



From the President

Thank you for electing me President of Wellington Botanical Society. I might be the first president who isn't a professional botanist or ecologist! I'm an historian, but am very passionate about plants - particularly mosses at the moment. If we haven't met, please introduce yourself at a field trip or evening meeting and let me know your thoughts on BotSoc.

I'd like to thank Frances Forsyth for her work as president and for Mick Parsons for auditing the accounts.

This year's Tony Druce Memorial Lecture by Prof. Phil Garnock-Jones was an interesting deep dive into the natural history and sexual syndromes of New Zealand native plants with beautiful and detailed photography. I think everyone's looking forward to Phil's book on the subject being published next year!

There are limited places available for the upcoming summer camp to the Nelson Lakes National Park area, so please register promptly, using the registration form in this newsletter.

Kate Jordan, President
wellingtonbotsocpresident@gmail.com

New members

We welcome the following people who have joined BotSoc since we published a list of new members in our April 2023 newsletter:

Brittany Abels, Prakriti Bhatt, Joanna Buswell, Ben Carson, Lorraine Cook, Kahurangi (Blue) Cronin, Nikki Fraser, Sarah Goldberg, Anna-Kate Goodall, Deryn Hardie Boys, Tessa Johnstone, Kim Livingstone, Rachael Lockhart, Andrew MacDonald, Emma Palmer, Simon Reeve, Tessa Roberts, Charlie Tustin, Sophie Williams, Julia Wilson-Davey.

We are keen to welcome more people to the delights of botany via 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.

Steve and Karen Whitton, Membership

What on earth?

Do you know what this photo depicts? You can find the answer at the bottom of page 4. Give yourself an extra pat on the back if you could identify both the feature and the species. It will likely be easier for people viewing it in colour—perhaps this is an extra incentive to subscribe to the digital PDF version of the newsletter instead of the printed version.



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@xtra.co.nz](mailto:herbert.r@xtra.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 more details and assistance, contact Eleanor Burton at:

troggs@duck.com or 479 0497.

BotSoc on Facebook

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

This is the unofficial page for Wellington Botanical Society.

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 20m down Kelburn Pde from pedestrian overbridge. No meetings December and January.

Meetings are in person and usually available on Zoom at <https://us02web.zoom.us/j/89547154619?pwd=bE0zRXRWSXBBUkVoUjdPcElJNXIjUT09>.

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 – 20 NOVEMBER 2024

Articles may be edited for clarity and length

Wellington Botanical Society

Address:	PO Box 10 412, Wellington 6140	
Web site:	www.wellingtonbotsoc.org.nz	
President:	Kate Jordan	wellingtonbotsocpresident@gmail.com
Vice-Presidents:	Sunita Singh	sunitasingh@actrix.co.nz (also Programme Organiser)
	Eleanor Burton	
Secretary:	Laura Girvan West	wellingtonbotsocsecretary@gmail.com
Treasurer:	Paul Bell-Butler	wellingtonbotsoctreasurer@gmail.com
Membership Secretary:	Karen & Steve Whitton	wellingtonbotsocmembership@gmail.com
Auditor/Reviewer:	To be advised	
Submissions coordinator:	Vacant—volunteer sought—please contact Secretary	
Bulletin editor:	Eleanor Burton	479 0497
Newsletter editor:	Chris Horne	475 7025
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.		

ATTENDING FIELD TRIPS AND MEETINGS

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 rain-coat (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, notebook, pen, pencil, mobile phone, wallet. Optional: walking pole, clipboard, 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 campground 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 mobile 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 windscreen 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 windscreen 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.

When leading a field trip into a regional park please tell the park ranger beforehand.

Other matters

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 near Victoria University's Murphy Building Lecture Theatre M101:

TO MEETINGS

No. 18 Karori: 6.45 p.m. from Darlington Rd, Miramar, 7.17 p.m. @ VUW Stop A.

No. 18 Miramar: 6.51 p.m. from Allington Rd, Karori, 7.03 p.m. @ VUW Stop A.

No. 21 Courtenay Place: 7.02 p.m. from Karori Mall – Beauchamp St, Karori, 7.14 p.m. @ VUW Stop A.

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

No. 4 Mairangi: Strathmore Park 6.30 p.m., Courtenay Place 7.02, 7.22 p.m. @ VUW. Stop B.

No. 4 Strathmore Park: 6.50 p.m. from Norwich St, Wilton, 7.05 p.m. @ VUW. Stop A.

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

FROM MEETINGS

No. 4 Strathmore Park: VUW Stop A 8.45 p.m., 9.15 p.m. or 9.45 p.m.

No. 4 Mairangi: VUW Stop B 8.57 p.m. or 9.27 p.m.

No. 21 Courtenay Place: VUW Stop A 9.14 p.m. or 10.14 p.m.

No. 21 Wrights Hill: V.U.W. Stop B 9.38 p.m. or 10.38 p.m.

Cable Car: No service after 8 p.m.

Further information info@metlink.org.nz Metlink, 0800 801-700.

Zoom link for meetings

<https://us02web.zoom.us/j/89547154619?pwd=bE0zRXRWSXBBUkVoUjdPcEljNXIjUT09>

NOTICES

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.

Student scholarship

This year BotSoc is supporting three students to attend the Summer Camp.

Full details are:

- WBS to cover the deposit for the camp of \$490 for up to three students to attend the 2025 summer camp. If there is an additional payment needed at the end of the camp (generally no more than \$40), the student will need to cover it.
- The first students to apply will be offered the places.
- The recipients must cover their own costs (such as travel to, from and during the camp, and snacks), and make their own arrangement of getting to and from Camp.
- The recipients must be (or have been) enrolled at VUW, Massey University, Weltec, or be apprentices in 2024 or 2025.
- The recipients must be members of the Society.
- The recipients must be at least 18 years old to attend.

BotSoc first-aid kit

It is missing!

If you know where it is, please contact secretary@wellingtonbotsoc@gmail.com promptly. Thank you!

Letters to the editor

We would welcome your comments on any aspect of BotSoc's activities:

- places you would like to visit on field trips
- topics you would like to have covered in evening meetings
- topics you would like covered in BotSoc's Bulletin and Newsletter
- other matters of concern or interest to you.

