soon be added to the 'Places to Visit' page on the QEII website.

Jarvis

11.3 hectares—Moonshine Valley, Upper Hutt
Approved in December 2022



This covenant protects modified secondary māhoe, putaputawētā and kāmahī forest, with modified primary black beech forest; and contains elements of the original forest cover, including kiekie and red and black beech, as well as white rātā / akatea. The covenant also protects streams with significant waterfalls and pools within the Moonshine Valley catchment, feeding into Te Awa Kairangi/Hutt River.

QEII's contribution to new covenants

QEII contributes to fencing and initial establishment costs of new voluntary covenants. In most cases, QEII will share fencing costs of standard stock-proof fencing equally with the landowner. Third-party funding may be available in some cases, often from local or regional councils. Each new covenant qualifies for an establishment grant of between \$500-\$5,000, to be used for covenant enhancement which could include weed and pest management or plants for revegetation. Maintenance of the covenant area and fences are at the landowner's cost.

Become a member of QEII

Learn more about QEII's work by joining a passionate group of over 5,000 members. An individual membership is just \$30. You get two copies of QEII's Open Space magazine a year, plus other perks. Join online and help to encourage conservation on private land: qeii.org.nz/membership

Jamie Pearson—Land Protection Advisor
Becky Harris—Team Leader Land Protection

Kiss of life for rare dwarf mistletoe species

A naturally uncommon mistletoe species that grows only in a handful of spots across the Kāpiti Coast has been given a kiss of life thanks to a decade of work by a local biodiversity champion.

Rhys Mills, Reserve Supervisor, Ngā Manu Nature Reserve, has spent the last ten summers painstakingly harvesting locally endangered *Korthalsella salicornioides* seeds, one of eight species of mistletoe found in Aotearoa New Zealand.

"Dwarf mistletoe is what we call a hemiparasite which means it can produce some of its own nourishment through photosynthesis but it needs to draw additional resources from a healthy host—mānuka in this case—for survival," says Mills.

"We're seeing incredibly heightened groundwater levels across the district that are effectively drowning two of the three main mānuka habitats where you could find mistletoe growing naturally. It's an all-out effort to get as much seed out as possible now."

Unfortunately, Mills' ability to collect seeds this year was hampered by a hand injury, so he called on Kāpiti Coast District Council for some help.

"Rhys has really been an unsung hero in the conservation of this threatened species," says Andy McKay Team Leader Environment and Ecological for Council.

"We've been more than happy to help with harvesting this year at ecological sites in Waikanae Park, which has dying mānuka currently sitting in a metre of water," says Mr McKay.

Collecting seeds isn't as simple or easy as it sounds, however. This mistletoe sheds its seeds explosively, similar to a mushroom shedding spores. The seeds travel between 60 to 100 cm from the plant into the surrounding canopy.

"We're not sure what the release trigger is but we know that it generally happens in February for about four weeks. That means we need our sites prepped, ladders in place and manpower on standby by the end of January," says Mills.

"The seeds are tiny so we set traps of fine mesh curtain secured by cable ties over each plant that catch expulsions. We need to check the cloth every 24 hours and when we find seeds, we use a slushy straw to gently scrape them off into an old pill canister.

"To help the seeds stick to a new host, they are ejected with a gelatinous substance that dries on the cloth, so we dampen it to help remove them, then sow onto new hosts in a safer ecosystem. We spray them with a 10% solution of PVA glue and water to reduce transpiration."



Korthalsella salicornioides.

Mills says that over the years he has experimented with locations, including a successful planting programme at Ngā Manu Nature Reserve, Ngarara Rd, Waikanae.

"Dwarf mistletoe needs a dense canopy habitat of either kānuka or mānuka so that the seeds can spread but we don't have that at the remaining sites in Kāpiti anymore. Our species prefers mānuka which has only a 20-year lifespan so I'm now trialling seeds on kānuka as it has a lifespan of up to 120 years," says Mills.

"Humidity is important for success, too. Seeds take better by open water so I think if we can do some planting on the edge of the wetlands in Waikanae Park, we'll have a good shot at reintroducing dwarf mistletoe back to the area in the future – but it will be years away."

So, after countless hours, year upon year, dedicated to saving a tiny exploding native parasite, has it all been worth it? Mills thinks so.

"Native mistletoe is extremely overlooked and gets a bad rap as a parasite but we have to remember that not all parasites are bad," says Mills.

"So many of the modern and traditional medicines we rely on originate from compounds found in plants. What if there is something that could be important in mistletoe? I think it's worth saving. If we lose it, it's gone forever."

Mills celebrated 30 years of tenure at Ngā Manu Nature Reserve in February, a huge achievement and testimony of his dedication to conservation work in Kāpiti.

