

# Wellington Botanical Society

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



# NEWSLETTER December 2020

Previous issue: September 2020

ISSN 1171-9982

## From the President

We warmly welcome Helen White to the committee in the new role of Membership Secretary and Zoom Assistant. At our November Extraordinary public meeting we voted to extend the term of President and Vice-President by up to 5 years, as we have such a small pool of potential Presidents. I must say I find the job quite rewarding and it does open doors, so give becoming President some thought for the next AGM - August 2021.

Our Summer Camp, 14 - 21 January 2021, will be based at Wainui YMCA camp, across Akaroa Harbour from Akaroa town.

On 16 November, Melissa Hutchison of Tenax Consulting, Christchurch, gave us a wonderful introduction to the Banks Peninsula flora and the many ecosystems present.

Check our Facebook page (<https://www.facebook.com/groups/322939557873243/>) for upcoming events.

Have a Merry Christmas and a Botanical New Year!

*Jon Terry*

## New members

We welcome the following people to Wellington BotSoc: Edmund Chew, Christopher Cornwall, James Crane, Pandian Gonasegaran, Kair Lippiatt, Kate McAlpine, Viola Palmer and Nina Rivers.

*Helen White, Membership Secretary*

## Articles for web site

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

[www.wellingtonbotsoc.org.nz](http://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 [esmereldadoris93@gmail.com](mailto: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

|                                 |                                                                                                   |                                                                               |
|---------------------------------|---------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| <b>Address:</b>                 | PO Box 10 412, Wellington 6143                                                                    |                                                                               |
| <b>Web site:</b>                | <a href="http://www.wellingtonbotsoc.org.nz">www.wellingtonbotsoc.org.nz</a>                      |                                                                               |
| <b>President:</b>               | Jon Terry                                                                                         | 021 168 1176                                                                  |
| <b>Vice-Presidents:</b>         | Owen Spearpoint                                                                                   | 562 8780                                                                      |
|                                 | Sunita Singh                                                                                      | 387 9955                                                                      |
| <b>Secretary:</b>               | Kate Jordan                                                                                       | 027 899 0018 <a href="mailto:kateljordan@gmail.com">kateljordan@gmail.com</a> |
| <b>Treasurer:</b>               | Chris Moore                                                                                       | 479 3924                                                                      |
| <b>Membership Secretary:</b>    | Helen White                                                                                       | <a href="mailto:helenamywhite@gmail.com">helenamywhite@gmail.com</a>          |
| <b>Auditor:</b>                 | Jane Humble                                                                                       | 971 6970                                                                      |
| <b>Submissions coordinator:</b> | Bev Abbott                                                                                        | 475 8468                                                                      |
| <b>Bulletin editor:</b>         | Eleanor Burton                                                                                    | 479 0497                                                                      |
|                                 | Chris Horne                                                                                       | 475 7025                                                                      |
| <b>Newsletter editor:</b>       | <a href="mailto:jchorne15@gmail.com">jchorne15@gmail.com</a><br>28 Kaihuia St, Northland, WN 6012 |                                                                               |
| <b>Annual subscription:</b>     | ordinary \$35; country \$30; student \$10;<br>joint / group / family \$40.                        |                                                                               |

Send your subscription to Membership Secretary, WBS, Box 10 412, Wellington 6143 or 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. QR code and hand sanitiser at door.

## 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 2021**

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 6143, 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, clipboard, map or park brochure, camera, binoculars, hand-lens, sun-block, sun-glasses, 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.

## 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](mailto:sunita@actrix.co.nz)

## Meetings

### Public transport to meetings

The following bus services stop on Kelburn Parade, about 50 m up it from Victoria University's Murphy Building Lecture Theatre MYLT101:

#### 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:** 01, 11, 21, 31, 41, 51 minutes past the hour from Salamanca Station

For further information ring Metlink, 0800 801-700.

## NOTICES

### Subscription reminder for the year ending 30 June 2020

Almost fifty members of BotSoc 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 Sub20 as Reference. Or pay by cheque to the Wellington Botanical Society account above. Or post a cheque addressed to Treasurer, Wellington Botanical Society, PO Box 10-412, Wellington 6143, which will be deposited on your behalf.

#### Cheques

Please note that our bank (BNZ) is phasing out cheques and from July 2021 will no longer accept them.

*Chris Moore, Treasurer*

### Membership Secretary

We welcome Helen White to the BotSoc committee as Membership Secretary.

*The committee*

### Awards and grants

- 15 December. **Jubilee Award 2020.** 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. Full details elsewhere in this newsletter.