Thank you,

The committee

Submissions writer sought

If you would like to consider being the person who drafts BotSoc's submissions, e.g., on city council or regional council draft management plans for public lands, or on DOC plans for Scenic Reserves, National Parks, on Significant Natural Area proposals or on the future of Stewardship Lands we would welcome the chance to discuss the role with you. Please contact us: secretary@wellingtonbotsoc@gmail.com.

Newsletter by e-mail?

If you would like to receive your newsletter electronically in PDF format, please contact Memberships Secretary, wellingtonbotsocmembership@gmail.com. The PDF newsletter includes hyperlinks to e-mail and website addresses, and colour images instead of the black-and-white images in the print version.

Ngā mihi, Laura Girvan West, Secretary

'What on earth?' revealed

Flowers of kareao / supplejack / *Ripogonum scandens*. What appear to be petals in these flowers are, in fact, the anthers which split open to release pollen.

Photos: Jeremy Rolfe.



FIELD 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.

SEPTEMBER–DECEMBER 2024 & JANUARY 2025

Monday 16 September: Evening Meeting Conservation genetics of *Syzygium maire* / swamp maire. How can a naturally widespread species remain adaptable when artificially fragmented?

Speaker: Colan Balkwill, PhD Researcher, will be discussing his PhD work on conserving the genetic diversity of a critically threatened New Zealand tree species, with thoughts on how to mitigate the effects of habitat fragmentation on adaptability of the species.

Saturday 5 October: Field trip Huntleigh Park, Crofton Downs and Korimako Track, Outer Green Belt

We'll botanise beside a branch of Korimako Stream, then along a track climbing through mature podocarp/broadleaf forest. See impressive matai, miro, rimu, tōtara, kahikatea, lancewood and numerous species of ferns and shrubs. Then botanise second-growth native forest along Korimako Track, Outer Green Belt. Finally we'll walk down Awarua St towards Awarua Station and Café Villa. Train back to Crofton Downs Station and city.

Meet: Crofton Downs Station 10 a.m. **Train:** Catch 9.32 a.m. train from WN Station to Crofton Downs Station.

Maps: NZTopo50-BQ31 W'gton; street map.

Leader: Michelle Dickson 022 635 0193 micheledickson21@gmail.com.

Monday 21 October: Evening Meeting

Presentations by students recipients of grants

NOTE: Venue – Lecture theatre SUMT 228. Access through glass doors from Beaglehole Courtyard and down flights of stairs.

1. Speaker: Rachael Lockhart. *Phenotypic plasticity of invasive hawkweeds under drought conditions in New Zealand grasslands*. I aimed to assess the plasticity in functional traits of *Pilosella officinarum* and *Hieracium lepidulum* populations in relation to colonisation history (invaded pre-1980, 1990s, or post-2000) and moisture conditions (precipitation). Using permanent long-term grassland sites monitored since the 1980s, I collected and measured functional traits of *Pilosella* ($n = 17$) and *Hieracium* ($n = 16$) populations established at different times, and over a precipitation gradient. To measure plasticity within populations in response to water availability, I also set up a common garden experiment using seeds collected from these field populations and grew them under two watering treatments: high-frequency and low-frequency. This research helps us to understand the mechanisms underpinning hawkweed trait variation and how this may affect their future spread.

2. Speaker: Riccardo Ciarle. *Re-evaluating the loss of divarication hypothesis on New Zealand's outlying islands*. The loss of divarication hypothesis predicts that plant species should lose divaricate-related traits after colonising New Zealand's outlying islands. Previous studies tested this hypothesis by assuming that ancestors of island endemics were always divaricate and that mainland sister species remained relatively unchanged over time. In this study, we used ancestral state reconstruction to test this assumption. Results show that loss of divarication, while supported, is not as widespread as previously thought.

3. Speaker: Joe Dillon. *Climate change and New Zealand orchids*. Climate change is set to drastically change the way we do conservation in Aotearoa. In my Masters I'm looking at native orchids and how they are affected by rising temperatures. I'll talk about what changes are in-store—the good, and the bad, and will show some preliminary results to that effect.

Saturday 2 November: Field trip

Khandallah Park

Khandallah Park is an important part of the Wellington Western Forests Key Native Ecosystem. Although most of the forest is regenerating kohekohe-māhoe-tawa forest, there is an area of about 10 hectares containing large pukatea and kohekohe which survived the worst of the burning. It has some large bryophyte patches and locally uncommon plants such as *Pseudowintera axillaris*, *Ascarina lucida*, *Mida salicifolia* and *Coprosma foetidissima*. There is also the possibility of spotting one of the *Powelliphanta* snails living there, descendants of snails transferred from near Levin in the 1940s, as well as a café to get a cuppa at the end of the trip. **Meet:** Khandallah Station, Station Rd at 9.20 a.m. or outside Khandallah Pool, Woodmancote St at 9.30 a.m. **Train:** Johnsonville Line train 9.02 a.m. from Wgtn Station arrives 9.17 a.m. **Maps:** NZTopo50-BQ31 W'gton; street map; Khandallah Park – WCC brochure. **Co-leaders:** Melanie Newfield melanienewfield@outlook.com) 0210 8355 915; Richard Grasse 022 077 87697 RichardGrasse@gmail.com.

Saturday 16 November: 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 matai / 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 connecting no. 112 Te Mārua bus to Te Mārua store—ring the leader to arrange to be met at Upper Hutt Station. **Maps:** NZTopo50-BP32 Paraparaumu; street map. **Co-leaders:** Glennis Sheppard 526 7450, Sue Millar 526 7440.

Monday 18 November: Evening Meeting

Working with plants

Speaker: Chris Ecroyd: Chris will give a few botanical highlights of his 37 years as herbarium curator at Scion in Rotorua. These include his research on our only fully parasitic native plant, *Dactylanthus taylorii* and short-tailed bats. Now retired to Nelson, he will also provide information on some of the more interesting plants to be found around Lake Rotoiti which the Society will visit in January, such as the aquatic fern, *Pilularia novae-hollandiae* and not too far away in the Red Hills *Nothofagus viretum*, the Red Hills penwiper and other ultramafic endemic plants.

