



From the President

Season's greetings to all Wellington BotSoc members. Our spring field trip season was interrupted not by Covid but by spring weather. Nevertheless, we did get out and about a few times and I really enjoyed my day at Kiripiti Scientific Reserve, Old Hautere Road, Ōtaki.

Much work has been done including planning for the summer camp, and choosing field trips and speakers for our February–May season. Bookings for our summer camp in the Catlins have closed.

The committee have been hunting high and low for a new Treasurer and finally have success to report. At the committee meeting on 7 December we discussed all possible options and have accepted an offer from Helen White to take on the position at least until the end of her maternity leave. The committee also decided to migrate our accounts into Xero accounting software which will reduce the workload considerably for whoever takes on the Treasurer's role in the future. Owen Spearpoint will take on Helen's Membership Secretary role in the meantime.

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.

On 22 November there was a ceremony at Ōtari Visitor Centre for the presentation of the H. H. Allan Mere Award to Wellington BotSoc member Carol West. The award was presented by the New Zealand Botanical Society's

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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

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 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 – 20 March 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.

From the President (continued from page 1)

President, Anthony Wright. The Allan Mere is awarded by the New Zealand Botanical Society to outstanding botanists to acknowledge their contribution and work. Carol justly deserves to stand alongside all previous recipients of this award. The mere is a traditional Māori hand club made from greenstone / pounamu / nephrite and carved at Westland Greenstone Ltd in Hokitika and was first presented in 1982.

All the best for the summer holiday season, I wish you all many happy hours of botanising, and I will no doubt see many of you in the New Year.

Frances Forsyth, President



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*

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.

Evening meetings: Please note that the doors of the Murphy Building and lecture theatre M101 open for evening meetings at 7 p.m. to allow time for members to socialise before the meeting begins.

Field trips: If a field trip has to be postponed because of bad weather or other reason, it will happen the following Saturday, or a later Saturday. Please check our web site or ask the trip leader.

FEBRUARY – MAY 2023

Saturday 11 & Sunday 12 February: Field trip

Tora & Timbrel Stations, Eastern Wairarapa

Day 1: Tora Coastal Escarpment. Botanise the most intact example of a modified but regenerating KNE site, a remnant of the original tūtoki-ngaio forest type, critically endangered in the Wellington region with no more than 3% remaining. The covenant's vegetation is heavily influenced by its location—a seaward-facing coastal escarpment within a warm, semi-arid climate, surrounded by farm grazing. The covenanted KNE site of 9.6 ha is spread out across 3 different titles whose owners are committed to its restoration and protection. See regionally endangered rengarenga lily / *Arthropodium cirratum*, whau / *Entelea arborescens* (both possibly introduced by early Māori) and speargrass / *Aciphylla squarrosa*. Also a regenerating understorey which includes ferns and orchids. See <https://www.gwrc.govt.nz/document/967/key-native-ecosystem-plan-for-tora-coast-bush-2016-2019> <https://www.nzpcn.org.nz/publications/plant-lists/plant-lists-by-region/tora-block-onpo/>

Meet: Featherston 9 a.m. Park along SH53 before the rail crossing. Drive in convoy to Martinborough, turn left off Cape Palliser onto White Rock Rd just south of the town. The White Rock/Tora Rd is long, narrow, winding and unsealed for the last 30 minutes drive. Please have a full tank of petrol when we leave Martinborough. There is an Alliance petrol station there with cheapish petrol. Saturday night accommodation: Basic camping. There is a new and clean toilet—bring loo paper and hand sanitiser. *There is no water to be had at Tora:* Bring 20 litres with you. Camping sites are below the road amongst the lupins between the estuary's river-edge road, and the beach. Further south near the road is another camping area, but be aware that site is more exposed in a north-westerly wind. The weather will be a consideration for the Tora KNE site visit due to the escarpment's exposure to an easterly or southerly storm. Botanising at this site is very close to the campsite and can be as gentle or adventurous as people wish so would suit all fitness levels and ages. There are also ephemeral wetlands close to the campsite, or across the river the coastal turfs at Te Kaukau Point seal haul-out. **Dinner:** People are welcome to do their own thing or we can mix in for a pot-luck. **Breakfast & lunch:** Bring your own.

Day 2: Timbrel Farm. Botanise a new area, consisting of mature forest and wetlands alongside the Mākara River and its tributaries in the Huangarua catchment. There are seepage wetlands on the hillsides and large areas of regenerating scrub/shrubland. The forest type in the area is mixed beech forest with occasional podocarp / broadleaved forest on the valley floors. There is good foot access via 4WD tracks to most of the farm. While relatively sheltered and the valley faces northeast, Timbrel Farm is on the margins of the Aorangi Range at a mid-range altitude so it can be misty, wet, windy and cold. **Depart:** Tora at 9 a.m. back along Tora Rd, then White Rock Rd to the wind-farm. At the wind-farm on White Rock Rd turn left along Range Rd, then onto Paruwai Rd and down into the Mākara valley. Cross the bridge and turn left up river a short distance to Timbrel Station. **Meet:** the farmer at 10.30 a.m. Both botanising sites are isolated and remote. Please bring plenty of spare clothes, lunches, thermos, water, scroggin, sturdy boots with good ankle support. Waterproofs (parka and leggings), and warm clothes including a warm hat, longs and gloves. If the predicted weather is wet or too windy we will cancel. **Co-leaders:** Owen Spearpoint 027 285 8083, owen.spearpoint@gw.govt.nz; Jenny Fraser 027 358 0073 JennyJFraser@gmail.com

Monday 20 February: Evening meeting

More than sentimental: Women and botanical publications in 19th-century Aotearoa and the Pacific

Speaker: Rebecca Rice, Curator of NZ Historical Art, Te Papa. The contribution of women 'flower painters' to the histories of botany and art have often been considered peripheral—their work readily dismissed as being of a 'sentimental rather than a scientific nature'. But what if the social constructs that have often been understood as limiting—the sentimental, the domestic, the amateur—actually lent themselves to an alternative way of relating to the natural world? In this talk, Rebecca will suggest there may be different ways of thinking about these women and their work, particularly as, in the contemporary moment, we are re-assessing our relationship to nature with a degree of urgency. Focussing on women such as Fanny Anne Charsley, Ellis Rowan, Sarah Featon and Isabel Sinclair, she considers how their watercolours, prints and associated texts register the intimacy of their encounters with flora, landscapes and people, a position from which they advocated for more meaningful engagement with the natural world.

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

Saturday 4 March: Field trip

An easy walk from the top to the bottom. View the historic Korokoro and Woollen Mills dams. Take a paddle in the cool clear waters and find out what is growing in this part of Belmont Regional Park. The walk from Oakleigh St to Cornish St takes 1.5 hours but is likely to be a lot slower due to behaviour of a botanical nature. **Meet:** Cornish St car park near the estuary at 9.30 a.m. Car-share from there to Oakleigh St carpark. **Bus:** No. 150 to Kelson departs Petone Railway Station to Oakleigh Street at 9.30 a.m. **Train:** Departs Upper Hutt 8.30 a.m. and arrives Petone Station 9.03 a.m. Departs WN at 9.05 a.m. and arrives Petone 9.17 a.m. Buses may replace trains. **Map:** https://www.gw.govt.nz/assets/Documents/2022/07/Belmont-Regional-Park-Brochure_web.pdf **Co-leaders:** Frances Forsyth 021 072 5210 FrancesmjForsyth@gmail.com; Kate Jordan 027 899 0018 katejordan@gmail.com

Riparian vegetation of Korokoro Stream

Monday 20 March: Evening meeting

Why monitoring is hard and why we must do better: the case of the NZ Biodiversity Assessment Framework

Speaker: Matt McGlone, Research Associate, Manaaki Whenua-Landcare Research, Lincoln. In 2004, the New Zealand Department of Conservation set up a joint DOC-Manaaki Whenua-Landcare group to explore the options for a national level monitoring scheme. Proposals from this group led to establishment of a comprehensive Biodiversity Assessment Framework underpinned by a Biodiversity Monitoring and Reporting System. This was not an easy task, and it was ten years before the system was fully operational. In this talk Matt will discuss the overall rationale and structure of the Biodiversity Assessment Framework, and its progress to date. He will also reflect on the struggles to get the monitoring system operational and the challenges it faces. Monitoring systems are liable to fall over through neglect, deliberate defunding and obsolescence. Much needs to be done to keep the framework alive, relevant and expanding.