Kāpiti Coast District Council

TRIP REPORTS

21–28 January 2023: The Catlins, Otago

Twenty-nine BotSocers gathered for six days of field trips in the Catlins. We were based at Tautuku Outdoor Education Centre. Surrounded by the bush of the William King Scenic Reserve, the camp has four large dorms and several staff sleeping rooms. A few people camped outside. We were remarkably lucky with the weather—a couple of overcast days, one heavy shower and the rest were beautifully fine. A shuttle transported several people from Dunedin Airport to the camp, but once there we had enough vehicles to car-pool to the field trips so no need for a rental van.

Our field trips covered a range of ecosystems and plant communities, including beaches, coastal turfs, lowland and coastal bush and estuaries. For more details, refer to the individual trip reports below.

A particular highlight was three students who joined us, supported by funding from the BotSoc Committee. Very eager to learn, they soaked up information all week.

Special mention is due to our caterer, Elizabeth Benn, who produced the most amazing dinners and even better desserts.

Participants: John Barnett, Paul Bell-Butler, Ellen Blake, Eleanor Burton, Robyn Ching, Katrijn De Bock, Michele Dickson, Gael Donaghy, Patrick Enright, Jenny Fraser, Julia Fraser, Ken Fraser, Laura Girvan West, Ann Graeme, Barbara Hammonds, Margaret Herbert, Richard Herbert, Chris Horne, Ling Hu, Stuart Hudson, Megan Ireland, Graeme Jane, Kate Jordan, Tom Mayo, Pascale Michel, Owen Spearpoint, Marlene Ware, Karen Whitton, Stephen Whitton.

Camp sub-committee: Tom Mayo, Megan Ireland and Kate Jordan

Collection permits

Before the trip Eleanor Burton and I were fortunate enough to get a DOC collection permit for many of the sites we were going to. We were given permission for low-impact plant collection for cuttings/seed to grow on in our collections at Ōtari Native Botanic Garden, Wellington. The collection permit covered several sites we visited e.g., Waipapa Point, Nugget Point and Papatowai. We had a ‘wish list’ with species such as *Celmisia lindsayi* and *Myosotis rakiura*. Some of the plants on the wish list we had grown at Ōtari previously but are there no longer, e.g.,

Myosotis rakiura and others were new such as *Puccinellia stricta* and *Oxybasis ambigua*. So with our permit, wish list, the Catlins and a group of hungry botanists the hunt was on.

We had a successful effort with our being able to safely—for people and plants—collect many species on our list. We would also like to thank everyone over the week for pointing out plants and helping us reach plants!

The cuttings are on our cuttings bench with under-heating and an automated misting unit. They are growing well. When they are big enough, they will be transplanted into the garden. We have processed the seed.

Where possible, our plants at Ōtari are wild-collected with records of who, when and where they were collected. These date back to 1927: *Agathis australis* / kauri.

We track provenance carefully—they are potentially useful for present and future conservation and research projects. Researchers use the Ōtari collections—it can save them time and money spent on collecting trips if they can get the plant material from us. This preserves the wild populations.

BotSoc summer camp is a great opportunity for plant collection but more importantly visiting the specific area and learning from the experts and like-minded people!

Megan Ireland
Pouarataki Ōtari | Team Leader
Ōtari Native Botanic Garden and Wilton’s
Bush Reserve
Ngā Māra o Poneke | Wellington Gardens
Papa Tākaro Hākinakina | Parks, Sport and
Recreation
Mi Heke Kī Poneke | Wellington City
Council

22.1.23 Catlins River Walk

After some mild confusion due to out-of-date maps and absent signage, friendly locals and some solid teamwork enabled our convoy to reach the campground at the head of the track by 10 a.m. The weather was ideal for botanising, overcast but not too cold. Owen Spearpoint and Pascale Michel were our ‘mentors’ for the day and led a group of those newer to botany while the rest embarked straight up the trail (Fig. 1).

Amongst the alder / *Alnus glutinosa* covering the river’s edge, our first stop



Figure 1. Keen BotSocers at the start of the track—walking times are very much a rough guide...

was to puzzle over the highly branched galls abundant on silver beech / *Lophozonia menziesii*. Later research revealed their cause—*Cymoptus waltheri*, a native mite that creates the galls as shelter (Martin, 2019). We spent some time in the scrub discussing the differences between *Coprosma areolata* and *C. rotundifolia* (I find the long black hairs on *C. rotundifolia*’s branchlets a very useful character), and examined a few different moss species that were growing together—*Sciadocladus* sp., *Canalohypopterygium tamariscinum*, *Thuidium sparsum*.