Thursday 5 & Saturday 7 December: Evening walk

Rātā-viewing walk, Lower Hutt

A casual 3.5-km 2-hour stroll through suburban Lower Hutt to see flowering rātā and other native trees in the streets and gardens. The walk will begin and end at Woburn Station, so we encourage public transport use. **Meet:** Car park on east side of Woburn Station. The walk will be held as an after-work event on Thursday 5 December. Thursday: 6 p.m. **Train:** Hutt Valley line – 5.43 p.m. from Wellington to Woburn. Saturday: 9.30 a.m. **Train:** 9.05 a.m. Hutt Valley line Wellington to Woburn. Leader: John Barnett 021 063 1590 johnbarnett@inspire.net.nz.

18–26 January 2025. Summer Camp

St Arnaud

Base camp: NZDA Red Deer Lodge, St. Arnaud <https://www.nzdanelson.co.nz/red-deer-lodge>. Breakfasts & lunches will be prepared by BotSocers on a roster system. Dinners and deserts will be catered by Alpine Lodge. Vegetarians, dairy-free and vegan catered for—if you have other special dietary needs, please make your own arrangements.

- **Accommodation:** Bunk-rooms, \$27.75 per person/night, no camping arrangement at Red Deer Lodge.
- **Transport:** Participants to arrange their own transport to and from camp. Transport may be available from Bus Stop / Train station / Airport nearest St Arnaud—please indicate if you need this on the registration form.
- **Booking:** Booking ESSENTIAL as room for only 28 at the lodge. Book early! Preference will be given to members of Wellington BotSoc. Please either print the registration form at the end of this newsletter. Please email your completed form to botsocsummercamp@gmail.com by 25 November.
- **Deposit:** \$490.00 per person to be paid at time of registration by internet banking. At the end of the trip, depending on the final cost, you will be sent an invoice (or a refund) for the full cost less your original payment.
- **Contact:** Email: botsocsummercamp@gmail.com.

PUBLICATIONS

- 1a. **Open Space 106/5.24:** Covenantors near ecosanctuaries; Stephenson Fund in action; native moths in covenants; Sherwood Forest, Southland; dream job for a QEII rep; pest control vital in covenants; Govt. funds ca. 75% of trust's work; ecologist Geoff Walls; new covenants 1.10.23 – 31.3.24; etc.
 - *Digital subscription: complete form on website: it.ly/qeii digitalsubs.*
- 1b. **QEII National Trust Annual Report 2023**
 - PO Box 3341, WN 6140. info@qeii.org.nz; 04 472 6626.
2. **Identification guide to the ferns and lycopphytes of Aotearoa New Zealand:** Leon Perrie and Patrick Brownsey. 2024. 280 p; prolifically illustrated in colour; stiff covers; 175 mm x 235 mm. Te Papa Press.
 - *Bookshops.*

3. **Forest & Bird 392. Winter 2024:** Highway proposed across significant coastal habitat in Auckland not consented; wapiti/elk in Fiordland N.Pk. two articles—p8 & p 38–41; Pākiri sand mining win; cuts to DOC budget—4000 native species already in trouble; Gov't seeks to facilitate mining – Fast-track Approvals Bill; Give-a-Trap website; F&B Centennial; bittern / matuku-hūrepo; Bird of the Year 2024 project; documenting flora and fauna below sea level in W'gton; visit gardenbirds survey.nz for details; trapping ferrets & stoats; *Coprosma pedicellata*—new location; Fast-track Approvals Bill—potential impacts on waterways; need to protect weweia/dabchick; combat global warming; Bushy Park/Tarapurui—near Whanganui; etc.
 - www.forestandbird.org.nz; PO Box 631, WN 6140; 205 Victoria St, WN 6011.

4. **Ōtari-Wilton's Bush Trust newsletter.**
 - *OWBT Newsletter Sept 2024. pdf 2.8 MB*
5. **wellington.govt.nz/enewsletters:** This will replace the hard-copy Our Wellington guide to life in the city.
6. **Restoring Nature:** Final report of Environmental Defence Society's Conservation Law Reform Project.
 - fiona@eds.org.nz
7. **Pipipi No. 59 5/24:** 82.4 ha added to Hinewai; weed problems; native fauna and vegetation thriving etc.
 - *No subscription system but donations always welcome. BNZ 02 0832 0044225 00; Post: Hinewai Reserve, 632 Long Bay Road, R.D.3, Akaroa 7583.*
8. **Garden News – Friends of Wellington Botanic Garden.** 6/24: Reports by President and by Manager; walks and talks programme; art competition result; etc.
 - wbgfriends@gmail.com
9. **Backcountry 236, 6/24:** Fast-track Approvals Bill; cuts to DOC's budget; Stewardship Land; etc.
 - eo@fmc.org.nz
10. **NZ Plant Conservation Network. Trilepidea 8/24.**
 - https://www.nzpcn.org.nz/site/assets/files/0/77/174/trilepidea_august_2024_final.pdf
11. **Canterbury Botanical Society Newsletter 9/24.**
 - newsletter@canterburybotanicalsociety.org.nz

Wellington Botanical Society Jubilee Award

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 may 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 by e-mail to troggs@duck.com, by **6 October 2024**.

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

- the applicant's name, postal address, telephone number and e-mail address
- any relevant position held
- a summary statement of the applicant's accomplishments in the field of botany – no more than one page
- an outline and timetable for the proposed project for which the Award is sought
- 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 by 15 October 2024.

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.

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 should be made to Eleanor Burton (troggs@duck.com) by 30 September 2024.

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 15 October 2024.

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

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

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, or 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.

QEII National Trust update

Natalie Morrison – Communications Advisor

Jamie Pearson – Land Protection Advisor

Becky Harris – Team Leader Land Protection

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 August 2024, QEII has a total of 5,252 registered covenants protecting 186,829 hectares throughout New Zealand. In the Wellington region there are 385 Open Space Covenants registered, protecting 6,554 hectares. The largest registered covenant in the Wellington region is 824 hectares and the average size is 17 hectares.

Newly registered covenant adds to corridor along Waikanae River

The Popham and Bennett covenant, registered in March, is a new addition to a larger corridor of covenants protecting lowland modified primary kohekohe-tawa-titoki forest along the Waikanae River. This forest type is regionally endangered, with only 16% of the original cover remaining.