Saturday 1 April: Field trip

Botanise patches of lowland mature black beech and hard beech forest, along ridgelines of regenerating kāmahi and mānuka scrub, and a fen. The trail is approximately 4.5km and includes some steps. **Meet:** 9:30 a.m. at the corner of Chatsworth Rd & Arundel Gr, Silverstream. **Train:** 8:35 a.m. Hutt line train WN to Silverstream. Contact the trip leader to arrange to be met at Silverstream Station. **Maps:** NZTopo50-BP32 Paraparaumu & BQ32 Lower Hutt. **Co-leaders:** Laura Girvan West 021 583 934 laurajgwest@gmail.com; Owen Spearpoint 027 285 8083 Owen.Spearpoint@gw.govt.nz

Tako Ngātata Scenic Reserve

Monday 17 April: Evening meeting

Speaker: Gill Roper, Author of Redwood Bush, Tawa, (published Oct 2022) written in response to the account of how Redwood Bush was saved when the Redwood subdivision made inroads into the native bush for housing development in the 1970s. Hear the background to how it was saved and how it has changed since then with pest control resulting in a resurgence of flora and fauna. **See:** <https://tawabush.org.nz>

'Redwood Bush, Tawa'

Saturday 6 May: Field trip

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 30 years by the Trellissick 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 Trellissick Park brochure. **Co-leaders:** Michele Dickson 972 2350, Chris Horne 475 7025. **Species list:** ask co-leaders to e-mail you a list. (* See article by Trellissick Park Group in this newsletter).

Trellissick Park, Ngaio Gorge

Monday 15 May: Evening meeting

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 10 minutes / person. For a gold-coin koha, or even 'folding money', buy one or more of the books we put on display, and help build up the Jubilee Award Fund which supports research on NZ plants. Room opens at 7 p.m. **Bring:**

Members' evening

- 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.

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, Owen Spearpoint wellingtonbotsocmembership@gmail.com

*Ngā mihi,
Kate Jordan, Secretary*

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.
- *10 December - 22 January Welly Walks – Wellington City Council walks programme.* 20 routes to choose from. Walks webmap; Wellington Walks brochure 3.1 MB pdf. You may either wish to join a walk or offer to lead a walk.
Google: Wellington City Council Welly Walks for more information.

Conferences

- *Now. Cop15 conference on Global Biodiversity, Montreal:* <https://www.theguardian.com/environment/2022/dec/05/making-sense-of-cop15-what-to-look-out-for-in-montreal>
- *22–24.3.2023. Environmental Defence Society. Pivot Point:* Deep Environmental Change. Auckland. eds@gmail.com

Student Grants 2022

Wellington Botanical Society has made grants to the following:

1. Paul Bell-Butler, studying bryophyte functional traits and their interactions with vascular plants in tussock grasslands.
2. Henry Morse, studying landscape-scale restoration projects, looking at revegetation sites at least 10 years old and 1 ha in size.
3. Stacey Pekelaar, studying interactions between *Discaria toumatou* / matagouri, mycorrhizae, and superphosphate.
4. Benjamin Wright, studying factors affecting successful translocation of macrophytes.

Eleanor Burton

Jubilee Award 2022

We congratulate Aimee Pritchard whose research aims to investigate the role of bryophytes as indicators of microclimate and biodiversity in exotic and native forest ecosystems in the Otago region.

Eleanor Burton

BotSoc first-aid kit still missing

If you went on our summer camp trip based at Aongatete Camp, Bay of Plenty, please check your car's boot and under the seats and your pack/luggage for our first-aid kit. Kate Jordan who made it for us describes it thus:

- cream canvas with pink abstract designs. It is ca. 20 × 20 × 15 cm with the zip on three sides of the lid.

The committee

Subscription reminder for the year ending 30 June 2023

Some BotSocers have yet to pay their subs as we approach the half year mark.

Pay now, be in before Christmas and start the New Year with a clean slate!

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

Please pay direct to BotSoc's Bank Account – 02 0536 0017812 00 – including your name and Sub23 as Reference.

Helen White, Treasurer

New members

We welcome Casey Bannon, Ling Hu, Kate Ladley, Molly Melhuish and Henry Morse to our membership.

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 and then tell them that there is a membership application form at the back of our newsletter.

Owen Spearpoint, Membership Secretary

Looking for volunteers

On 8 November 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 is looking for more volunteers to come to our bi-monthly working bees or to help in other ways—see Trelissick Park Group or contact trelissickgroup@gmail.com.

Peter Reimann

DOC Wellington

Visitor Centre

*Te Pae Manuhiri, Te Rohe
ō Te Whanganui ā Tara*

Conservation House,
18–32 Manners St

- Track, hut, conservation information
- Kapiti Island visitor permits
- Hut tickets, backcountry hut passes
- Hunting permits

Open: Mon–Fri 9 a.m. – 5.00 p.m.
Sat 10 a.m. – 3.30 p.m.