### 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.*

### Nominations called for

- *29.1.2021.* **Wellington Conservation Board – 3 nominees.** Appointments take effect from 1.7.2021—term up to 3 years. Information & application form both online & downloadable at [www.conservationboards.org.nz](http://www.conservationboards.org.nz) or from any DOC office or by contacting [nominations@doc.govt.nz](mailto:nominations@doc.govt.nz)

### Submissions called for

- *16 March – 16 April 2021.* **Greater Wellington Regional Council draft Long-Term Plan 2021-2031.** Check web site and Public Notices in newspapers.
  - [www.gw.govt.nz](http://www.gw.govt.nz)

*The committee*

## FIELD TRIPS & EVENING MEETINGS

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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.

### FEBRUARY – MAY 2021

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#### Saturday 13 February: Field Trip

Mt. Climie, Remutaka Forest Park

*Note:* Second Saturday.

We will drive in 4wd vehicles from Tunnel Gully, Te Mārua to North Climie, 830 m and Climie No. 2, 860 m. We will botanise subalpine plant communities on the ridge, then along spur to 835 m, then forest towards 775 m. Be prepared for strong winds; bring sun protection. **Bookings:** essential as numbers limited to available 4wds. **Meet:** 9.30 a.m. at Tunnel Gully car park, off the end of Plateau Rd, Te Mārua. **Train:** 8.05 a.m. on Hutt Line from Wellington to Upper Hutt. Ask co-leaders to meet you there. **Co-leaders:** Jon Terry [Jon.Terry.NZ@gmail.com](mailto:Jon.Terry.NZ@gmail.com) 021 168 1176, Helen White [helenamywhite@gmail.com](mailto:helenamywhite@gmail.com) 022 413 5194. **Map:** Parkmap Rimutaka & Haurangi Forest Park, or NZTopo BP32 + BP33 + BQ32.

#### Monday 15 February: Evening meeting      Orchid conservation in NZ—a long and winding road

**Speaker:** Carlos Lehnebach, Curator, Te Papa. More than 30% of our orchids are of conservation concern with some species reduced to only a few hundred plants in the wild and restricted to a single locality. Some potentially new species are also facing the threat of extinction. What can we do to save them? In this talk I will present current research projects aiming at understanding orchid partnerships with fungal mycorrhizal partners and the development of methods to propagate terrestrial and epiphytic orchids from seed.

#### Saturday 6 March: Field Trip

Martins River, Akatarawa Forest

Martins River is at the head of the west branch, Akatarawa River, Akatarawa Forest. It is accessed from the Maungakōtukutuku Valley entrance to the forest with 4wd vehicles on old logging roads, which takes c. 1 hour to the ridge above the valley. From the vehicles we will descend some 300 m to the valley floor and the wetland using old logging tracks. We will be very remote and have no cell phone coverage. Tramping boots are essential as the ground is very uneven, moderately steep and slippery. Bring warm clothing, plenty of snacks, lunch, a thermos and water. The wetland is a mix of open sedgeland and mānuka/coprosma shrubland over sedgeland or sphagnum. The wetland is very wet in places—you may wish to take gumboots and tramping boots. The forest around the wetland is mixed mature and regenerating red beech/podocarp forest. The area is subject to unauthorised track building. We aim to leave the wetland no later than 3.30 p.m. **Train:** Catch 7.44 a.m. train on Kāpiti Line from Wellington to Paekākāriki Station. **Wait:** northern carpark to be collected at 8.45 a.m.—tell Owen that you'll be there. **Meet:** Maungakōtukutuku Rd end 9.30 a.m. **Map:** NZTopo50–BP32 Paraparaumu. **Leader:** Owen Spearpoint 027 285 8083.

#### Monday 15 March: Evening meeting

Kōtukutuku Ecological Restoration Project

#### (KERP) – Impact of rodent control on forest regeneration

**Speaker:** Winifred Long, Ecological Analyst. KERP is based on a 32-hectare Kāpiti Coast property with mature and regenerating coastal forest plus pasture and plantation forest. The flora on the property has been inventoried: 42% of the species present are endemic with a further 21% indigenous but not endemic. One of KERP's objectives is to protect and enhance the biodiversity of the 17-ha coastal forest remnant on the property through intensive pest control. In 2020 a vegetation survey was done including eight 20 m × 1 m survey plots originally surveyed in 2016 before pest control operations began. This enabled a comparison of the 2020 survey results with the pre-pest control results to identify whether the control of rodents has had an impact on vegetation as it is known that rats and mice eat seeds and seedlings.

#### Saturday 10 April: Field Trip

Ralph Green's native forest, Kāpiti Coast

Botanise this mature nikau-kohekohe west-facing 2-ha forest and ponga-mānuka east-facing forest. Boots essential. We will prepare a species list for the owners.