The 0.9-hectare covenant protects forest that would have once cloaked the area, consisting of tawa and titoki, kohekohe, hīnau, rewarewa, māhoe, māpou, tī kōuka, lancewood and kōwhai. The covenant also contains northern rātā and rimu, which are both particularly notable here. Kohekohe and northern rātā are highly palatable species, which makes them vulnerable to browsing possums and goats. Podocarps can be rare in this forest type, as the kohekohe and tawa form a dense canopy and heavily shaded understorey in which shade-tolerant seedlings dominate. The Popham and Bennett covenant is a great example of this forest type with a high diversity of representative local species, a lush canopy and healthy understorey.

The health of Waikanae River is greatly enhanced by the protection of intact riparian forest, which buffers the river and provides nutrients and organic matter required for a healthy, functioning freshwater ecosystem. Protection of this area of the Waikanae River sits in the wider context of the Waikanae ki Uta ki Tai project, which aims to restore the values associated with the whole river catchment from mountains to sea. The project, a partnership between Ātiawa ki Whakarongotai with kāwanatanga agencies—DOC, Greater Wellington Regional Council and Kāpiti Coast District Council, coordinates restoration efforts of community groups, focusing on restoring wetlands and fish-spawning habitat as well as monitoring freshwater biodiversity across the catchment.

Local QEII covenantors visit unique river terrace forest steeped in natural and cultural history

In March, QEII regional representative Rob Cross took a small group of Kāpiti covenantors to visit the rare primary riparian forest remnants along the Waikanae River, not far downstream from the newly registered Popham and Bennett covenant.

Rob guided the group through the council-owned covenants, talking about the cultural and ecological history of the landscape.

The Elder family, who were prominent early Waikanae European settler landowners, preserved a sliver of the riparian forest partly for its scenic beauty, and partly to

protect habitat for introduced trout. Today, a network of covenants and other protections (of which the Popham and Bennett covenant is the latest) are linking up these forest remnants, contributing to the overall ecological health of this unique landscape.



Driveway view of the newly registered Popham and Bennett covenant



Covenant edge at The Popham and Bennett covenant.



Local covenantors with an old tawa growing in the primary riparian forest remnant along the Waikanae River, downstream from the new Popham and Bennett covenant

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

Upstream – Friends of Central Park

The Friends of Central Park—also known as ‘Upstream’—is one of the many community groups helping to care for Wellington’s green spaces.

Central Park is part of the Wellington Town Belt, the arc of open space on the hills around the central city, which was set aside for public enjoyment in the original city plan. Like most of the town belt, it was cleared of its native vegetation and grazed in the nineteenth century. The Scenery Preservation Society started planting there in 1907 and the park was named in 1913. Formal gardens, paths and a small stream-fed lake were developed, with pines and eucalyptus planted on the higher slopes.

The Friends group was formed in 2005, after the community complained the park was neglected and under-used. Most of our efforts, supported by Wellington City Council, are to help native forest re-establish as the ageing pines and eucalypts fall.

A key focus is Moturoa Stream, visible above-ground only in the park. The Council initially cleared masses of blackberry, built a new track up the stream ‘gorge’ and supplied the Friends with plants for the riparian margins. As those plants became trees, we started thinking about the ground layer. Ferns were scarce so we tried nursery-grown, locally sourced plants but they didn’t thrive and were expensive. Instead, we adopted our ‘tidemark’ approach: clearing tradescantia as far as we can reach on each bank, hoping spores will waft in. For years nothing much happened but finally we’re seeing results!



Maintaining the tradescantia tide-mark along Moturoa Stream, here helped by the Student Volunteer Army in 2022. Finally, we’re seeing an increase in ferns establishing!

Elsewhere in the park, planting has been to revegetate weed-cleared areas and reintroduce, in a few selected sites, tall forest and bird-attracting species that had completely disappeared.

However, we now plant less and focus more on weed control. Like many urban parks, Central Park is plagued by invasive vines and woody species at a scale and inaccessibility that is daunting. We raised funds through WCC and other grant schemes and have contracted the professional skills of Kaitiaki for several years, with good results. We know the weeds will continue to reinvade but hope to prevent massive incursions.

Meanwhile, we keep spotting new weeds, some probably dumped—most recently, datura, dragon plant and expanding patches of mile-a-minute and umbrella sedge. Thanks to Leon Perrie on the BotSoc trip, we’re now aware of two potentially invasive ferns to remove, *Pteris cretica* and *Adiantum raddianum*.

The good news, though, is the growth of our planting, the increasing presence of birds such as kākā and kererū, and the increasing diversity of native seedlings, including nikau and rewarewa.



Seedlings of species that had completely disappeared from Central Park are now appearing, such as this young rewarewa.

And, we’re now better informed about the park’s flora, thanks to BocSoc!

For more about the Friends: <https://www.upstream.org.nz/>

Shona McCahon for Friends of Central Park

Sex, Flowers and Species – Tony Druce Memorial Lecture, Monday 19 August by Phil Garnock-Jones, Emeritus Professor, VUW.

For those of you who may have missed it, below is the link to the Zoom recording of the lecture.

Once you have clicked on the link it will ask you for a passcode.

Passcode: Bq=1TH*U

<https://us02web.zoom.us/j/0UZBy7WdyzrE4L1xC3oeFy0bHCvRykw1urgz8rLy-U7cq1rQpIH5H-vasngtSa17.EOJxRmB2wJB4IfmY?startTime=1724053736000>

Steve and Karen Whitton – Membership secretariat

Ōtari update

Spring is in the air and the kōwhai are putting on a good show throughout the gardens. It is great to see the sun more as well as having our ngutukākā, toropapa and *Clematis* coming into flower. The kākā, tūi and kererū are all vying for the nectar in the fresh blossoms as each tree comes into bloom. Local photographers seem like a constant presence here, and they have captured some amazing images lately, including a kōtare catching skinks while being harassed by tūi, and kākā giving each other flowers as a part of pair bonding! Recently a pīwaiwaka fantail was found in our par-
apara too...

My team has been working hard to finish the winter plantings, including a day spent on the slip below Wilton Park. We also put in a few dozen plants in a grassy area just along from the entrance on Wilton Rd near the Surrey St bus turnaround. In this area we have also been controlling weeds such as gorse, broom, blackberry and *Tradescantia* with a view to completely planting the area next winter. With the support of Nate Rigler from Zealandia and volunteers from CentrePort, we removed 1.5 tonnes of rubbish and weeds from the forest in this area in a day, including a shoe with huruhuruwhenua / shining spleenwort growing out of it...