Tel: 04 384 7770 Fax: 04 384 7773

E-mail: wellingtonvc@doc.govt.nz

Web: www.doc.govt.nz

New Zealand Government



PUBLICATIONS

1. **Weed Biocontrol. 100, 5/22:** Local MP visits Landcare Research; old man's beard control agents; yellow flag iris control; Chilean flame creeper; Chilean needle grass; woolly nightshade. **101, 8/22:** Keeping track of adventive species; predation & tradescantia beetle; search for old man's beard pathogens; boneseed leaf-roller; broom mite attacks broom; biocontrol agents become active in spring; list of biocontrol agents for weeds; etc. A4 colour brochures.
 - www.landcareresearch.co.nz
2. **Native Plants of Aotearoa:** Heidi Meudt & Carlos Lehnebach, Botany Curators, Te Papa. 50 species described. Illustrated with black & white drawings produced over 250 years ago by Sydney Parkinson on HMS *Endeavour* on Cook's first voyage to Aotearoa.
 -
3. **Chilean needle grass / *Nassella trichotoma*:** A6, 30 p, spiral bound, colour.
 - *Ministry of Primary Industries.*
4. **How to clear old man's beard:** A4, 2 p, illustrated. ombfree.nz
 - ombmustgo@gmail.com
5. **Women in Science:** Four postage stamps issued 2.11.22.
 - *NZ Post*
6. **NZ Botanical Society newsletter 149 9/22:** *Olearia nummularifolia*; regional botanical societies' news; Cook's scurvy grass; *Verbena* spp.—purple tops; are recently proposed genus changes for several NZ trees consistent with minimising change within a scientifically-based taxonomy?—Dr Leon Perrie; biographical sketch—Rex Bertram Filson (1930–); book review – *In defense of plants: An exploration of the wonder of plants.* Matt Candeias. USA.
 - www.nzbotanicalsociety.org.nz
7. **Auckland Botanical Society Journal 77(2) 12/22.**
 - aucklandbotanicalsociety@gmail.com
8. **Botanical Society of Otago. No. 97 11/22:** 2023 calendar; programme; trip reports; talk reports; etc.
 - bsot@otago.ac.nz PO Box 56, North Dunedin 9059.
- 9a. **Canterbury Botanical Society. Journal 53 2022:** Bledisloe Trophies: Senior, Intermediate – Post Primary, Junior – Primary; 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; observation of *Aciphylla aurea* recovery following the exclusion of lagomorphs in Canterbury High Country; 42 years of wild gardening; *Solanum villosum* (Solanaceae) in NZ; *Carex kirkii* var. *elatior* Kuk, (Cyperaceae), a grass-like and little known sedge from the South Island; Just for the record—additions to *Plant Life on Banks Peninsula* by Hugh Wilson; the long and the short of it—re botanical nomenclature; CBS 69th annual report; etc.
- 9b. **Canterbury Botanical Society. Newsletter 12/22:** Foulden Marr.
 - <http://canterburybotanicalsociety.org.nz>
10. **Nelson Botanical Society. Summer 2022-23:** Karamea trip report; *Pteris parkeri*; *Veronica senex*; Phil Garnock-Jones: land plants—some big-picture news; Tony Aldridge: pesky small-leaved Coprosmas—a step into leaf shape; etc.
 - nelsonbotanicalsociety@gmail.com
11. **Ōtari-Wilton's Bush Trust News and Views. 12/22:** March seminars—4, 14, 21, 28 @ 7.30 p.m.; Sunday guided walks programme; message from chair Carol West; report from Manager Tim Park; web site update—owbt.nz; Trust Board; Dave Bidgood's 30 years' service; Two Hundred Years at Ōtari-Wilton's Bush by Bee Dawson & Chris Coad launch; H H Allan Mere Award to Chair Carol West; new working space for volunteers; *Metrosideros bartlettii* in flower; *Coybas iridescens*. Subscriptions: \$20 – individual; \$30 – double/family. 030518 02050713 000.
 - owbt.nz
12. **Friends of Tawa Bush Reserves:** Redwood Bush—signed botanical trail; planting at Greenacres School; mustelids; Wilf Mexted Reserve revegetation; DOC Creative Spaces team—planting day; Redwood Bush, Tawa book launch; four kākārīki seen in Redwood Bush; etc.
 - <https://tawabush.org.nz>
13. **Whareroa Guardians Community Trust newsletter.**
 - www.kapitibiodiversity.org.nz/whareroa
- 14a. **Forest & Bird. 386 Summer 2022:** President's message; mining on conservation land; pīwauwau / rock wren; F&B will be 100 years old in March 2023; wanted—wildlife artists; making room for rivers; oceans' crisis; stewardship land review; Catlins: mammoth southern rātā, *Ourisia modesta* & other rarities; Predator Free 2050; Wilderlab uses environmental DNA to find rare aquatic species & bats; restoring a wetland – Southland; Archey's frog—Coromandel; cats; Hauraki Gulf; kiwi conservation; music for nature; extinct birds; art for nature; wallaby control; bittern restoration—Aotea / Great Barrier Island; nature study at Pūkaha / National Wildlife Centre; is time running out for our myrtles?; how creatures sleep; 2022's highlights & wins; coastline sea-life; restoring a Christchurch wetland; Cass Valley predator control; etc.
- 14b. **Tukua Ngā Awa Kia Rere – Making Room for Rivers:** Brochure A4, 4 p.
 - www.forestandbird.org.nz
15. **Forest & Bird – Kāpiti-Mana Branch. 11/22:** 28-ha site including peatland for sale between Kāpiti Rd & Wharemauku Stream—potential for a park?; mining on conservation land; COP-27 disappoints; a myrtle rust-eating midge?; rainbow skinks report; copper butterflies—how many species?; etc.
 - russelljamesbell@gmail.com
16. **Pīpī. 56 11/22:** New clothes for bare ground—recovery from deluges; restoring tracks, bridges, waterways, roads; worrisome weather; storm damage at Ōtānerito; storms breach fencing protecting Hinewai & Purple Peak Curry reserves – cattle & sheep enter reserves; birders visit from Ornithological Conference, Christchurch; Pest-Free Banks Peninsula workers cut access routes for pest-control work; jewelled geckos; etc. Donations welcome: Direct credit BNZ 02 0832 0044225 00.
 - *Hinewai Reserve, 632 Long Bay Rd, RD3 Akaroa 7853*
17. **Zealandia Te Māra a Tāne – Karori Sanctuary:** 2021/22 highlights. A4, 23 p.
 - www.visitzealandia.com
18. **Invasive Hats and How to Knit Them:** a collection of eight hat knitting patterns inspired by weeds. Each knitting pattern has a small essay about the history of the weed and the detrimental impact it has on our native ecosystems. Format: Soft cover, perfect bound, 64 pages. RRP, \$35.
 - *Email katejordan@gmail.com for a copy.*
19. **Backcountry. Federated Mountain Clubs 11/22:** Stewardship land review; Greater Wellington backcountry network; tenure review; etc.
 - daniilo.hegg@fmc.org.nz
20. **Fossil Treasures at Foulden Marr:** D. E. Lee, U. Kaulfoss, J. Conran.
 - *Otago University Press.*
21. **Redwood Bush TAWA. Gilbert Roper. Friends of Tawa Bush Reserves Inc. 2022.** 153 p. Colour and b&w illustrations, A4 soft cover. See information on page 12.
22. **Ōtari Two hundred years of Ōtari-Wilton's Bush:** Bee Dawson. Photographs by Chris Coad. 2022. 228 p. Colour and b&w illustrations, A4 hard cover. See information on page 16.
 - *Ōtari-Wilton's Bush Trust.*

Greater Wellington Regional Council—Pest Plant Updates

Regional Pest Management Plan

Another season's control work has begun for the progressive containment of lodgepole pine / *Pinus contorta* in Pakuratahi KNE. *P. contorta* control was previously the subject a trial run by Wayne Cowan, where herbicide was injected into the trees via shotgun from a helicopter.

Work is in two operational areas; the first site is located just off the Kaumatua Ridge, and over 700 pines (mostly *P. contorta*) have been controlled in the last two years. The second control area is off Marchant Ridge, accessed from the Puffer Track. Here our field team have controlled upwards of 500 pines this year, again most of which were *P. contorta*.



Pinus contorta standing dead off the Kaumatua Ridge—most of the live trees here have been controlled since.

Alligator weed response

During planned property inspections in Taita for woolly nightshade, Darryl Kee discovered our first known alligator weed / *Alternanthera philoxeroides* incursion. The site was roughly 40 m², and growing in the corner of a fenced garden lawn. The landowners were able to put us in touch with previous tenants, and from their recollection this site has been here for about ten years!

It is at a lower risk of spreading than it would be if it had been growing in an aquatic environment, but worryingly had been mown over in the past. Initial control was undertaken, and a large amount of vegetation and soil removed from the site.

We have conducted our first follow-up inspection—of many to come—and did not find any regrowth, but we expect it will require continuing control as not all roots were able to be removed.



A. philoxeroides before and after initial control

We are a small team operating throughout the region and rely on reports of pest plants for our programmes' success. If you spot any of the weeds listed below, or have general pest plant queries, please contact pest.plants@gw.govt.nz

Alligator weed / *Alternanthera philoxeroides*, Chilean needle grass / *Nassella neesiana*, nassella tussock / *Nassella trichotoma*,

moth plant / *Araujia hortorum*, Senegal tea / *Gymnocoronis spilanthoides*, spartina / *Spartina anglica*, *S. alterniflora*, velvetleaf / *Abutilon theophrasti*, woolly nightshade / *Solanum mauritianum*, purple loosestrife / *Lythrum salicaria*, blue passionflower / *Passiflora caerulea*, and eelgrass / *Vallisneria spiralis*, *V. gigantea*.

Pest Animal Updates

The team have been kept busy with their regular programme servicing bait stations in parks and reserves across the region; and night shooting for ungulates, rabbits and hares. Hutt City Council's budget for deer control has increased this year so more shooting can be done; the 'Pig Brig' trap has been working well on private property with numbers as high as 24 pigs caught at once; and planning is underway with NZTA for rabbit control in Kāpiti this summer.

Plague skink response

In August we received a confirmed report (and photograph) of a plague skink / *Lampropholis delicata* found in fresh produce at a commercial property in Kilbirnie.