After this we entered the forest proper. The entire canopy comprised a thick cover of silver beech, with the understorey a baffling array of small-leaved shrubs including *Coprosma areolata*, *C. colensoi*, *C. dumosa*, *C. linariifolia*, *C. propinqua* and *C. rotundifolia*. We were struck, however, by the preponderance of unpalatable species. Deer had clearly had an impact on the forest composition and hard ferns (family Blechnaceae) and tree ferns (Cyatheaceae, Dicksoniaceae) dominated many areas. Always spectacular, impressive thickets of peretao / *Austroblechnum colensoi* stood out on small waterfalls and in shady seeps by the path overhanging thick carpets of moisture-loving bryophytes e.g., *Fissidens rigidulus*, *Thamnobryum pandum*, *Monoclea forsteri*.

Herbaceous growth on accumulated sediment on the rocky riverbanks provided plenty of entertainment, hosting a diverse array of rheophytes including the tiny but fascinating *Glossostigma elatinoides* (Fig. 2). The style of this plant’s flowers is curled over to cover the anthers, but when disturbed by an insect or a fine twig, retracts to expose the pollen. This is thought to prevent self-fertilisation and promote out-crossing facilitated by visiting insects (Cheeseman, 1878).

Probably the botanical highlight of the trip was the discovery of a potato orchid / *Gastrodia* sp. (Fig. 3). Debates



Figure 2. Pat, Graeme, and Eleanor examine tiny plants on the streamside (inset: *Glossostigma elatinoides* (top), *Lagenophora strangulata* (middle), and *Cardamine hirsuta* (bottom)).



Figure 3. *Gastrodia molloyi* (inset: whole plant).

over the relative lengths of column and labellum, colour and tuberculate-ness ensued and were not resolved for the rest of the day! Upon our return to the camp, consultation with references provided a definitive determination—*G. molloyi*.

Though some were too enraptured by the forest to progress the entire length of the trail, those of us who did were rewarded with abundant pirita / *Peraxilla colensoi* nearing the end of its flowering period. Senescent flowers littered the track, inviting the walker to gaze upward to spot the elusive green bushes emerging from the beech trunks. Seen from a distance, they fizzed a bright red highlight against the deep green of the canopy. Though most didn't focus on the local avifauna, some

of the group were graced by the presence of the highly threatened mohua / *Mohoua ochrocephala*. We also heard kākāriki / *Cyanoramphus novaezelandiae novaezelandiae*, were followed by titipounamu / rifleman / *Acanthisitta chloris* and watched pīpī / brown creepers / *M. novaeseelandiae* along the way, amongst other species more familiar to the Wellingtonians.

All-in-all, an excellent first day! Plenty of botany, a stimulating walk and a fine meal awaiting us back at camp.

Literature cited

Cheeseman, T.F. 1878: Notes on the fertilization of *Glossostigma*. *TNZI* 10: 353–356.

23.1.2023 (a.m.) McLean Falls

A korimako serenade at the carpark was an auspicious start, before we were deep

in the grey scrub, looking for some of the unusual shrubs found on frost flats.

Highlights included one small plant of *Melicactus flexuosus* which, sadly, looked as if the track clearers had trimmed it back; *Pittosporum obcordatum*, also only one plant seen, but a mature one; *Raukawa anomalus* × *R. simplex*, with fruit; *Coprosma wallii* with the red layer under the bark, a single trunk and didymous fruit; and *Neomyrtus pedunculata* in flower.

Suddenly we were in the forest under a low canopy of *Pseudowintera colorata* and *Olearia ilicifolia* with *Coprosma rotundifolia* trees in the sub-canopy. A bit further in the canopy trees were *Fuchsia excorticata*, before it became mostly kāmahī / *Pterophylla racemosa*, and *Griselinia littoralis* with emergent rimu. Very tall whekī-ponga, *Dicksonia fibrosa*, were a feature in places. It was unfortunate to see ungulate browsed epicormic growth on one very large, leaning *G. littoralis*.



Deer browse up the sloping trunk of a very large *Griselinia littoralis*.

The forest was rich in filmy ferns, with at least twelve species seen. *Hymenophyllum pulcherrimum* caught the fancy of some, and we learnt to distinguish *H. rufescens* from *H. flabellatum*, as well as how to identify the two 'hen & chicken' ferns, with *Asplenium gracillimum* preferring drier ground and having the scales on the rachis drawn out to a fine point and *A. bulbiferum* preferring damper spots.

A highlight for me was getting my eye in for *Carex megalepis* with its surprisingly long glumes that stuck out 'like a hedgehog' (Pat's useful description). For others, it was seeing *Leptopteris superba* for the first time, along with plentiful *Blechnum colensoi* 'the beautiful fern'.