**Train:** 8.44 a.m. train on Kāpiti Line from WN Stn to Paraparaumu Stn. **Meet:** 9.45 a.m. at car park, Coastlands Mall, near pedestrian underpass from station. **Car-pool** then travel in convoy to site. **Address:** 214 Main Rd North (= former SH1) 300–400 m south of Otaihanga Roundabout. Go around roundabout then drive south c. 300–400 m. **Parking & ease of access:** Better one entrance north from no. 214—the owners will advise the co-leaders so that we know what to do on the day. **Map:** NZ Topo50–BP32 Paraparaumu. **Co-leaders:** Chris Moore [chrism.wellington@gmail.com](mailto:chrism.wellington@gmail.com) 479 3924, 027 431 3789, Laura West [laurajgwest@gmail.com](mailto:laurajgwest@gmail.com) 021 583 934.

## Monday 19 April: Evening meeting Wellington's dunelands—a naturally uncommon ecosystem

**Speaker:** Dr Roger Uys, Senior Terrestrial Ecologist, Greater Wellington Regional Council. Dunelands used to be far more abundant, but their continued loss to stabilisation, farming and development has seen them become one of our rare ecosystems. Like wetlands they are now Nationally Threatened. In contrast, our naturally uncommon ecosystems have always had limited distributions. However, like the rare ecosystems, most of our naturally uncommon ecosystems have also become threatened with extinction.

Wellington's Regional Policy Statement requires the regional council to identify indigenous ecosystems and habitats with significant indigenous biodiversity values so that these ecosystems can be protected in district and regional plans. This talk is about how we've been mapping the extent, surveying the biodiversity and monitoring the health of dunelands and naturally uncommon ecosystems in the Wellington Region. I will let you in on some fantastic botanical discoveries and give you the inside scoop on what councils, DOC and community groups are doing to protect these ecosystems.

## Saturday 1 May: Field Trip

## Ōpau Stream valley and Ōpau Bay

From the West Wind Farm we will travel by 4wd or foot down the steep Makara Walkway to Ōpau Bay where we will botanise the coastal turf vegetation. From there we will head up Ōpau Stream valley to explore the only raupō swamp within the Wellington city boundary, some very large karaka trees and coastal forest remnants. There will also be an opportunity to walk along the beach, if the weather is favourable. **Meet:** 9 a.m. West Wind Farm car-park. Walk or take 4wd from here. **Directions:** Follow Makara Rd from Karori, continue past junction of Takarau Gorge Rd, go Ōpau Rd, then continue till you reach West Wind Farm car park. **Co-leaders:** Lara Shepherd and Leon Perrie [Lara.Shepherd@tepapa.govt.nz](mailto:Lara.Shepherd@tepapa.govt.nz) 027 363 5854. **Direction map:** [www.google.com/maps/@-1.2406978,174.7131088,1427m/data=!3m1!1e3](http://www.google.com/maps/@-1.2406978,174.7131088,1427m/data=!3m1!1e3) **Map:** NZTopo50-BQ31 Wellington.

## Monday 17 May: Evening meeting

## Members' evening

Please share your botanical slides and photographs taken on BotSoc trips, your paintings and drawings, and your favourite botanical readings. Slides on a USB stick, limited to 20 per person. For a gold-coin koha, or even 'folding money', buy one or more books we put on display to help build up the Jubilee Award Fund which is used to support research on NZ plants. Bring any spare botanical or other natural-history books you have and don't want any more to have them auctioned – to be taken home again if they don't sell. Plant specimens to sell, or to discuss, would add to a memorable evening.