Thorough visual inspections of the site and its surrounds in Kilbirnie were conducted, and tracking tunnels were placed in the immediate gardens around the building. Tunnels containing Black Tracker cards were checked and changed weekly for five weeks, on fine sunny days. The tunnels were collected at the end of September with no tracks or sign other than that of cockroaches and sparrows. No more skinks have been reported and no further sign has been detected.

Rook eradication programme

Aerial rook nest-baiting control was completed for the Wairarapa in early October with toxin applied to nests at 10 rookeries. At two of these rookeries only empty nests was found and treated meaning that we have eight active (breeding rookeries) confirmed across the region this year. At these active sites, there were twelve nests holding eggs, nine nests holding chicks and a further twenty-nine fresh but unused nests located and treated with the toxin. Overall, a very good result again this year. A rookery that was missed from control last year due to access issues was successfully treated this season with the landowner now onboard with our eradication goals.

There has been no further rook activity or sightings since the baiting.

Wallaby incursion response

Manaaki Whenua has completed an assessment of surveillance to prove successful eradication of wallabies for the Kaitoke wallaby incursion. Between November 2021 and April 2022 five wallaby were detected and controlled using feratox. Manaaki Whenua has calculated a 98% probability of wallaby absence from the camera and wallaby detection-dog surveillance done since the last wallaby was controlled in April. They have recommended periodic dog surveillance to increase the confidence of eradication, and so a wallaby detection dog will visit every six months for two years before declaring the operation complete.

Laura West, Biosecurity Officer (Plants)
Kāiwhakahaere rerenga rauropi
M: 021 583 934

Greater Wellington Regional Council, Te Pane Matua Taiao
1056 Fergusson Drive, PO Box 40847, Upper Hutt 5140

Sheelagh Leary 1941–2022

We are sad to report Sheelagh's recent death. Sheelagh was a pillar of BotSoc's summer camps for many years. She would organise the menu, purchase the food supplies and bring them to the base camp. Sheelagh and Gordon brought their children to some of the camps which added greatly to the vitality of our forays into the backcountry. Her many achievements were celebrated in Tauranga on 7 November and in Wellington on 3 December.

The committee

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 November 2022, QEII has a total of 5,024 registered covenants protecting 182,605 hectares throughout New Zealand. There are 372 Open Space Covenants registered to protect 6,397 hectares in the Greater Wellington region. The largest registered covenant in the Greater Wellington region is 824 hectares and the average size is 37 hectares.

QEII reaches 5,000 registered covenants

Earlier this year we were excited to celebrate registering the 5,000th Open Space Covenant, adding to the growing number of QEII covenants all over the country, protecting biodiversity in New Zealand for future generations.

Covenantors and members from the local community got together in rural Wairarapa to celebrate the milestone on the McDonald family farm. The event was held overlooking the newly protected 8.9-hectare forest, which the family have called 'The Gorge'. This is their fifth QEII open space covenant.



The McDonald family with Bruce Willis during the unveiling of a plaque to celebrate the 5000th QEII covenant.

The site protects modified primary forest and a stream system that feeds into Wainuioru River.

The Gorge protects at-risk and threatened flora including *Olearia gardneri* (Threatened – Nationally Endangered), kānuka (Threatened – Nationally Vulnerable), and mānuka (At Risk – Declining). The covenant also protects the habitat of indigenous fauna, including the locally rare whitehead / pōpokotea, and abundant tūi and kererū which feast on the kōwhai. The McDonalds have also protected the last rimu on the farm, which is one of few remaining in the district.

Kathryn Longstaff

Team Leader Land Protection, QEII National Trust

Percy Scenic Reserve news

We have had a great spring flowering season, especially with our alpine in the glasshouses. Several of the plants we collected in March on our seed / cuttings trip to Queenstown, have flowered well, amongst these *Veronica hectorii* var. *hectorii*, *Geum leiospermum*, *Dracophyllum pronum* and *Brachyscome montana*. Others in the alpine collection which have thrived include *Pimelea traversii*, *Ranunculus callianthus* and many of the *Celmisias* including *C. dretzjü* and *C. verbascifolia*.

Our *Carmichaelia crassicaulis*, which we collected in 2018 from Foggy Peak, Canterbury, has sat there looking a bit forlorn. Just one small stem decided to put out three new shoots last year and has produced three new shoots this year, looking much better.

Some of the seed we collected on our trip in March has germinated. These include *Aciphylla lamondii* and *A. kirkii*. I have never managed to get any of the many *Aciphylla* species we have collected seed from over the years to germinate.

I have also been taking cuttings including *Veronica hookeriana*, *Celmisia dretzjü* and *Atriplex cinerea*. The *Atriplex* are to bulk up our plantings along Petone Foreshore, which are doing extremely well and to establish new planting areas.

We have again done a swap of one of our *Celmisia man-gaweka* with one of those from Ōtari-Wilton's Bush. This is to cross-pollinate them and grow some plants on for DOC for planting back in the wild. Unfortunately none of the seed we collected last year germinated. Luckily Ōtari had better luck and we got some of their seedlings to grow on. We also did a plant swap with them, giving them several *Carmichaelia curta*, getting a *Celmisia semicordata aurigans*, which we did not have in our collection, a *Celmisia byallii* and a *C. sp.* "Pupu Springs".

*Cliff Keilty
Gardener*

Ōtari-Wilton's Bush Reserve

Spring has sprung at Ōtari, with many plants in the collection flowering well in the early summer heat. Particularly so the *Myosotis pottsiana*, *Bulbinella hookerii*, *Linum monogynum* and *Sonchus kirkii* which all seem to be spreading along the paths, but we aren't considering them weeds yet due to their glorious flowering displays.

We have had some momentous occasions here recently with the release of Bee Dawson's book about the history of Ōtari, our Trust chair Dr Carol West being presented with the H. H. Allan Mere Award, the opening of the realignment of the new Blue Trail to Moko, our giant rimu, as well as celebrating our much-loved gardener Dave Bidgood's 30 years of service working at Ōtari. Bee's book is a real page-turner and unlike most history books, it is a social, ecological, and horticultural history rolled into one and is very well illustrated with Chris Coad's photos. It was a real pleasure to host the awarding of the Allan Mere here at Ōtari. Carol has known me since the 1983 Wellington BotSoc summer field trip to Tairāwhiti, which was attended by my whole family and others such as Tony (A. P.) Druce, who was one of the first recipients of the Award. We are getting overwhelmingly positive feedback from walkers using the new section of track up to Moko, some even mentioned that they thought they would not be able to visit Moko again, but due to the new route, and taking the lower Yellow Track, it is now possible again for them to visit Moko. We are very lucky to have the long serving Dave Bidgood on our team—he has been a mentor to a huge number of staff, passing on his deep knowledge in a gentle way and his real contribution in his own words is that he "has spent most of his

life taking the original traditional garden grid and turning it into natural curves”.

Following on from our success with the experimental cross-pollination of *Celmisia* “Mangaweka” last summer, the team is again hand-pollinating the few remaining wild plants of this undescribed entity (which is thought to be extinct in the wild). As it is on the brink of extinction, we are working closely with Percy Scenic Reserve, Lower Hutt and DOC to ensure we do what we can to propagate this plant, so we can eventually reintroduce it into the wild.

This summer Karin, Carlos and Jennifer are being joined on the orchid conservation project by Joe Dillon, (aka online as Welly’s Hungry Botanist) a VUW botany student who successfully applied for the summer scholarship which is generously funded by the Deane Endowment Trust. The work in the lab is already proceeding well with the collection of some of the orchid seeds needed for the project, as well as some of the fungal partners. Karin has also joined a group of international plant researchers training others on using specialist techniques to save “Exceptional plant species”.