After the river flats it was onwards and upwards to the spectacular falls, and the fossilised sand ripple patterns on

some of the rock platforms at the upper, main falls. Along the way we admired the delicate looking lace fern *Leptolepia novae-zelandiae*.

Barbara Hammonds

23.1.2023 Tautuku Beach North End (p.m.)

No korimako here, but the roar of the sea, blue sky, blue sea and white breakers were a welcome contrast to the cool, overcast morning in the grey scrub and forest.

Some of us dawdled along the beach while others made a beeline for the ocean cliffs, our destination, to get as far along as we could before being caught by the incoming tide. The cliffs were worth the walk. Notable coastal plants included flowering *Linum monogynum* and *Hebe elliptica*, the ferns *Asplenium obtusatum* and *Blechnum banksii*, and the very blue grass *Poa astonii* with large drooping heads hanging down the cliff faces. A little less obvious from a distance but providing quite the ‘wow!’ factor close up was *Carex trifida* with its wide leaves and very big heads. The most exciting botanical moment was when Eleanor found the hybrid *Hebe* × *lewisii*.



Hebe × *lewisii*. Illustration: Eleanor Burton.

The rock platforms below the cliffs suited other plants, with the highlight being some fine specimens of *Rumex neglectus*. Among other plants we saw

were *Azorella hookeri* and the usual suspects, *Crassula moschata* and *Apium prostratum*.

While some were risking life and limb scrambling up the cliffs and leaping between rock platforms, Steven and Kat spied a relaxing foot spa opportunity and sat chatting away on either side of the lagoon, until ‘surprise!’ some bigger swells surrounded their entertainment area and threatened to overtop it, much to the amusement of those of us watching from afar.



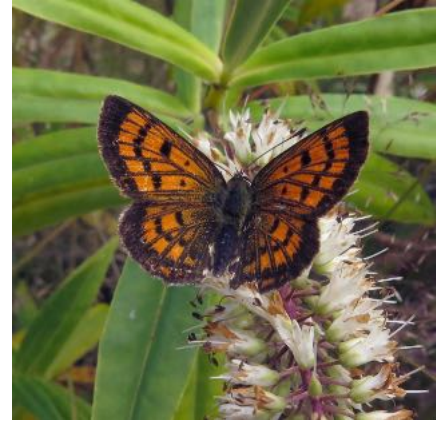
Kate, Paul, Graeme (showing evidence of extreme botany) with *Poa astonii* clumps above.

A final treat when we got back to the carpark were the copper butterflies enjoying the ragwort, grasses and hebes.

Barbara Hammonds

24.1.23 Lake Wilkie (a.m.)

This short walk through mixed rātākāmahi forest (and beech absent, in con-



Copper butterfly on Hebe by the carpark.

trast to the Catlins River Walk), turned up some interesting finds. We first walked along a terrace with a variety of tree ferns, shrubs and trees. *Cyathea smithii* with *Dicksonia squarrosa* and *D. fibrosa* were the dominant tree ferns, while ground vegetation was dominated by *Polystichum vestitum*, *Blechnum procerum* and *Leconopteris pustulatus*. Where sufficient light reached the forest floor there were a few herbs such as *Acaena novaezealandiae*, *Hydrocotyle heteromeria* and *Nertera depressa*.

As we descended towards the lake, we spotted a few different orchids. There were many *Corybas trilobus* with leaves still visible, but any seed heads were long gone. There was a lone *Thelymitra pulchella*, identified by its striped, mauve flower. In looking carefully at the *Thelymitra* we spotted *Caladenia* leaves growing nearby—probably *C. chlorostyla*. We also saw a single *Chiloglottis cornuta* with an elongated seed-head.

The boardwalk around the lake allowed us to look at some of the wetland vegetation—*Eleocharis acuta*, *Potamogeton* and what looked at first glance to be a *Myriophyllum*, but in fact was a sphagnum moss, growing in deep water. At this site a sharp-eyed botanist spotted a *Thelymitra cyanea* in full flower, despite the overcast conditions and cool 12° C.

Taputeranga Marine Reserve
 For any Conservation-related illegal activity,
 call the 24-hour conservation emergency helpline
DOC HOTline
0800 362 468
 For Search & Rescue—call 111
 All other enquiries to your local DOC office or visit our
 website www.govt.nz
 Department of Conservation
 Te Papa Atawhai
 New Zealand Government

Newsletter by e-mail?

When we did the ring-around for the Level 4 Zoom meeting, some people hadn't realised that they could receive the newsletter by e-mail. This is an option.