## PUBLICATIONS

- 1a. **What's up DOC.** 10/20: Rongoā; etc.
- 1b. **Possible fines for conservation rule-breakers.** [https://www.doc.govt.nz/news/media-releases/2020-media-releases/conservation-rule-breakers-may-face-fines/?fbclid=IwAR1Sg84fEHtwn8yQwP6vNpReVStDPbR3jL4AX59ZSsqK2R\\_61VkwsmWn0EO](https://www.doc.govt.nz/news/media-releases/2020-media-releases/conservation-rule-breakers-may-face-fines/?fbclid=IwAR1Sg84fEHtwn8yQwP6vNpReVStDPbR3jL4AX59ZSsqK2R_61VkwsmWn0EO)
  - [www.doc.govt.nz](http://www.doc.govt.nz)
- 2a. **NZ Seed Plant Checklist 2020.** PDF of 2.8 MB, c. 400 pp. Note: it covers only seed plants. Lichens, mosses, ferns and other non-seed plants are not included. (Nelson BotSoc Newsletter 9/20).
- 2b. **NZ Myrtaceae key—new homepage:** <https://keys.landcareresearch.co.nz/nzmyrtaceae/key/nzmyrtaceae/media/html/intro/index.htm>
  - Landcare Research
3. **NZ Botanical Society.** 14/19/20: *Dactyloctenium aegyptium*; Bill Malcolm wins Allan Mere Award; regional botanical societies' news; Robert Langley Holmes (1833–1919)—plant collector; Olof Peter Swartz (1760–1818)—biographical sketch; etc.
  - [www.nzbotanicalsociety.org.nz](http://www.nzbotanicalsociety.org.nz) c/o Canterbury Museum, Rolleston Ave, CH 8018. Subscription \$25.
4. **Auckland Botanical Society.** Newsheet 11/20; *Metrosideros carminea*; etc.
  - [aucklandbotanicalsociety@gmail.com](mailto:aucklandbotanicalsociety@gmail.com)
5. **Botanical Society of Otago.** 10/20: Seeding project; observations of vegetation after fire on Flagstaff, Dunedin; etc.
  - [bsotago.ac.nz](mailto:bsotago.ac.nz)
6. **Canterbury Botanical Society.** Journal 50. 2019: Role of mycorrhizal fungi in plant invasions; large vegetation change in Branch River valley – extensive cover of pines; NZ Wilding Conifer Group; role of botanic gardens to mitigate impact of invasive alien species; impact & control of weeds in Canterbury; crowd-sourcing discovery of new plant naturalisations in Canterbury using iNaturalist; Chilean mayten tree invading Canterbury; the fern *Polypodium vulgare* weedy in NZ; etc.
  - <http://canterburybotanicalsociety.org.nz>
7. **Nelson Botanical Society.** 9/20: NZ Seed Plant Checklist; etc. 11/20: Talk about north Canterbury QE2 covenants; presentation of 2020 Allan Mere Award to Bill Malcolm; etc.
  - [pittham@xtra.co.nz](mailto:pittham@xtra.co.nz)
8. **Tieke.** Weekly e-newsletter. Alerts & events. ECO – Environment & Conservation Organisations of NZ Inc. BotSoc is a member organisation of ECO. Friend of ECO sub. = \$45 p.a.; Sustaining Friend of ECO sub. = \$120 p.a. PO Box 11-057, WN or 389016 0185477 00.
  - [eco@eco.org.nz](mailto:eco@eco.org.nz)
9. **Ōtari-Wilton's Bush Trust.** 10/20: Ōtari history to be published; volunteers sought for plant propagation project; kōwhai at Ōtari; *Dactyloctenium aegyptium* seed sown; *Meliclytus lanceolatus* / narrow-leaved māhoe; etc.
  - [www.owbt.nz](http://www.owbt.nz)
10. **Forest and Bird.** 376 Winter 2020: "green economy" policy – <https://bit.ly/2zxbpM>; circumventing the RMA; native frogs; capturing carbon; donations sought; caring