If you live near Ōtari please keep an eye out for a new weed in your garden called black bryony / *Dioscorea communis* or *Tamus communis*. It is the only species in the yam family that has become a naturalised weed in Aotearoa. It has been seen occasionally in the 38 degrees garden over the years, but has recently also been found in the forest on the Blue Trail. It looks similar to convolvulus, but it has small flowers and the stem has no milky sap when snapped. However the tuber needs to be dug out and when broken the sap in the tuber can cause irritation and is considered toxic so ensure you wear gloves. It also has bright red berries which are undoubtedly spreading via our feathered friends.

Wellington Gardens (including Ōtari) has again been certified as being Carbon Zero as we continue to reduce our carbon footprint and transition to electric equipment. Also two Electric Vehicle chargers will be available for visitor use in the main carpark at 150 Wilton Road.

If you or friend or family member are interest in learning how to weave flax, the Ōtari Raranga Weavers group meetings can be found on Facebook or Eventfinda. Workshops for beginners happen regularly during the week and on weekends.

Please remember that the mulch pile in the Northern Carpark off Churchill Drive sometimes does need to close due to its own success, so when the rope is up across the pile please refrain from taking mulch as it is closed. Recent visitors will also have noticed that we have a new drinking fountain at the Troup Picnic Area.

I hope to see you all visiting Ōtari this summer!

Ma te wa,

Tim Park

Kaiohakaheare Ōtari | Manager Ōtari Native Botanic Garden and Wilton’s Bush Reserve

Ngā Māra o Poneke | Wellington Gardens

Papa Tākaro Hākinakina | Parks, Sport and Recreation

Mi Heke Ki Poneke | Wellington City Council

0212479739 Tim.Park@wcc.govt.nz Wellington.govt.nz

Audrey Lily Eagle, CNZM

We are sad to report that Audrey, Doctor of Science, University of Otago and author of books on native plants, died on 27 November, aged 97.

The committee

Lower Hutt Garden Circle

On 25 May, I gave a talk to the Lower Hutt Garden Circle on behalf of the committee. I spoke about BotSoc’s activities, the history of flora in the Hutt Valley and what native plants I grow in my Waiwhetu garden. The audience were lovely, asking many questions, particularly about what native plants they could grow in tricky spots in their gardens.

Kate Jordan

Chatham Islands / Rekohu

In September I joined a geology trip to the Chatham Islands led by Hamish Campbell. In between geological sites there was enough time to have a look at the botany. The endemic plants are so different from their mainland relatives that it was challenging to work out the relationships. The isolation, low relief, cloudiness and fierce winds seem to be the cause of the diverging evolution. I found whole fields of *Muehlenbeckia australis*, very healthy-looking with shiny stalks and leaves quite different from the plants on the mainland. The endemic species are too many to mention but rautini / *Brachyglottis huntii* / Chatham Island Christmas Tree and Chatham Island akeake / *Olearia traversii* stood out. A BotSoc summer camp on the Chathams would be a marvellous experience, if an expensive one!

Ken Fraser

Climbing asparagus on the Kāpiti Coast

Like the rest of the Wellington region, we are struggling to control climbing asparagus / *Asparagus scandens* throughout our Kāpiti Coast parks and reserves.

Originally from South Africa (Weedbusters incorrectly says South America), climbing asparagus is yet another garden escapee. It has been naturalised in Aotearoa New Zealand since 1970.

Ecological weeds are a wicked problem, and climbing asparagus is almost the perfect invader in terms of its ability to spread. It tolerates low light conditions, and given that its berries are attractive to birds, it can pop up almost anywhere.

Once established it forms a dense ground cover and can climb up to two metres high. It becomes almost impossible for most natives to germinate and grow in these dense infestations, leading to “zombie” forests and eventual canopy collapse.

Hand control is difficult and labour intensive, as any tubers left behind quickly resprout. It is recommended that disposal is via burning or burying. In isolated areas tubers can be hung in surrounding vegetation but there is always a risk these will fall to the ground and resprout before they die.

Herbicide control with a weak glyphosate solution is effective, but larger plants need to be cut first to allow for better coverage of base foliage. Follow-up control is crucial, as is continued monitoring. Care must also be taken near native vegetation to reduce the threat of killing desirable species.

Within the Kāpiti Coast, Paraparaumu hosts the worst climbing asparagus infestations, with other known areas around Paekākāriki and Waikanae. Ecological site K145 off Ruahine St, Paraparaumu is in particularly poor condition now (image below). The District Plan lists this area as kānuka-broadleaf scrub which is rare in Foxton Ecological District 31.02.



Ecological Site K145.

The forest itself is on a mix of public and private land and is steep, making control logistically complex.

Council employs two full-time environmental restoration officers to help manage over 600 hectares of open space. We also employ contractors to do additional ecological weed con-

trol. It has been recognised that the current level of focus is inadequate if we want to see these areas restored and functioning as biodiversity hotspots and carbon sinks into the future.

To counter this, at the time of writing we are hiring a biodiversity advisor to work across our open space areas, doubling our capacity. This role will be a mix of office-based planning work for ecological weed control, animal pest control and restoration planting. The field work component is monitoring, assisting community conservation groups and working alongside our environmental restoration officers.

The challenge is immense. I am hoping we see some central government support soon, especially off the back of the Parliamentary Commissioner for the Environment's *Space Invaders* report. Ideally we would see something on the same scale as Predator Free 2050. We need to do better at managing what we've got, otherwise these tāonga will continue to disappear before our eyes, under a sea of weeds.

Andy McKay – Team Leader Environment and Ecological Services – Te
Kāiārahi Rōpū Ratonga Taiao me te Hauropi
Kāpiti Coast District Council
Tel 04 296 4653
Mobile 027 5555 653
www.kapiticoast.govt.nz

TRIP REPORTS

Saturday 10 September 2022: Field trip Kiripiti Scientific Reserve, Ōtaki

After being delayed for two years, we finally made it to this small 2 ha tōtara-tūtoki-mataī forest remnant fenced off from livestock in 1971. It is an example of a now rare forest type that sits on a densely settled, dry, stony terrace originally formed by outwash from the nearby Ōtaki River. Some native forest blocks nearby have been subsumed into the landscape of rural gardens with many exotic intrusions, while others have had some management and livestock exclusion.

Led by A. P. (Tony) Druce, the reserve was first visited by BotSoc in 1963 as part of a study of six severely degraded forest remnants. Another trip by the society ensued in 1977. Point-intercepts along a North-South transect were taken on both these trips to analyse the structure of the forest canopy and the effects of livestock exclusion. The results are written up in past WBS *Bulletins*.

On our trip Pascale Michel guided a small group of the twenty-five attendees to replicate the methodology to assess the current state of the forest structure. It will be interesting to see the results of the point-height intercepts, but first impressions are that any changes are small and the biggest changes in structure are yet to come.

The rest of us, helped by Pat Enright's species list, were greeted at the

forest edge by a *Melicope simplex* festooned with the mistletoe *Korthalsella lindsayi*. Another was inoculated with seedlings, many of which had their feet successfully planted on their host. A large *Coprosma crassifolia* was the first bush-edge tree we saw. Then we saw the milk trees *Streblus banksii* and *S. heterophyllus*. On bursting through the edge of the forest, we saw that the forest floor was a mat of tūtoki / *Alectryon excelsus* subsp. *excelsus* seedlings. We did not see if there were any other larger cohorts of tūtoki in the reserve but in an adjacent block, also fenced off for about the same period, there were larger plants. Within the reserve sub-canopy were healthy kohekohe / *Didymocheton spectabilis*, up to 3 m high. Further in with less light were mats of *Corybas trilobus* that were hard to avoid when we gathered for lunch under the canopy. The canopy cover looked reasonably intact but we saw evidence of recent wind damage that had collapsed some of the taller trees opening up small light gaps. The sub-canopy and ground cover appear to be continuing to develop. Large *Geniostoma ligustrifolium* var. *ligustrifolium* and *Piper excelsum* subsp. *excelsum* are making the understorey much harder to push through. Disturbingly, there are also large *Rhamnus alaternus* / evergreen buckthorn rising up to canopy height and also along most fence-lines and the edges of adjoining

blocks. If it is to be eliminated from the reserve, it will not be easy. A large privet / *Ligustrum lucidum* was well disguised with a covering of moss and lichen, in the centre of the reserve, with more on the western fringes. In the adjacent block on private land, evergreen buckthorn had enveloped the edges of the block and wonga wonga vine / *Pandorea pandorana* had infested the edges. We saw mataī seedlings and, in an adjacent block, a miro / *Pectinopytis ferruginea*.