If you would like to receive your newsletter electronically, please contact Memberships Secretary, Helen White: helenamywhite@gmail.com

Ngā mihi,
 Kate Jordan, Secretary

24.1.23 (p.m.) Old Coach Rd – Possumers Track Loop, Papatowai

Our first mission here was to look at the estuary turf alongside the carpark by the river. This was dominated by *Selliera radicans* in full flower, *Samolus repens*, with a few flowers, *Triglochin striata* (in seed) and *Plantago coronopifolia*. It was interesting to see the *Salicornia quinqueflora* in flower here. Native grasses included *Puccinellia striata*, *Lachnagrostis glabra*, *Poa cita* and the southern toetoe, *Austroderia richardii*.

The Possumers Track turns off the Old Coach Rd close to the carpark then loops around through rātā-kāmahi forest with many emergent podocarps – mainly tōtara, rimu, miro and kahikitea. There were many small-leaved shrubs to keep us thinking—*Coprosma rhamnoides*, *C. rubra*, *C. areolata*, *C. colensoi* to name a few. *C. pedicellata* was a special feature in the damp dune hollows.

Being a dune slack area close to the coast, with exposure to the prevailing southerly wind off the sea, the habitat is moist most of the year, and the range of ferns attests to this. We saw ten different filmy ferns—mostly the common ones, but *Hymenophyllum bivalve* and *H. rufescens* are not so often recorded.

Because of this cold exposed habitat at the very south of the South Island, some species that we sometimes think of as alpine that can grow here for example *Coprosma colensoi*, *Helichrysum filicaule* and *Hymenophyllum rufescens*.

The Possumers Track emerges onto the beach so there was a beach walk to the Old Coach Road by the river mouth followed by a short walk back along that to complete the loop back to the carpark.

Gael Donaghy

25.1.23 Niagara Falls; Curio Bay; Slope Point; Waipapa Beach

Wednesday was a packed day at Summer Camp. Our first stop (of 4!) was at Niagara Falls, where we were met by Jesse Bythell from QEII National Trust. Jesse very generously joined us for the day, providing us with her excellent local knowledge and valuable commentary. We spent 40 minutes at Niagara Falls, botanising a small intact remnant of kōwhai / mānatu riparian forest along the nationally significant Waikawa River. Here we were able to see *Fuchsia perscandens*, as well as *F. excorticata* × *perscandens* hybrids. Highlights for the group were the impressive height of many kōwhai, and the view of Niagara Falls.

Our second stop was at Curio Bay.

Here the group had a quick smoko then spread out. Some decided to take a break from botanising to look in the rock pools and at the petrified forest. A large area of salt marsh turf out at the point kept others occupied. Highlights here were *Anisotome lyallii* / Lyall's carrot, and *Myosotis rakiura* / Stewart Island forget-me-not. We saw examples of both plants in flower, although most had developing seed. *Veronica elliptica* was also in flower and easily spotted here.

Next we stopped at Slope Point for lunch where the unusually calm conditions allowed us to watch native bees coming and going from their burrows while we ate. After lunch the group again dispersed to roam the coastal turfs and botanise along the shoreline where accessible. *Limosella lineata* / mudwort was in flower, and BotSoccers examining it were an odd site to other tourists visiting the point. *Puccinellia stricta*, *Leptinella dioica*, *Samolus repens* var. *repens* and *Selliera radicans* were all readily spotted along the slope.

Our fourth and final site for the day was Waipapa Beach. The short walk to the lighthouse took us past *Brachyglottis rotundifolia* / mutton-bird scrub. Closer to the carpark we saw the out-of-region *Brachyglottis greyi*. While walking to the lighthouse one group stopped to watch a kake / female sealion emerge from the sea and lazily chase a pair of tōrea / oystercatcher. Once at the lighthouse there was very easy access down to the beach, and it was great to see a swathe of *Gentianella saxosa* near the shoreline. Here BotSoccers found the turf to be the most diverse so far—we found *Myosotis brevis* with the occasional flower still present.

Laura Girvan West

27.1.23 Nugget Point; Purakaunui Falls; Long Point

For me this was the best day of the trip. Nugget Point is easily my favourite lighthouse—it is an astonishing piece of scenery. It also has *Celmisia lindsayi* growing all over it, though as it likes vertical south-facing cliffs as a habitat we didn't really see much of it until we got right to the end of the track, when it was everywhere. Other botanical highlights were *Korthalsella lindsayi*, *Ileostylus micranthus*, *Melicope simplex*, *Fuchsia perscandens*—seen in many places once we worked out what it looked like, and *Anisotome lyallii*. There was also a lot of wildlife, a huge range of sea birds, and many fur seals on the beaches all around the point. The interpretation for Nugget Point was beautiful, short poems with good

information.