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

- for freshwater; penguins; politics of Manapōuri; feral cats; tūi; lupins – a pest plant; wildlife rescue; dolphins; rare Bay of Plenty kānuka / *Kunzea toelkenii*; government funding wilding pine control; dolphins; Jeanette Fitzsimons; harakeke hues; Banks Track; Isabel Morgan – KCC educator; etc. [377 Spring 2020](#): Tahr & wallaby control; donations; case against coal mining at Te Kuhā; tenure review; Paparoa helicopter use challenged; dolphins; Kaitorete Spit encroachment; tahr cull win; bird-call monitor; marine life crisis – Hauraki Gulf; Horohoro (Rotorua) mining plan; forest ringlet butterfly; F&B's paper archives; bats / pekapeka in south Auckland; Otago seabird project; fertilisers & algal blooms; threat from tahr; lizards on Central Otago drylands; Strategic Plan 2020-2025; shearwaters; Kiwi Conservation Club; RiverWatch checking river pollution; Sophie Handford – youth award; Waitākere Branch wins F&B award; Pat Heffy & Liz Carter – Old Blue awards; sea stars / pātangaroa; impact of wilding pines; penguin rehab; white fantail; book review: *Invasive Predators in NZ: Disaster on Four Small Paws*. by Carolyn King; wildlife in Ōkarito; etc. [378 Summer 2020](#): Remarkable letter from a new supporter: protecting pekapeka / bats from cats; trying to protect Ngaruroro River; call to stop clearance of native vegetation on public land; kākābeak discovery; severe decline of Antipodean albatross; reconnecting with nature; loss of natural capital; estuaries in trouble; rodent-detecting dog; Maniototo / Mackenzie Basin ecosystems disappearing – Dryland Heritage Park sought; kiwi return to South Taranaki; documenting nature & climate change; Rotorua youth hub; orange roughy fishery impacts; saving our myrtles from rust; controlling ferrets; deep sea corals; ferret control: <https://bit.ly/2TeNPBE>; donating to F&B; review of 2020; F&B's wildlife lodges; campaign to stop vehicles on Catlins' beaches; environmental benefits of chickens; nature of viruses; wildlife hospitals; Dunedin's Town Belt; rat trapping in Manawatū; etc.
- [www.forestandbird.org.nz](http://www.forestandbird.org.nz)
11. **Pipipi.** [51 5/20](#): Pandemic & climate change; c. 500 people on Open Day; West Coast rain-forest; Hinewai gains 37 ha at Stony Bay; impact of Aussie fires; *Bulbinella hookeri* discovered; vehicle damages a track; huge ancient slip found - now forested; controlling pines and possums; raptors; etc. No subscriptions system but donations welcome: BNZ Akaroa 02 0832 0044225 00. [52 11/20](#): Warming world – 33 years' records at Hinewai; mokimoki / *Microsorium scandens*; Ōnikautahi and Mokimoki Bush added to Hinewai – see “37 ha at Stony Bay” above; further land purchases possible – donations welcome!; invasive alien conifers; etc.
    - *Hinewai Reserve, 632 Long Bay Rd, RD3 Akaroa 7583.*
  12. **Zealandia Te Mārae a Tāne.** Annual Report 2019/20. A4, 65 p.
    - [www.visitzealandia.com](http://www.visitzealandia.com)
  13. **Moths & Butterflies of NZ Trust.** Forest ringlet butterfly / *Dododnidia helmsii*. A3 information sheet & poster.
    - *M&B of NZ Trust, Box 44100, Pt Chevalier, AK 1246* [www.monarch.org.nz](http://www.monarch.org.nz)
  14. **Backcountry.** [221 8/20](#): Aoraki / Mt Cook Mgmt Plan restart; Truman Track blasting; Ōparara project starts;
- Griffin Creek hydro?; *Conceding nature...Conceding the commons* re DOC's handling of concessions; Les Molloy – patron; Sub-Antarctic Islands; recreational opportunities from tenure review; etc. [222 11/20](#): NZ's Conservation Act & National Parks Act; FMC asks DOC to start again; reviews of Conservation General Policy & General Policy for National Parks; Provincial Growth Fund not heaven-made for conservation or DOC; Crown Pastoral Land Reform bill will end tenure review; Maerewhenua Trust supports FMC; tahr – mountain locusts; wild rivers campaign; DOC's 'stewardship land' lacks legal protection; FMC calls for a wild rivers park on stewardship lands on West Coast; West Coast's Griffin Creek sought for hydro; climate change – inconvenient truth; weather patterns & forecasting; bikepacking in the ranges; DOC's struggle to maintain huts & tracks; tenure review – recreational opportunities; etc.
- [www.fmc.org.nz](http://www.fmc.org.nz)
15. **Gorge Gazette.** [12/20](#): New bridge link to Oban St., water pollution in Kaiwharawhara Stream; Trellissick Park's trees produce honey; etc.
    - <http://www.trellissickpark.org.nz/>
  16. **Friends of Wellington Botanic Garden.** [12/20](#): New web site; etc.
    - <https://friendsofthewellingtonbotanic.garden>
    - <https://www.facebook.com/wbgfriends/>
  - 17a. **Toitū te marae a Tāne – Restoration Planting Sites.** A4 68 p.
  - 17b. **Toitū te marae a Tāne – Restoration Planting Techniques.** A4 59 p.
    - *Wellington City Council, <https://wellington.govt.nz/>*
  18. **Willdenowia.** Annals of the Botanic Garden and Botanical Museum Berlin. [50.1 4/20](#): Phylogeny and molecular systematics; taxonomy of plants; etc. [50.2 8/20](#): Phylogeny & molecular systematics; taxonomy of fungi; taxonomy of plants; inventorying diversity of Europe and the Mediterranean; etc. Documents available on loan from newsletter editor.
    - <https://www.bgbm.org/willdenowia>
  19. **RNZ news.** Public agencies failing to protect natural environment - Forest and Bird
    - <https://www.rnz.co.nz/news/national/427580/public-agencies-failing-to-protect-natural-environment-forest-and-bird>

## Blooming aliens

Help to reduce the spread of alien plants by removing their buds or flowers.

- Agapanthus / *Agapanthus praecox*. Snap off the bud or flower head several centimetres below base of bud or flower. “Becoming a serious problem in many localities”. Note: The slimy sap affects some people's skin. (South Africa).
- Bear's breeches / *Acathus mollis*. Snap the flower stalk. “A very large and conspicuous weed”. (South-west Europe).
- English ivy / *Hedera helix*. “Both berries and foliage can be poisonous”. Attracts wasps. (Europe & Asia).
- Pellitory-of-the-wall / *Parietaria judaica*. (Europe, North Africa to Central Asia). “Pollen may cause asthma; fine hairs may irritate skin”. Dig out with garden fork.