Ferns may have, so far, been the largest beneficiaries of the elimination of livestock for the last 50 years but there appeared to be no evidence of possum control. The small presence of grasses such as *Microlaena stipoides* and *Oplismenus hirtellus* subsp. *imbecillus* may be suffering from the apparent high rabbit population and the intrusion of weed grasses around the edges of the forest. It was clear, unless there was the occasional shade tree around the edges, there was no regeneration of natives occurring in the long grass weeds that filled the space.

Our intentions were to botanise other blocks on adjacent land that represented this same vegetation, but time and energy did not permit. It would be well worth visiting these neighbouring sites on private land that owners have invested much time in weeding and animal-pest control. We must apologise to

these willing participants for not having the time to do so and thank them for the offer of facilities while we were nearby. We can assure them that we will be back to follow the results of their efforts.

Participants: Paul Bell-Butler, Daniel Davis, Katryn De Bock, Gavin Dench, Michele Dickson, Frances Forsyth, Jenny Fraser, Ken Fraser, Ian Goodwin, Jill Goodwin, Chris Horne, Kate Jordan, Andy McKay, Pascale

Michel, Mick Parsons (leader / scribe), Lynne Pomare, Dave Reynolds, Barbara Simone, Roy Simone, Sunita Singh, Owen Spearpoint, Julia Stace, Jackson Thompson, Pat Thompson, Anne Tuffin.

1 October 2022: Field trip Tuapaka/Hutton's Covenant, Te Horo

The Tuapaka covenant is a bush remnant in a steep valley east of Te Horo. It is home to one of only two populations of *Powelliphanta traversii otakia*, and the owners work closely with the Department of Conservation to ensure the population continues to thrive. To this end there is good pest control on the property, and periodic monitoring of the snails.

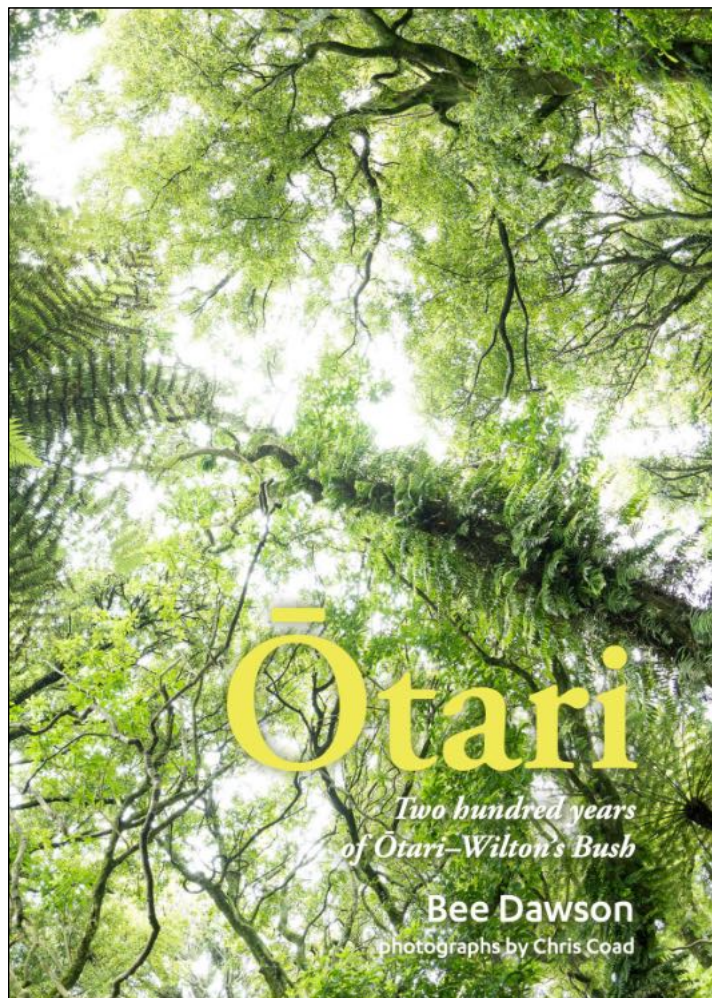
Our trip started with morning tea and a talk about the property from Jim Matheson, much appreciated by us all. Then we went down through a stand of planted mānuka/kānuka, with broadleaf seedlings beginning to establish underneath it, across a stream / wetland area still in long pasture grasses though with some wetland species amongst it. *Syzygium maire* / swamp maire planted in this area is doing well. This area might be interesting to have a closer look at. Then we entered the cov-

enanted area. This is regenerating bush, with a surprising amount of podocarps—especially tōtara—present. The bush is in good health, with a dense understorey probably due to good pest control. We saw numerous dead snail shells, especially in the lower part of the covenant near the stream, but also up near the ridge. There are several tracks in the covenant; most of us did a steep loop track, and some newer members spent most of the time in the lower part of the covenant with Michelle Dickson and Chris Horne giving them an introduction to plant identification.

Highlights for me were the many tōtara, the *Earina mucronata* in flower, and the snails; others were pleased to find *Trichomanes elongatum*, and some spent the day among the bryophytes, Leon and Lara finding species of fertile liverworts.



Pukatea / *Laurelia novae-zelandiae*. Pukatea flowers were abundant on the forest floor. Illustration: Eleanor Burton.



Ōtari: Two hundred years of Ōtari-Wilton's Bush is a lively, informative and beautifully produced account of Wellington's internationally renowned garden and reserve. It's a place that sustains both the people who visit it and the country whose plant life it protects.

Ōtari will be in bookstores in late November, but we are offering a pre-release discounted price of \$75 for people who order and pay through the Ōtari-Wilton's Bush Trust before 18 November. We will advise payment and collection options on order and P&P will be available. Contact treasurer@owbt.nz to order your copy now.

190 × 250 mm, hardcover, 226 pages, full colour throughout
ISBN 978-1-98-859561-0

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A few species were added to the list, and a list compiled of liverworts and mosses. Altogether we had a very enjoyable day out, and thanks to Jim and Sarah for allowing us to explore their property.

Participants: John Barnett, Paul Bell-Butler, Eleanor Burton (co-leader / scribe), Katrijn De Bock, Gavin Dench, Michelle Dickson, Joe Dillon, Jenny Fraser, Ian Goodwin, Jill Goodwin, Richard Grasse, Chris Horne, Kate

Jordan (co-leader), Rachael Lockhart, Viola Palmer, Tarina Pendlebury, Leon Perrie, Dave Reynolds, Lara Shepherd, Beverley Scott, Sunita Singh, Jon Terry, Su Min Yeoh, Nina Zimowit.

15 October 2022: Field trip Akatarawa 4WD trip

This was an additional special mid-month botanical trip. Twenty BotSocers were transported into the heart of the GWRC-managed Akatarawa Forest by eight 4WD vehicles from the Wellington Cross-Country Vehicle Club, enabling us to visit areas that would be otherwise be out of reach for most members. Akatarawa Forest has an interesting mix of actively managed *Pinus radiata* plantation, unusual exotic timber trees in what appear to be abandoned plantations, regenerating native forest and some larger remnant natives, particularly species that were not valued for timber, such as northern rātā and hard beech.