Then we went to Purakaunui Falls, a short bush walk to a waterfall. Next to the waterfall was a wall of ferns and mosses. I counted four species of *Blechnum* and then stopped, but others were occupied with the bryophytes for much longer. On the way out we found an enormous vine of *Rubus cissoides* agg., which must have been 10 cm diameter. As there was still some afternoon left, a couple of car-loads of us went to Long Point. Long Point has personal significance for me as my great-great-grandfather (who was harbourmaster at Catlins River) was shipwrecked there. There is a memorial on Long Point Rd. Seeing we were there we walked down to the beach, finding on the way an erosion scar full of interesting plants, *Atriplex buchananii* and *Agrostis muscosa* among them. When we got down to the beach there was coastal turf of *Agrostis muscosa*, *Crassula moschata* and *Selliera radicans*, and cliff vegetation including *Anisotome lyallii* and *Celmisia lindsayi* again. There was also a hoiho. All a bit much really!

Eleanor Burton

27.1.23 Tautuku River margins

The last full day of our summer camp was greeted with intermittent rain which lasted all morning. Several BotSoccers participated in indoor activities—others explored nearby sites not yet visited during our stay. Five of us botanised Tautuku River margins further downstream towards the head of the estuary. The route we followed traversed a gradient of vegetation transitions from dry to wet between the main road and the river, starting from the LENZ Reserve forest, through mānuka bog to the riverbanks and estuary.

From the road we traversed a narrow band of beech/broadleaved-podocarp forest very similar to we had seen on the track to Tautuku Beach opposite the Lodge. After 10 m or so this changed to broadleaved-podocarp forest with a community of species more tolerant of less free-draining, wetter soils. The edge of this forest type then transitioned into a narrow fringe of mānuka / *Leptospermum scoparium* var. *scoparium*-dominated scrub, which separated the beech forest from the marshy flood plain and river margin. The ground under the mānuka was boggy with sparse shrubby vegetation. It was heavily trampled by deer. The mānuka scrub then transitioned into the estuary margin marsh habitat of small shrubs: *Myrsine divaricata*, *Coprosma*



(left) Tautuku river margin; (center) herb community on boggy/marshy ground along Tautuku river margins. Photos: Pascale Michel. (right) Tautuku estuary boardwalk. Photo: Owen Spearpoint.

propinqua and *C. rigida* on the higher ground and occasional mānuka; with a river margin of swamp flax / *Phormium tenax*, *Carex* and *Machaerina* spp. and oioi / *Apodasmia similis*. This vegetation was also heavily browsed and trampled by deer.

We recorded several herb species scattered throughout the boggy ground including *Hydrocotyle novae-zeelandiae* var. *novae-zeelandiae*, *H. heteromeria*, *Ranunculus reflexus*, *Plantago raoulii*, *P. triandra* and *P. major*, *Gonocarpus micranthus* subsp. *micranthus*, *Crassula sinclairii* and the exotic *Sagina procumbens*. We also recorded the fern *Blechnum penna-marina*, the exotic grass *Agrostis stolonifera*, the sedge *Carex appressa*, and the rush *Isolepis cernua* var. *cernua*. Nearing the estuary we saw that oioi becomes more dominant, covering large areas. The estuary and river margins are home to fern birds / mātātā which we heard and saw during our visit. Along with the riverside marsh turf communities, the highlight of this area was the unbroken succession of forest and estuary canopy cover; a very uncommon occurrence in New Zealand, making for picturesque scenery which at first glance looks pristine.

The same group of five then visited the Tautuku estuary board-walk track. This short track follows the old logging mill road to the historic mill site. It then proceeds across the flat to the scrub edge and the board-walk to the tidal river's edge and the mud flats. The forest in this area has been heavily logged and modified, but is now regenerating with the more mature trees up to 70 years old. The cut-over regenerating broadleaved-podocarp forest at the Tautuku board-walk track was dominated by kāmahi and mānuka. Along the main track to the estuary board-walk, we were delighted to see several patches of

Gastrodia molloyi still in full flower. We saw several other orchid species including *Corybas*, *Pterostylis* and *Thelymitra* and we were accompanied by the best bird songs and interactions we had on the trip. Again, the wetter margins of the forest were dominated by a narrow band of mānuka, on the estuary side of which we saw a narrow band of salt marsh ribbonwood / *Plagianthus divaricatus*. Amongst it, *Leptocophylla juniperina* subsp. *juniperina* was fruiting. The mānuka / saltmarsh ribbon wood transitioned abruptly into a monoculture of oioi / *Apodasmia similis* which continued all the way to the river/mudflat edge. From past visits, the oioi around the board-walk appears to

slowly recede over time, exposing the bare mud; possibly due to either the board-walk or climate change with the deposition of woody and vegetative debris.