We recently got a permit to collect plants from Mt Ruapehu, and are planning some trips in the coming months to expand our small collection that is currently mulched with red scoria under the big ngaio at the end of the Cockayne Lawn. We are looking forward to connecting with Ngāti Rangī while we are up there—they are also keen on getting some plants from the sub-alpine and alpine areas when we are there.

I am pleased to report that almost all people walking their dogs at Ōtari are obeying the rules and have their dogs on leads now. This is a result of the greater awareness of locals and dog owners about the presence of kiwi in the area, so thank you everyone who has had a polite conversation about this.

We are all looking forward to Open Day this year. Jane, Lynley and other volunteers have been working diligently to propagate hundreds (or maybe a thousand!) plants in the volunteer nursery to have up for sale, which are looking great. We are stoked to have many of our close partners coming along who all work hard to connect people to plants and restore and protect nature across the city. There are some behind-the-scenes tours as well as some great workshops happening, in addition to some live music and traditional Māori games. Have a look online at all the activities planned and book a tour or workshop to avoid disappointment on the day. <https://www.eventfinda.co.nz/2024/ra-tuwhera-ki-otari-otari-open-day/wellington>

See you at Open Day on Saturday 14 September, 10–12 noon!

Tim Park

Kaiwhakahaere Ōtari – Manager Ōtari Native Botanic Garden and Wilton's Bush Reserve
160 Wilton Rd, Wilton, Wellington

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

Wellington Botanical Society Incorporated – new constitution

Like every other incorporated society in New Zealand, we are required to update our constitution to comply with the Incorporated Societies Act 2022. This is to give members a heads up on the expected timeline your committee is considering for this process.

- The AGM on 19 August gave the committee approval to draft a new constitution.
- By the end of 2024 it is proposed that the committee will prepare a draft constitution, which will largely be based on the Companies Office constitution builder template, plus input from the existing constitution.
- In early 2025 this draft will be circulated to the wider membership for comments and feedback which the committee will then review and incorporate as appropriate into the draft constitution.
- The draft constitution will then be presented to the 2025 AGM for approval.
- Once approved the committee will then arrange for re-registration as an incorporated society under the new Act with the new constitution by the deadline of April 2026.

If any member has a particular interest in this topic and wishes to be involved at any earlier stage could they please contact committee member Richard Herbert at herbert.r@xtra.co.nz.

Richard Herbert for the committee

Percy Scenic Reserve News – Winter '24

This year's mild winter resulted in abundant weed growth, so we spent much time weeding. We have also had many plants flowering early, including in the alpine houses. The *Celmisia angustifolia* have been flowering almost all winter along with several of the alpine *Ranunculus* species.

We have been busy with our winter planting in July and August. We have planted about 430 Hutt City Council-supplied plants, including *Carex buechananii* and *Astelia chathamica*—also several exotic species to try and bring in more colour, especially around the main lawn area, where we have many weddings in the summer. We have planted some of the plants propagated here at Percy's such as *Veronica hulkeana* and *V. elliptica*. I usually get about 500 of our own plants in, but I don't think I will manage that this year, due to spending more time weeding this year. I will grow on any plants I don't get planted and plant them out next year. This will allow me to plant out larger plants next year ... hopefully I then won't lose so many then, due to them being trampled by kids.

We have, over the last few years, had many problems with mealy-bug. We have been using Confidor to control them, but this has become less and less effective over time, probably caused by resistance build-up. We recently changed to using Dew 600, a Diazanone-based product, after trialling several other products with little success. This seems to be working really well as I have not had any new infestations for several months, since our initial spraying. I think the ideal is to alternate between Confidor and Dew 600 so as to prevent resistance build-up. I just need to decide on how long to use each product before switching.

The new houses have been erected, with only a little left to do, i.e., installing the doors, spouting and benches, then the climate control system. This took only one week for the

foundations and another two weeks to get to the stage they are at now, much quicker than the first two houses, which took months to complete. I am looking forward to getting plants in to them.



Plants in the new alpine house.



Brachyscome pinnata.

Cliff Keilty, Gardener

The Vandals are at the Hutt

In 1840, Dieffenbach's party took seven days of bush bashing to reach Kaitoke. They crossed coastal bush with milk tree (all gone), a mix of kahikatea-pukatea and rimu-rātā forest (remnant in Tunnel Gully), then variously tōtara forest (remnant in Benge Park) or tawai (beech) forest. Looking for those tawai forests, I found degraded scraps in Harcourt Park, and scattered trees along the Hutt and Akatarawa. Only when ticking off Katherine Mansfield Drive (KMD) did I strike gold: a glorious black beech remnant, scruffy with lancewood, sunning itself on a gravelly terrace above swampy podocarps.

Fast forward to March 2022. A gang from the UHCC would drive up KMD within 24 hours, chainsaws blazing. Not so fast! Resident Josh Bailey and Amelia Geary from F&B pointed out that the council didn't have resource consent, nor consent to fell trees so close to power lines. They managed to stave off the execution order by some two years. But to what end? Council and developer quickly contracted a Road Safety audit to buttress a Road to Zero endgame. Then Boffa Miskell mercenaries cut them a nice green fig leaf to point to. Et voila! July 2024: resource consent is granted without a shred of public consultation (like 95% nationally).



Start of the chainsaw massacre.

How on earth did we fail? Right from the start, we should have created a formal dedicated group with Facebook page and newsletter, as a magnet for public opposition, information, press releases, petition, guided site visits. We instead encouraged the public to fill the UHCC paper baskets and trash folders. We relied on local and national governance, only to find rabbits running for cover. We relied on the media, only to get blips of coverage quickly washed away in the news tsunami. We blinked on the last day, and stared like possums into the headlights of cherry pickers on the next. Amateur nice-ball team vs professional hard-ball team—no prize for guessing who won.

The vandals' rallying cry? "We will prioritise protecting and enhancing our natural environment", sung from their (Book of) Upper Hutt Sustainability Strategy.

Jean-Claude Stahl

New guide to identifying ferns and lycophytes

Perrie, L. R., & Brownsey, P. J. (2024). *Identification Guide to the Ferns and Lycophytes of Aotearoa New Zealand*. Te Papa Press.