Starting at the Upper Hutt suburb, Tōtara Park, we drove on well-formed logging roads to McGhie's Bridge over the Akatarawa West River, then through an actively logged area (with clear-felled steep hillsides dropping straight into the river) to the Pram Track. From here the road became a little more challenging. We stopped part of the way up to admire flowering Kirk's daisy / *Brachyglottis kirkii*. Several plants were at the top of a steep bank, out of reach of browsers. We saw numerous *Chamaecyparis lawsoniana* seedlings that were self-sown here on the roadside.

We travelled on to Whakatikei Rd, then Titi Rd., where we stopped at the start of the Link Track for a quick morning tea, shared with our drivers. From here Leon quick marched us down an old logging tram track through regenerating kāmahi to a "grove" of hutu / *Ascarina lucida* , where this species, which is rare in the Wellington region, is unusually common. We discussed the similarities and differences between hutu and pukatea.

Our next stop was the causeway across the Hydro Valley Rd wetland. Here we had a poke around the edges of the wetland where two buttercup species drew our attention—one weedy—*Ranunculus flammula*—and one native—*R. glabrifolius*. We saw several *Clematis paniculata* flowering near the

causeway.

After lunch at the Orange Hut we headed to our main destination—the Whakatikei rātā, a five-minute walk off the Pram Track through an old *Chamaecyparis lawsoniana* plantation. This tree is the world's largest known northern rātā / *Metrosideros robusta*, along with another tree also in the Akatarawa Forest that is more difficult to access. We attempted a tree 'hug' and it took 15 of us holding hands to encircle the trunk,

although the ground was not level all the way around. We noted pig rooting of the nearby ground.

Thanks to the Wellington Cross-Country Vehicle Club, especially Barry Insull and David Sole for their organisation, and Sunita Singh for sending 140 e-mails (!) to coordinate BotSoc participants.

Lara Shepherd and Leon Perrie



Whakatikei rātā. Photo: Lara Shepherd.

19 November 2022: Workbee Te Mārua Bush, Kaitoke Regional Park, Upper Hutt

In slightly wet conditions, our group from BotSoc and Upper Hutt F&B gave the bush a good tidy-up, removing montbretia and Peruvian lily / *Alstroemeria psittacina* (picture). We left the markers for the Peruvian lily so we can check next year because it grows from tubers. We removed a small amount of rubbish.

- We could not find any sign of tradescantia around the tōtara by SH2.
- We saw a small patch of broomrape / *Orobanche minor* about 15 m from the gate – we shall remove it later.
- We found another yew / *Taxus baccata* about 50 m from the previous site and about the same age—it will be cut and painted.



Peruvian lily / *Alstroemeria psittacina*. Photo: Allan Sheppard.

Health and Safety incident— report to park ranger

At the end of our working bee one of

our members fell from the stile by Twin Lakes Road. Fortunately he was wearing a large pack which cushioned his fall as he fell onto his back.

We consider the main causes of the fall were:

1. The lack of a non-slip surface on the lower step—it was wet at the time.
2. The unsafe condition of the supporting post caused by the broken batten and the accumulated lack of tension in the 16-gauge fence wires which allowed too much movement.

Note. There is also another stile about 4 m away which needs a supporting post and the non-slip surface replaced.

Allan and Glennis Sheppard

Participants: John Barnett, Trudi Bruhlmann, Chris Horne, Sue Millar, Allan, Glennis and Graeme Sheppard.

25 November 2022: Field trip Saline wetlands, eastern Wairarapa

It was third time lucky for our group of seven which met, permit in hand, on Saturday 25 November. We arranged to meet the forest owner at 9.30 a.m. in Gladstone. After poor weather made us postpone the previous two Saturdays it was good to finally be on our way. Bot-Soc's first visit to this rare inland saline

ecosystem was in October 2017, so we expected that being a month later this time we might see some of the summer annual orchid species. From Gladstone it was an hour and a half drive east to the saline wetland. The forest owner rep, Tom, led the way with our two utes following. On arrival at 11.30 a.m. we

parked 50 m away to conduct a site health and safety briefing.

The saline springs and wetlands are situated on a ridge top in Glenburn pine plantation at 370 m a.s.l. and about 3.5 km from the coast. The site is of particular geological interest as it is where two tectonic plates meet. Cold saline springs



such as these are rare both nationally and globally. The string of saline springs from Glenburn to Hicks Bay, occurring on land, is only one of two or three in the world and thus is of intense interest for scientific study. It was visited by Thomas Kirk on 2 February 1880 where he recorded a new species, *Schoenus moorei* (WELT 20473), now considered to be *Schoenus concinnus*. His basis for the identification was the size of the plants, particularly the height, but on our visit in 2017 there was a vast range in the height of the plants depending where on the site they were growing.

The saline wetlands had a deer fence erected around them with a good-sized buffer in 2017. Many of the *Pinus radiata* growing within the fenced area (about 100 m by 100 m) have been felled, but there remains a row along the south-western edge. It is planned to fell these within a year or so. As was the case in 2017 there was copious deer and pig sign outside the deer fence, with the understorey in parts looking like a mowed lawn. We saw many rabbits' or hares' droppings outside the mesh fence. The mesh deer fence is in good condition and the gate is kept locked. The vegetation within the deer fence has recovered well since 2017 and our visit added one tree species, *Hoheria angustifolia*,

eight native shrub species, three native climbing species, three native tree ferns, six native ground ferns, six other native plant species and one moss. The one threat to this proliferation of new native species observed was possum browse on the *Pseudopanax arboreus* / five-finger. The growth of the rank grasses *Lolium*, *Agrostis*, *Holcus* and *Dactylis* was obvious but has not impacted the saline turf species. The party removed two dozen or more wilding pines and several *Erica lusitanica* / Spanish heath.

Entering through the locked gate the springs are not visible, so we all immediately started botanising the freshwater seepage wetland just through the gate. The party was led into the wetland by Brian and Chris Rance. It was great to have their botanical expertise on the trip. Very different from Southland I imagine! I spent some time with Tom, the forest owner's representative, showing him the turf species and explaining the importance of the site. He explained the pest control that was happening including possums and the plans to remove all the pines within the fenced area. The forest owners are very proactive and keen to improve the native plant richness and to continue pest control.

This first and fresh water wetland was dominated by the native *Carex* spp,

Machaerina rubiginosa, *Eleocharis* and *Schoenus concinnus* and the exotic species *Carex flacca*. We then quickly proceeded down slope to the north to be greeted by the odour of rotten eggs and then saw the saline springs. Again the saline turfs of *Triglochin striata*, *Samolus repens* and *Scleria radicans* were obvious with the *Triglochin* spreading across the grey muds. We spent much time searching the edges of the saline turfs and then along the deer fence before returning to the vehicles for lunch. After lunch we searched the northern end of the fenced area and then the south-west boundary along under the pines. Of note throughout the site was the depth of the pine needles, much due to red needle disease which was particularly bad last winter. After finding more new species and a fair number of seedlings under the pines we returned to the vehicles at 3.30 p.m. and left for home. The warm weather and sun made for a pleasant day compared with the cold and overcast visit in 2017. A very big thank you to Hannah Harvey, Julie-Ann Simmonds and Tom for facilitating this botanising trip and guiding us in.

Participants: Michelle Dixon, Jenny Fraser, Kate Jordan, Brian Rance, Chris Rance, Owen Spearpoint (leader / scribe), Julia Stace.

1 December 2022: Rāta walk, Lower Hutt

The rāta walk returned for another year, this time a bit shorter at 4 km. There were thirteen northern rāta on the route and many other natives, including rimu, pukatea, tōtara, kauri and kahikatea. Unfortunately the rāta were later flowering this year, but the Chilton rāta and one on Witako Street still put on a bit of a display.

We had six people on Thursday night and eight on Saturday. We were

lucky to be joined by Councillor Andy Mitchell, who shared his knowledge about the notable tree list, berm encroachments and many other matters.

Route: Waterloo Station to Woburn Station via Birch St, Witako St, Pretoria St, Marina Grove, Waterloo Road, Knights Road, Willoughby St, Wilford St, Kauri St, Hinau St, Totara Cres, Penrose St, Massey Ave. (map available

at [tinyurl.com/ratawalk](https://www.tinyurl.com/ratawalk)).