Pascale Michel & Owen Spearpoint

DOC Wellington

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**Department of
Conservation**
Te Papa Atawhai

11–12 February 2023 Tora KNE and Timbrel Farm, Wairarapa

Saturday 11 February dawned fine and clear—a great day for a botanical foray to the east coast of the Wairarapa and Tora Station and KNE. However, with Cyclone Gabrielle approaching and possible heavy showers forecast for Sunday, we all had one eye on the weather. The Tora Station escarpment remnant is a relic of the tūtoki - ngaio forest that once dominated the forests of the Eastern Wairarapa coastline. Less than 3% of this forest type now remains in the region - nearly all of that remaining is highly degraded. One of the more representative relics of this forest type, it has been identified by Greater Wellington Regional Council as a Key Native Ecosystem and receives funding for pest animal and plant control as well as fencing for to exclude stock. It has also been covenanted with QE2 Trust by the landowners. The vegetation canopy is largely intact. A spring on the lower slopes where the steeper escarpment meets the basal screes is used as water supply by the houses below. Notable in the KNE are the groves of large karaka / *Corynocarpus laevigatus* trees and the presence of large whau / *Entelea arborescens*, an indication the area was, and maybe is, used by Māori. We were concerned at the lack of regrowth underneath the canopy of the karaka trees. The underlying basal rock of the forest is limestone. This was obvious at the site of the strongly flowing spring.

There is more than one Tora Bush on Tora Station. The site we visited is on the coastal escarpment, just south of the river mouth. We arrived Saturday morning, parking on the road side at 10.30 a.m. After a health and safety briefing our party walked across the paddock to the foot of the escarpment and the bush remnant. A highlight for some was the now unusual sight of a paddock dominated by ragwort / *Jacobaea vulgaris*. Once under the canopy at the foot of the escarpment the slopes quickly reached 30–40°. Some of the group climbed to the top of the escarpment at its north-eastern end, while Pascale, Owen, Sunita, Gavin, Ling, Chris and Jim botanised the scree and slopes along the foot of the escarpment. The forest floor was mostly very open on the screes, with a paucity of bryophytes, ferns, saplings and shrubs. Of interest were the remaining mature rewarewa / *Knightia excelsa*, tūtoki / *Alectryon excelsus* subsp. *excelsus* and ngaio / *Myoporum laetum*—originally the dominant forest canopy. Also of interest were the karaka and

whau, and the diversity of native ferns including *Adiantum cunninghamii*, nine species of *Asplenium*, three species of *Blechnum*, two species of *Cyathea* and *Polystichum*, plus *Hypolepis ambigua*, *Lastreopsis velutina*, *Lecanopteris pustulata* subsp. *pustulata*, *Paesia scaberula*, *Pellaea rotundifolia*, *Pakau pennigera*, *Pteridium esculentum*, *Pteris tremula* and *Pyrrhosia eleagnifolia*. Those who climbed to the top of the escarpment at the north-eastern end were rewarded by seeing speargrass / *Aciphylla squarrosa* var. *squarrosa* and flowering puatea / *Craspedia uniflora* var. *grandis*.

At 3.30pm we all reunited at the base of the south-eastern end of the escarpment and returned to the cars, briefly visiting the very weedy coastal wetlands en route. We camped that evening in the campground by the river. After a great supper we enjoyed conversations on a clear but slightly windy evening.

Participants: Eleanor Burton, Gavin Dench, Pat Enright, Jenny Fraser, Chris Horne, Ling Hu, Kate Jordan, Pascale Michel, Jim O'Malley, Mick Parsons, Sunita Singh, Owen Spearpoint (leader/scribe).



Sunday 12 February dawned overcast with very light drizzle starting just before we emerged for breakfast. All including Chris who had slept under the stars got just a little damp. After a short discussion a consensus was that we would take the opportunity to visit the coastal turfs of the Awhea Reserve administered by DOC. **Sunday part one.** This turned out to be an interesting diversion with seals to watch out for while botanising on hands and knees with hand lenses at very small turf species. We kept a keen eye out for *Isolepis basilaris*—national conservation status “Nationally Endangered”. The limestone turfs were dominated by tūtae kōau / *Apium prostratum* subsp. *prostratum* var. *filiforme*, māakoako / *Samolus repens* var. *repens*, ureure / *Salicornia quinqueflora* and remuremu / *Selliera radicans*. We had a great time botanising, photographing

and staying dry while the showers rolled past out to sea, however it was a bit windy. About 9.30 a.m. we departed back up Tora Road to Timbrel Farm.