Review by Paul Bell-Butler

The first thing you will probably notice about the new fern and lycophyte identification guide is the stunning pictures. The covers showcase the scope of the guide. The front shows the (relatively) diminutive piripiri *Hymenophyllum demissum*, while the back boasts a vertical canopy shot of towering mamaku *Cyathea (Sphaeropteris) medullaris* in all their glory. This sets the tone of the book; the diversity of Aotearoa New Zealand's fern and lycophyte flora illustrated in gorgeous (and informative) detail, from some of the smallest to the largest.

This book has arisen from the recently completed technical treatment, *Flora of New Zealand – Ferns and Lycophytes* (Brownsey & Perrie, 2022), and is intended as a more accessible, though less comprehensive, guide. The introductory pages and indeed, the format of the book, reflect Leon's great talent for making the more esoteric aspects of botany (i.e. terminology) simpler for those new to the field. The introduction itself clearly and concisely outlines the taxonomic scope of the plants covered, as well as their relationships with other land plants. It also tells readers what they can expect to achieve with the guide in terms of identification and provides a decision flowchart to help readers with the process.

There are several pages devoted to an illustrated guide to basic fern structure, so the reader will know the difference between a stipe and a rachis, a sorus and a sporangium. Again, this is done with the minimum of technical terminology to increase accessibility. The different forms that structures can take are shown sometimes with photographs, sometimes diagrammatically. There follows a 'Guide to genera'. This is an overview of groups of ferns based mainly on the shapes and position of their sori and provides an effective way to simply narrow down options from a specimen, provided it is fertile.

The final part of the introduction is the 'Species scan'—several pages of single photographs of each species described in the book. This is designed for the reader to quickly flip through to compare a specimen they have on hand, and is grouped phylogenetically; i.e., closely related and morphologically similar plants are found near each other for easy comparison.

The remainder of the book covers 201 species of ferns and lycophytes found in Aotearoa New Zealand. Each species is given a whole page to itself, about two-thirds of which is high-quality photographs. There is a short paragraph covering the best features that distinguish the plant from others and a simple but effective map showing the known distribution of the species. The scientific name of the species used in the Flora is given, as well as synonyms

commonly used by other botanists and Māori and English common names, where they exist. This part of the book is arranged purely alphabetically, by genus, then species. This makes comparisons of closely related species a little more difficult, e.g., *Parapolystichum* is quite a few pages away from *Lastreopsis*, *Gleichenia* from *Sticherus*, etc. This effect is somewhat mitigated by the arrangement of the 'Species scan' section, however, and does facilitate finding a species' description quickly once one has the name.

Overall this is an excellent book, and a great field-ready companion to the full Flora. It does not pretend to be as comprehensive or detailed; rather aims for broad utility and user-friendliness. All the most common ferns and lycophytes throughout the length of the country are included and even in the case that the user comes across a rare local species not shown, tools such as the 'Guide to genera' will point them in the right direction. Those new to botany will find it simple to use, and those more experienced will appreciate the detailed photographs of features distinguishing easily confused species. If you want a practical way to identify a fern or lycophyte you're found while out-and-about this book is for you.

NIWA Science Fair prize winners

We awarded:

- \$150 to Levi Millar from Tawa College for his project "Is the beach a road?" measuring sand compaction to investigate the effect vehicles have on sand-dune habitat;
- \$100 to Amos Robinson from Rongotai College for "Poisonous Pōhutukawa" investigating the medicinal potential or toxicity of pōhutukawa trees.

Eleanor Burton and Richard Herbert

Subscription reminder for year 2024–25

Some members are yet to pay their dues for subscription to the current year of BotSoc membership. If this is you, please pay as soon as you are able:

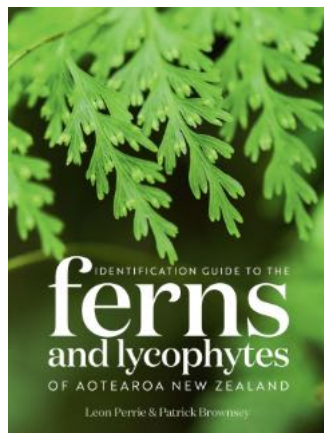
- Ordinary members \$35
- Country \$30
- Joint/family \$40
- Student \$10

Fees may be deposited directly into the BotSoc bank account: 02-0536-017812-00

Please include in the deposit details 1) your name, 2) the type of membership, and 3) any donation you are including on top of your membership. Donations are appreciated, but by no means expected, and go towards the Society's Jubilee Fund. If you are uncertain of your membership status, please contact the memberships secretarial team.

Ngā mihi,

Paul Bell-Butler, Treasurer



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

TRIP REPORTS

4.5.2024: Te Ara Paparangi & Gilbert Bush Reserve, Newlands

Twenty-three botsoccers made the trip to Gilbert Reserve to walk the recently-created Te Ara Paparangi track. We started from the carpark at the end of Tamworth Crescent where the track began by sidling along the top of the scarp above the Hutt Road. Here there were spectacular views across the harbour and we were fortunate to be there on a calm day. The botany at this end of the track was not as spectacular as the view, with regenerating scrub and many areas of recent native plantings interspersed with numerous weeds.

As we travelled further along the track towards the head of the gully the trees became larger and the understorey filled out, although apparent plantings were scattered all the way along the track. We noted a large tawa (*Beilschmiedia tawa*), the only tawa seen, a large multi-trunked akapuka (*Griselinia lucida*) and several large ngaio (*Myoporum laetum*) and kākūka (*Kunzea robusta*). We found what we initially thought was a fruit of native passionfruit but following a vigorous debate, our inability to locate the parent vine and realising it had a strong mushroom smell we later

decided it was a sequestrate fungus. Some concerning weeds in this older forest included a liquorice plant (*Helichrysum petiolare*) climbing into the canopy and a large *Prunus* above the track.

At lunch Gavin shared his memories of exploring the hillside as a child growing up in Newlands 50 years ago. We then carried on to where the track crossed several deep, dark gullies, where the bryologists found plenty to examine and there were several large kōtukutuku/tree fuchsia (*Fuchsia excorticata*). We passed a steep bank beside the track with three *Blechnum* species (*B. novae-zelandiae*, *B. procerum* and *B. fluviatile*), *Epilobium nummulariifolium* and what we decided was a sun orchid (*Thelymitra*) before turning back. On the return journey Leon headed 5 metres downhill from the track to confirm a small kiekie (*Freyinetia banksii*). Most of us took a shortcut back up to Tamworth Crescent where we noted several additional weed species.