Information: *Common Weeds of NZ*. 3rd edition. Popay, I. Champion, P, James, T. NZ Plant Protection Society. 2010.

### Newsletter by e-mail?

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

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

*Ngā mihi,*  
Kate Jordan, Secretary

# SUBMISSIONS MADE

## Greater Wellington Regional Council's Draft Parks Network Plan—Toitū Te Whenua, 2020–2030

### Pop quiz

1. Before you start reading this, see if you can write down the names of the eight regional parks managed by Greater Wellington Regional Council (GWRC) as the Parks Network.  
*Hint: they are not all called parks or regional parks.*
2. GWRC manages a large area of public land as regional parks. Which of the following areas is closest to the total area?  
(a) 10,000 hectares      (b) 30,000 ha  
(c) 50,000 ha            (d) 70,000 ha.

(Answers at end of this report).

The subtitle of the Draft Parks Network Plan (PNP) is *Everything is connected; E tūhonohono ana ngā mea katoa*. It has six goals; three on-going, and three for the term of this plan. It's not always easy to see those connections because the six goals and 275 pages of the draft PNP already contain 84 policies and about 400 action statements. And the consultation and planning haven't finished because GWRC plans to utilise "master planning processes, working collaboratively with mana whenua partners, stakeholders and the community to provide park-wide and place-specific spatial blue prints for recreation and conservation facilities and activities in parks, and to guide broader-scale landscape restoration". A diverse range of aspirations for the future development of parks has already been identified. As one example, we were concerned to find that policy 49P identifies six situations where interest has been expressed in planting non-indigenous plants. We opposed this, arguing that the place for exotic plants is closer to human settlements, not in the reserves established primarily to protect water supplies, forestry plots and indigenous biodiversity.

The public consultation leading to the latest draft PNP started more than two years ago (June 2018) when GWRC circulated three "Food for Thought" documents; a *Parks Plan Discussion Document* (74 pages), *External Influences on Parks* (47 pages), and *Farming in Regional Parks* (73 pages). There is an account of our 2018 submission in the September 2018 Newsletter. At that time we congratulated GWRC on recognising climate change as a key consideration for biodiversity planning.

### Phasing out stock grazing

At the organisational level, GWRC has responded to the growing concern about climate change by developing a Corporate Carbon Neutrality Action Plan (CCNAP) to guide its aspiration to become a carbon-neutral organisation by 2030. One of the key CCNAP strategies is to phase out stock grazing from the farms in regional parks, and to progressively restore natural heritage. Action A5 in the PNP says: "develop and implement a planned approach to removing livestock and non-recreation horse-grazing from parks (except Battle Hill) to support conservation and recreation objectives". We endorsed a planned approach because there are so many variables to consider. If stock

are removed too soon, weed seeds will germinate and long grass and scrub (e.g., gorse) will increase the risk of wild fires. As well as questions about what species to plant on each farm, it's not yet clear whether local nurseries will be able to produce sufficient quantities of each species in each of the restoration plans which are still to be developed, especially if the plants are expected to be ecosourced.

The costs of restoration by planting may also come as a surprise. We reminded GWRC that in 2018 one of their "Food for Thought" documents had estimated that restoration planting of mānuka at Kaitoke Regional Park would cost about \$4,100 per hectare, and planting a mix of forest species would cost about \$42,500 per hectare. For new plantings to survive, a maintenance cost of about \$1,750 per hectare per year for weed management for five years would also be required.

### The potential contribution of pest control to reducing climate change

GWRC finalised its Pest Management Strategy for 2019–2039 in 2019 (with our input) but our submission on the PNP includes a thought-provoking quote from Chris Horne who argues that sustained pest-animal control including triennial 1080 drops would increase the sequestration of carbon dioxide from regional parks. (as well as protecting plants).

Faced as the world is by the mounting threat of runaway climate change, sustained pest-animal control over all lands administered by GWRC is essential to ensure that the plant communities are eventually fully restored and thus able to sequester carbon to the fullest extent possible. Alien pest animal species include deer, pig, goats, possums, rodents, feral stock, rabbits, hares and wasps, and as by-kill, mustelids, hedgehogs and feral cats. All these pests contribute in one way or another to diminishing the capacity of our native plant communities to sequester carbon.

### Te Mārua Bush

The second part of our submission provided more details about the work BotSoc, Upper Hutt Forest and Bird, and GWRC have been doing for the last 30 years to restore Te Mārua Bush. We were pleased to see that GWRC intends to continue to support conservation and recreation groups in the restoration of Te Mārua Bush.