Sunday part 2. After driving for about 40 minutes we arrived at Timbrel Farm in the eastern hills of the Ruamahanga catchment. We walked along the main access farm track past the old homestead and soon observed the beautiful form of a weeping elm. There were a few other unusual exotics. Just past the house on the valley floor was a great example of *Lophomyrtus obcordata* / rōhutu - its bark feeling characteristically cool compared with warm air temperature. A couple of hundred metres past the house the track starts to climb a spur through black beech forest. We spent time botanising the edge of the 4wd track among a good diversity of native flora. *Clematis forsteri*, *Adiantum cunninghamii*, *Euchiton* spp. and *Helichrysum filicaule* were some of the species of interest here. Above the beech forest remnant, we were again in shrubby pasture. The showers became heavier now around the middle of the day. We saw *Coprosma rubra* and *C. rigida* along the edge of the track. We had lunch between the showers under a black beech roughly halfway to the large stock pond further up the track. The track above the lunch spot went up a ridge on the right of which we saw a large earth flow. While still covered with vegetation the whole gully could be seen to be rippling and flexing. At the stock pond we saw a pair of dabchicks along with the aquatic native species *Potamogeton cheesemani* and *Myriophyllum propinquum*. At this point we headed out

along a shrubby ridge towards the river with abundant *Ozothamnus leptophyllus*. The ridge was good travel with views towards the river. On the terrace above the river we found a farm track led down to the river. This track was the most interesting botanically with a very rich flora including a multitude of herbs and ferns and was the highlight for Eleanor

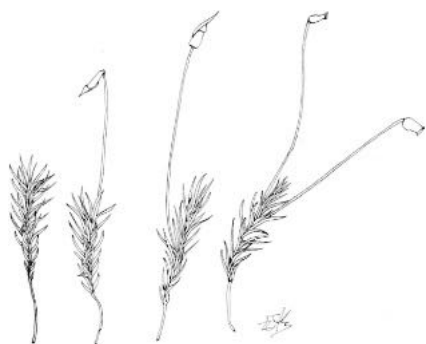
and me. The river itself was still interesting with many species so we spent time botanising the small ferns and bryophytes on the terrace banks. In dribs and drabs we walked slowly back to the cars after a very enjoyable and long day. Though the whole farm is grazed by cattle, the native flora appears to be coping.

Participants: Eleanor Burton, Gavin Dench, Jenny Fraser, Chris Horne, Ling Hu, Kate Jordan, Pascale Michel, Mick Parsons, Sunita Singh, Owen Spearpoint (Leader / scribe).

Saturday 4 March 2023: Korokoro Valley, Lower Hutt

The day dawned dreary but the BotSoc field trip to Belmont Regional Park went ahead nevertheless. Four BotSocers travelled by bike or public transport - the other seventeen drove or carpooled to the Oakleigh St, Maungaraki entrance to Belmont Regional Park, way up in the clouds.

We descended the northern half of the Otonga Loop Track, a well-formed gravel track which meanders gently down to Korokoro Dam. A cut bank on one side formed excellent moss habitat, with *Hymenodon pilifer*, *Hypnodendron arcuatum*, *Polytrichadelphus magellanicus* and many more. The bush was primarily tawa / *Beilschmiedia tawa*, kohekohe / *Didymocheton spectabilis*, with rewarewa / *Knightsia excelsa* and occasional rimu / *Dacrydium cupressinum* emergent. We saw an abundance of palatable species, possibly due to pest control.



Polytrichadelphus magellanicus. Illustration: Eleanor Burton.

We had lunch at the grassy area above the dam, still under a slight drizzle. Several people botanised the stream above the dam and found some concerning weeds, including beggars' ticks / *Bidens frondosa* and *Lagarosiphon major*. Leon collected Chilean rhubarb / *Gunnera tinctoria*, including a large seed head.

After lunch, we headed down the Korokoro Stream Track with the ambitious target of 45 minutes to reach the Cornish St carpark (spoiler – we didn't make it). The bank on the right of the track was another smorgasbord of mosses, with a few liverworts and ferns thrown in. Regenerating forest was

much younger here and weeds far more prevalent. Across the stream at several points there were large areas of montbretia / *Crocasmia ×crocasmiflora* and *Tradescantia fluminensis*. African clubmoss / *Selaginella kraussiana* occurred frequently alongside the track and there were some large plants of Himalaya honeysuckle / *Leycesteria formosa*. Near the bridge at the car park, we also found a young old man's beard / *Clematis vitalba*.

Participants: Paul Bell-Butler, Kim Broad, Eleanor Burton, Gillian Candler, Katrijn De Bock, Gavin Dench, Michele Dixon, Jenny Fraser, Julia Fraser, Ken Fraser, Chris Horne, Leon Perrie, Lynne Pomare, Robyn Procter, Dave Reynolds, Sunita Singh, Julia Stace, Shaun Thompson, Carol West.

Co-Leaders: Frances Forsyth, Kate Jordan.



Photo: Kate Jordan

Wellington Botanical Society

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