We were able to add numerous new species to the provisional plant list that had been based on a list created for the broader area before the track

was established. We added a lycophyte (*Lycopodium volubile*), five fern species and several native shrubs but most of the additions were weeds or planted natives or their offspring.



Lycopodium volubile. Photo: Jeremy Rolfe.

Participants: John Barnett, Paul Bell-Butler, Daniel Davis, Gavin Dench, Michelle Dickson, Frances Forsyth, Jenny Fraser, Ken Fraser, Richard Grasse, Chris Horne, Kate Jordan, Irena Kennedy, Mathilda Livesey, Olivia Lu, Mick Parsons, Leon Perrie (co-leader), Lynne Pomare, Dave Reynolds, Lara Shepherd (co-leader, scribe), Sunita Singh, Carol West, Sophie Williams, Matthew Woodbury.

8.6.2024: Heke Reserve, Huntleigh Park, Orleans-Makererua Reserve

Rather ambitiously 19 of us set out to botanise three reserves in Ngaio, which made a nice loop. We started in Heke Reserve, which is a steep hillside between Ngaio and Crofton Downs. It is kohekohe forest, with a good understorey, though very weedy around the edges especially where it borders on private gardens. At the entrance at the end of Collingwood Street, just above the Ngaio Railway Station, there are two large tōtara. There was some discussion as to whether these were planted or remnant, and after some asking around it was concluded that they were most likely remnant. We did see a small number of *Streblus heterophyllus* near the track—we were not sure whether they were planted or naturally occurring.

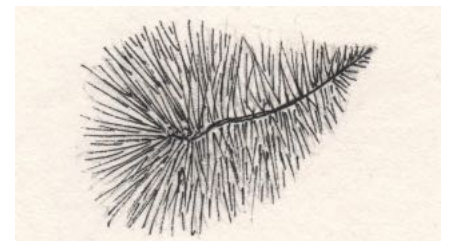
Next was Huntleigh Park Reserve, which goes up the hill between Crofton Downs and Ngaio and is accessed from the play centre near the end of Silverstream Road. This again is kohekohe

forest with a good understorey of ferns etc. There was a small grove of mature matai near the top of the hill. Again, there were some *Streblus heterophyllus*, and several different climbers.



Streblus heterophyllus. Photo: Jeremy Rolfe.

Then we moved on to Makererua Street Reserve, down 120 steps (counted by Chris—at least we didn't have to go up them). This has a more mixed canopy, still kohekohe but also tawa. This reserve was most notable for a very large pukatea, which had some convenient spider webs on the trunk which had caught several of the windborne seeds. Seedlings were also present.



The windborne seed of pukatea. Illustration: Eleanor Burton.

Thanks to Richard Grasse and Michele Dickson for doing a recce with me, and to Michele for being tail—very necessary this trip!

Participants: Eleanor Burton (leader and scribe), John Barnett, Gavin Dench, Michele Dickson, Jenny Fraser, Ken Fraser, Ian Goodwin, Jill Goodwin, Richard Grasse, Chris Horne, Tessa Johnstone, Kate Jordan, Leon Perrie, Lynne Pomare, Simon Reeve, Dave Reynolds, Lara Shepherd, Sunita Singh, Carol West ... and Loki and Toffee the dogs.

15.6.2024: Te Mārūa Bush workbee

Along the SH2 boundary we planted 16 trees sourced from the UH F&B nursery to fill the gaps caused by die-off of the original plantings or some vehicle damage.

In light rain we surveyed the rest of the bush for weeds and to gauge future work. We found and removed some tradescantia on the Pony Club boundary. We noted a fallen tree on Twin

Lakes Road ~ 60 m south of the stile was noted for clearing and replanting.

We collected two bags of rubbish and weeds for the GWRC staff to remove.

Trees planted were 2 lowland pepper / *Pseudowintera axillaris*, 3 kānuka / *Kunzea ericoides*, 2 *Olearia*, nominally *O. paniculata* but I think they are something else, 2 black maire / *Neste-*

gis cunninghamii, 3 kōwhai / *Sophora microphylla*, 2 lemonwood / *Pittosporum eugenoides*, 2 five-finger - *Pseudopanax arboreus*

Participants: Bruce Austin with Jalso, Steve Edwards GWRC, Chris Horne, Lynne McLellan with Punga, Sue Millar, Allan and Glennis Sheppard (scribes), Graeme Sheppard.



Two aerial views of Te Marua Bush showing the change in vegetation over the years. Left 2008, right 2024. Source: Google Earth Pro.

6 July 2024: Denton Bush forest remnant

Our party of 22 met at Waikanae Railway Station, arranged car pooling, got instructions on how to get to Denton's Bush near Ōtaki, then set off. We arrived safely and were met by the farmers at the dairy farm entrance. It was a warm, calm, and sunny winter's day—good for botanising an alluvial broadleaved forest remnant.

After giving us some background history on the forest remnant, Max and Irwin then gave us a back-of-the-ute health and safety briefing followed by the leader's briefing. Max and Irwin have been doing possum control here for many years. The remnant holds significance to both brothers. It was formerly grazed then was fenced by Max and Irwin and is recovering well. It also contains artefacts of the past including old vehicle bodies and cast-off farming implements. The bush remnant is on an older alluvial river terrace surrounded by dairy farmland. It contains four natural springs which all emerge and meet within the remnant, then flow out across the farmland. The remnant does not appear to have been logged—it has some of the biggest pukatea and tawa you will see. The remnant is entirely within the flat river terrace and on the transition between the more free-draining WF2 tōtara, matai, ribbon-wood forest and the wetter WF8 kahikatea, pukatea type forest. It is a

regionally significant forest remnant as both the WF2 and WF8 forest types are regionally critically endangered with less than 3% and 1% remaining respectively. The remnant being on the transition between these critically endangered forest types increases the importance of this remnant. The dominant canopy trees of the remnant are *Beilschmiedia tawa* (tawa), *Laurelia novae-zelandiae* (pukatea), *Rhopalostylis sapida* (nikau), and *Didymocheton spectabilis* (kohekohe). Guided by Max and Erwin we traversed an anticlockwise circuit of the remnant. There were a few weed species of concern around the margins of the remnant: *Iris foetidissima*, (stinking iris), *Tradescantia fluminensis* (wandering Jew), and one plant of *Clematis vitalba*. Further in from the margins of the forest remnant the understorey was devoid of exotic species and dominated by the shrubs and saplings of *Piper excelsum* (kawakawa), *Rhopalostylis sapida* (nikau), *Geniostoma ligustrifolium* var. *ligustrifolium* (hangehange), *Melicytus ramiflorus* (māhoe), *Pseudopanax arboreus* (five-finger). The ground-cover ferns *Icarus filiformis* (climbing hard fern), *Parapolytichum glabellum* (smooth shield fern), *Hypolepis ambigua* (smooth shield fern), *Diplazium australe*, *Lecanopteris pustulata* (hound's tongue fern) and

the sedge *Carex uncinata* (hook-grass).