### Hard copies and hearings

GWRC deserves praise and thanks for making three hard copies of the draft plan available to BotSoc at no charge. This level of agency support for submitters is unusual these days. But after several days work on the draft submission, reducing our ideas to a 5-minute presentation to the hearings panel left me wondering how BotSoc should engage in submissions processes in the future. There are some tough issues coming up in 2021, e.g., the National Policy Statement on Indigenous Biodiversity which may propose new ways of protecting significant biodiversity on private and Māori land.

### Involvement in Master Planning

We don't yet know how or when GWRC proposes to

organise the collaborative processes to develop the master plans for specific parks, but if you have a particular knowledge of, or an interest in one of their parks, watch for invitations or contact GWRC.

*Bev Abbott, Submissions Coordinator*

### Answers to quiz

1. The eight parks are Akatarawa Forest, Battle Hill Farm Forest Park, Belmont Regional Park, East Harbour Regional Park, Kaitoke Regional Park, Pakuratahi Forest, Queen Elizabeth Park (QEP), Wainuiomata Recreation Area.
2. (b) is the closest option as the total area is approximately 33,000 hectares. The Parks and Recreation page on the GWRC website, however, says "There are more than 50,000 hectares of parks in the Wellington Region just waiting for you to explore". Can you name any of the other 'parks'.

## ARTICLES

### Percy Scenic Reserve news

During autumn we took several batches of cuttings, including *Pennantia baylisiana* and *Lepidium oleracium*. The *Lepidium* cuttings have thrived unlike the *Pennantia* ones.

In July we planted about 400 plants brought in for our winter planting and about 400 propagated here at the reserve. We brought in many *Carex* this year, mainly for the wetland area and also for use throughout the reserve. We added many ferns to bulk up the fernery area and fill in the understorey in shady areas.

We extended our new wetland garden area, planting *Carex secta*, *Eleocharis acuta* and *Isolepis nodosa* and other species. This has almost doubled the size of the planted area, which is starting to look really good. Last year's plantings are doing very well.

We repopulated our rockery area, replacing dead plants and filling in gaps with *Veronica maccaskillii*, *Carmichaelia corrugata*, *Veronica pareora*, *Acaena anserinifolia* and *Gaultheria macrostigma*. Some plants were propagated at the reserve and some collected on our recent seed-collecting trips to the South Island.

We also planted *Carmichaelia williamsii*, *C. petriei*, *Pittosporum pimelioides* subsp. *pimelioides*, *P. cornifolium*, *Streblus banksii* and many others which were propagated here at the reserve. We planted *Blechnum fluviatile*, *Dicksonia fibrosa*, *Elatostema rugosum* and *Carpodetus serratus*, all brought in for our winter planting.

Through the spring we have been sowing more seed and taking more cuttings. We have sown seed from *Lepidium oleracium*, *Ceodes brunoniana*, *Bulbinella hookeri* and *Leptinella atrata* var. *atrata* obtained during our collecting trips and from plants growing here at the reserve. The *Lepidium* have germinated well. These are for a planting project on Petone foreshore, around the Settlers' Museum.

We have also taken cuttings from *Veronica hulkeana* subsp. *hulkeana*, *Brachyglottis sciadophila* and *Celmisia gracilentata* × *Olearia arborescens*.

We may take more cuttings of *Atriplex cinerea* to bulk up our plantings along the foreshore and to plant in other areas. The previous plantings have been doing extremely well, except those planted further along around Eastbourne and Burdan's Gate. They seem to have been eaten by goats or sheep.

We have been re-potting some of the alpinines in the alpine collection and potting on our propagated plants in to larger pots. A busy time of year in the houses!

We had an open day in October which went well even though the weather wasn't ideal. The local horticultural society were there showing off their plants and giving away some freebies. There was a good interest in the alpine collection and those who took the guided tours through the houses and rockery area seemed very keen, asking many questions, which was good to see.

We have had some help in the houses in recent months with Julia White, who comes in once a week or so and does volunteer work, weeding through the glasshouses—this is very much appreciated, thank you Julia!

*Cliff Keilty, Gardener*

### Greater Wellington Regional Council's biosecurity work

The *Regional Pest Management Plan – Operational Plan 2020/21* is available on the external web site <http://www.gw.govt.nz/assets/Uploads/RPMP-Operational-Plan-2020.21.complete.pdf> and the *Regional Pest Management Plan – Operational Plan Report 2019/20* should be posted soon on that web page.

Some staff have been involved in a nine-week trial programme working alongside DOC. The Whangai Repo programme upskills trainees in conservation-related skills—in this case the group did some pest-plant and pest-animal control work around Wairarapa Moana Wetlands.