Next year it's likely we'll take a different route to view different trees.

More information about notable trees: <https://www.huttcity.govt.nz/council/district-plan/notable-trees>

Notable tree map: <https://haveyoursay.huttcity.govt.nz/notable-trees/maps/testing-map-file>

Kate Jordan



A new book about Tawa, now available

This book was launched on Tuesday 18 October 2022 in the Tawa Community Centre.



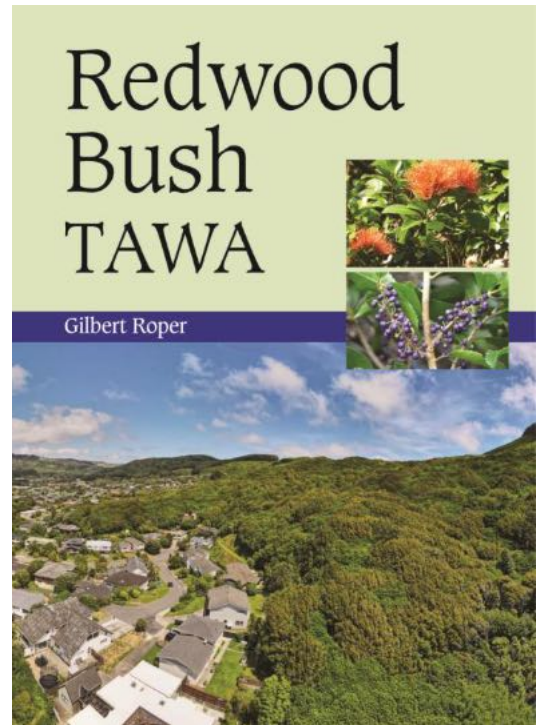
This is author, Gilbert (Gil.) Roper's third publication relating to Tawa. He was motivated to write this new book: **Redwood Bush, Tawa** after reading how Redwood Bush was saved when the Redwood subdivision began making inroads into the native bush for housing development in the 1970s. Many

Tawa residents objected seeing pristine native bush destroyed. Ultimately, the Tawa Borough Council secured a loan from The Treasury to purchase the area as a reserve. Today it's an invaluable recreational resource of mature lowland native bush.

This new publication is sponsored by the Friends of Tawa Bush Reserves (FOTBR). See: <https://tawabush.org.nz>

The colour-illustrated, 160-page, A4 size book features:

- native bush in Tawa at the time of pioneer settlement
- some history of the Redwood subdivision
- residents of Tawa protest and action is taken
- recollections by residents of changes in Redwood Bush over time
- walking Redwood Bush in the present day
- visual details of the native flora and birds in Redwood Bush and how these have changed
- lizard studies, lichens and fungi recorded in Redwood Bush
- pest control and the resurgence of the flora and fauna
- information on a new signed botanical walk in Redwood Bush.



Orders and cost

These can be placed with Denis Rogerson, Friends of Tawa Bush Reserves: denisrogerson@gmail.com with payment made by direct credit into FOTBR's bank account, using 'Surname or organisation' for **Particulars** and 'Redwood Bk' as a **Reference**. The FOTBR account number is: 03 – 1534 – 0043966 – 25 and the cost is \$30 per book.

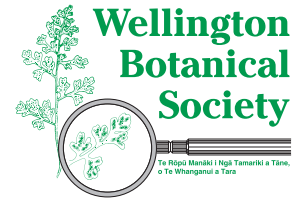
For Tawa residents, when placing an order with Denis, please indicate the address to which the book is to be sent so that he can make the delivery to you. For people beyond Tawa, books can be couriered but will incur an extra charge. Please communicate the delivery address details to Denis. Books can also be purchased from 'Tawa Books and Post', Main Road, Tawa for \$30 (cash).

Please note:

This book is published by FOTBR which is a non-profit organisation and seeks to defray the cost of printing through the sales of the book.

Subscription Notice 2022–23

PO Box 10-412,
Wellington 6143



**Charities Commission
Registration: CC10518**

1 September 2022

Your subscription for the year ending 30 June 2023 is due.

We really appreciate your membership. Your subscription fees allow us to produce 3 newsletters annually and publish the bulletin, which is produced once every two years. It also contributes to bringing speakers in from out of town for our monthly meetings. And in this past few years, pays for our zoom subscription so we can broadcast our meetings out further, making us more accessible to our members, such as those with young families and those who live out of the city and find it challenging to travel to our evening meetings. Any donation to support research into NZ native plants is welcome. This will be added to the Jubilee Award Fund.

Wellington Botanical Society Inc. no longer accepts Cheques as payment:

Payments can be made directly to the Society’s Bank Account — 02 0536 0017812 00 – including following details:

Particulars: *Name*

Code: *Membership type*

Reference: *amount of any included donation*

Or can be made as a cash payment in person at our monthly meeting. Please enclose this form, along with the payment in a sealed envelope addressed to the Membership Secretary and pass to a member of the committee.

If neither of those options are available to you, please get in touch with the membership secretary, Helen, on 022 413 5194 or the email below:

Subscription enquiries or change of address please contact: wellingtonbotsocmembership@gmail.com

The Memberships Secretary
Wellington Botanical Society Inc.
PO Box 10-412
Wellington 6140

Name:

Subscription for the year ending 30 June 2023 \$.....

Ordinary membership \$35, Country \$30, Group/family \$40, Student \$10

Donation to the Jubilee Award Fund \$.....

(Donations to Wellington Botanical Society Inc. qualify for a New Zealand tax rebate)

Total \$.....

www.wellingtonbotsoc.org.nz



Membership application

(For new members, **NOT** for renewal of existing membership)

I wish to join the Society

My name Mr/Mrs/Ms/Dr Phone (.....) (h)

My address Phone (.....) (w)

..... Fax (.....)

I would like to receive my newsletters by e-mail as a PDF: YES / NO (Delete as appropriate)

My/our e-mail address@.....

Signature Date:..... / /

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

Membership fees for the year ended 30 June 2023 are:

Type of membership: *Ordinary* \$35; *Country* \$30; *Student* \$10; *Group / family* \$40.

We welcome donations to support research into NZ native plants and to the Jubilee Award Fund.

Please pay direct to the Society's bank account 020536 0017812 00

using the following details:

Particulars: *Name*

Code: *Membership type*

Reference: *amount of any included donation*

and e-mail this completed form to the Membership Secretary at wellingtonbotsocmembership@gmail.com

or post to: **Membership Secretary, Wellington Botanical Society Inc, PO Box 10 412, Wellington 6140**

Payment enclosed for	Ordinary membership	\$.....
	Country membership	\$.....
	Student membership	\$.....
	Group / family membership	\$.....
	Donation	\$.....
	TOTAL	\$.....

As we can no longer accept cheques, cash payments can be made directly to a member of the committee on meeting nights or field trips if the correct value is placed in a sealed envelope addressed to Membership Secretary with a copy of this form.

Authority to release your name, address and phone number to other members of the Society

The Society holds the names and addresses of all members to use for post-outs of newsletters etc.

The committee sees benefit in circulating the membership list to all members. This is done by many societies to enhance social interaction as well as being of practical value.

Under the Privacy Act the circulation of names on such lists requires the approval of the individual members.

If you agree to your name and address being on the circulated list, please sign the authorisation below and return it with this membership application.

I agree to my name, email, address and telephone number being on the membership list to be circulated to members of the Wellington Botanical Society. I understand that this list is to be used only by members, and that the circulated list will include the caveat that the list is for social and society use and is not to be used for any other purpose.

Specifically the list is not to be used for marketing, soliciting or political purposes.

Name..... Signed..... Date / /

Name..... Signed..... Date / /

If you do not agree, it would assist processing if you could please put a line through paragraphs above and return the form unsigned.

www.wellingtonbotsoc.org.nz