Noticeable and a testament to the pest control were the carpets of kohekohe fruit and a few on the trees—also five-finger saplings. At midday all but seven people headed off to the Ōtaki River mouth to botanise the second site while there was plenty to keep the remaining seven people busy and complete the circuit. One question raised by Irwin was, would the regenerating nikau seedlings and sapling out-compete the broadleaved species resulting in the slow trajectory of the remnant to a dominant canopy and monoculture of nikau as can be seen at Paraparaumu Scenic Reserve? Certainly, in places there was an almost 100% ground cover of nikau seedlings and saplings. We returned to the cars at 3.30pm after a very interesting and agreeable day botanising. A very big thank you to Max and Irwin for the opportunity to access their beautiful and interesting forest remnant.

Participants: Owen Spearpoint—leader and scribe, John Barnett, Pene Burton-Bell, Eleanor Burton, Gavin Dench, Michelle Dickson, Jenny Fraser, Ken Fraser, Laura Girvan-West, Sarah Goldberg, Ian and Jill Goodwin, Chris Horne, Kate Jordan, Pip Kirkman, Pascale Michel, Leon Perrie, Robin Procter, Simon Reeve, Lara Shepherd, Sunita Singh, Shaun Thompson.

Wellington Botanical Society – 2025 Summer Field Trip St Arnaud

18 January to 26 January 2025

Based at **Red Deer Lodge, St Arnaud.**

To register, complete the below form and send to botsocsummercamp@gmail.com and pay your deposit.

Fill in the form's check boxes by double-clicking on them, then click on 'checked' button.

Completed forms and deposit to be in by 25 November 2024.

Name:	Address:
Mobile phone:	
Home phone:	
E-mail:	
Emergency contact:	Relationship:
Phone:	

Travel and accommodation arrangements

Please indicate which evenings you intend to be at Red Deer Lodge, St Arnaud	
<input type="checkbox"/> 18 Jan <input type="checkbox"/> 19 Jan <input type="checkbox"/> 20 Jan <input type="checkbox"/> 21 Jan <input type="checkbox"/> 22 Jan <input type="checkbox"/> 23 Jan <input type="checkbox"/> 24 Jan <input type="checkbox"/> 25 Jan	
Type of accommodation you require:	
<input type="checkbox"/> Bunk accommodation in dormitories, \$27.75 per person/night <input type="checkbox"/> I/we will make my/our own arrangements.	
Please specify your mode of travel to Red Deer Lodge, e.g., public transport, own car, or as a passenger with someone else.	
<input type="checkbox"/> Public transport <input type="checkbox"/> Own car <input type="checkbox"/> Passenger in someone else's car	
Do you need transport from the <input type="checkbox"/> bus stop <input type="checkbox"/> train station <input type="checkbox"/> airport nearest St Arnaud?	
<input type="checkbox"/> No	
If you are going with your own car, how many additional passengers could you take?	
<input type="checkbox"/> None <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
If you are taking a car, will it be available for day trips?	Is it a 4WD?
<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you have any dietary requirements?	
<input type="checkbox"/> Vegan <input type="checkbox"/> Dairy-free <input type="checkbox"/> Vegetarian	

Student application (check if applicable)

I wish to apply for the student support ☐

My period of study or apprenticeship is during 2024 or 2025 ☐

I acknowledge the need to pay transport to and from and the possible additional cost at the end of the trip. ☐

Payment: Estimated cost per person: \$490. Please deposit \$490 by internet banking when your registration is confirmed.

Account name: Wellington Botanical Society

Account number: 02 0536 0017812 02 **(PLEASE NOTE THE ACCOUNT SUFFIX FOR SUMMER CAMP)**

Reference: put your name in the particulars/reference boxes of the payee section.

At the end of the trip, depending on the final cost, you will be sent an invoice (or a refund) for the full cost less your original payment.

E-mail the registration form to Tom Mayo at botsocsummercamp@gmail.com



New Membership application

I wish to join the Wellington Botanical Society ☐

Name(s): _____

Address: _____

Email: _____ Phone: _____

The membership year is from 1 July to 30 June. Dues received after 1 May will be credited to the following year.

Ordinary membership	\$35.00	
Country (out of Wellington area)	\$30.00	
Group/family	\$40.00	
Student	\$10.00	\$ _____
Donation to the Jubilee Award Fund		\$ _____ (Optional)
(Donations to Wellington Botanical Society Inc. qualify for a New Zealand tax rebate)	Total paid	\$ _____

Please make payment to: **Wellington Botanical Society Inc.**

Bank Account: **02 0536 0017812 00**
Particulars: *Name*
Code: *Membership type*
Reference: *amount of any included donation*

Authority to hold your name, address and phone number with the Society.

The Society holds the name, address, email and contact phone numbers of all current and life members to use for communication, and mailing of bulletins etc. Under the Privacy Act the circulation of names on such lists requires the approval of the individual members.

The list will not be used for marketing, soliciting or political purposes.

I agree to my name and contact details being held on the membership list whilst I am a current paid up member. I understand that if my details are requested for use within the Wellington Botanical Society I will be notified. I understand that this list is to be used only by members of the committee.

Signature: _____ Date: _____

Please **e-mail** this completed form to the Memberships Secretary at wellingtonbotsocmembership@gmail.com or post to Wellington Botanical Society Inc:

Memberships Secretary c/o Wellington Botanical Society Inc., PO Box 10 412, Wellington 6140

www.wellingtonbotsoc.org.nz