#### Pest Plants

Pest-plants staff attended a Fresh-water Biosecurity Partnership conference—this concerned GWRC's Check-Clean-Dry programme, a National Biocontrol Collective meeting, and an aquatic pest-plant management training session by Paul Champion (NIWA) and organised by Horizons Regional Council. 50–60 people attended and staff learned a lot—they visited several properties with aquatic-weed problems and suggested solutions to the owners.

The draft NZ Standard for the Management of Agrichemicals that our Pest-Plants Team Leader, Mark McAlpine, has been involved in reviewing is now available for public consultation (<https://shop.standards.govt.nz/default.htm?action=browseDrafts&draftTypeId=1&mod=drafts>) if anyone would like to submit on it.

#### Species of interest

A *Polypodium vulgare* site was visited and delimited at Cape Palliser with the member of the public who notified us of it. It will be controlled with the intent of eradication – starting this season.

### *KNE programme*

Site visits and work agreements have been completed. Site-specific work plans and spray plans have been reviewed for most KNEs to re-assess the hazards at the sites and the control methods necessary for the range of weeds present. Control work has begun at several sites and colleagues from our Land Management department have assisted with our KNE work in Wairarapa. A gorse-spraying contract at Onoke Spit was completed for the Friends of Onoke Spit care group.

### *Biocontrol*

Nodding thistle crown-weevil sites were monitored, completing the second and final monitor of the project. We also monitored sites of Darwin's barberry seed weevils. *Tradescantia* yellow-leaf spot fungus was released in Keith George Memorial Park.

### *RPMP*

We met with Horizons Regional Council to discuss pest-plant management in our two regions. Bomarea is an eradication species in Manawatū, but not in Wellington region. We brought an area of rail corridor with a bomarea infestation at the northern end of the Wellington region to the attention of Kiwirail, who plan to control it to reduce the risk of reinvasion to the Manawatū region.

We've worked in Masterton, Featherston, Ngawi, Lower Hutt, Paekākāriki, Raumati, Paraparaumu, Waikanae and Ōtaki surveying for RPMP species. A small number of new infestations of moth plant, woolly nightshade and boneseed were discovered, causing extensions to survey activities.

Annual Inspections of known boneseed, moth plant and woolly nightshade sites have begun. We've completed over half the control work on boneseed in the Wairarapa sites, although a drone aerial spray contract for the control of boneseed has been postponed until next year due to unsettled weather resulting in missing the opportunity to spray plants while flowering.

Staff are reviewing the blue passionflower control programme with our Environmental Science team to develop a more strategic control approach to this species.

## **Pest Animals**

### *KNE programme*

We helped our Environmental Science team with fish surveys in Battery Pond and Boundary Stream at the Western Lake of Wairarapa Moana Wetlands.

We controlled goats at Baring Head and deer in Dry Creek, and are servicing both KNE and TA reserve trap/bait-station lines, including predator control at Wairarapa Moana Wetlands. Night shooting operations are underway: several projects have been allocated to our contractors while staff are busy on cost-recovered rabbit control.

Two services of bait stations at Wainuiomata Mainland Island have been completed, with the second bait-fill involving a swap to a new bait 'Double Tap', a mixture of Cholecalciferol and Diphacinone, which we are trialling as it should be more effective than either alone.

Our team prepared plans for several new control areas within the Wairarapa Moana Wetlands programme. We installed a new trapping network at Tauanui and Hiwinui forests on behalf of our Land Management department, and have mapped potential trapping sites at the Stoney Creek site.

Staff attended a public meeting with local landowners around Pūkaha/Mt Bruce, concerned about the rising rabbit numbers and the effect of predator control on that. The area will be included in future rabbit-trend monitoring. The Rabbit Working Group is progressing plans for aerial Pindone control of rabbits in the New Year at Pūkaha/Mt Bruce.

### *RPMP*

Enquiries from the public regarding rabbit control have been constant and plentiful—over 30 enquiries a week is not unusual, and the workload on our staff has been heavy. Almost 2 tonnes of Pindone carrot bait was made up and applied for various clients around the region. At this time of year we stop Pindone application jobs due to the low efficacy because the presence of young rabbits who don't take bait and new grass growth resulting in lessened bait appeal. We are still doing rabbit night-shooting for Wellington City Council and Kāpiti Coast District Council.

After a period of promotion (social media posts, newspaper adverts etc.) an aerial rookery survey was done and 11 rookeries found, two of which were new. Control work—aerial rook nest-baiting—was done mid-October with 20 active nests treated across the region.

We've started to receive public enquiries about aggressive magpies, with staff providing call-birds for magpie control and dispatching a few magpies in Wairarapa.

We've received complaints of deer from Stokes Valley, Whitemans Valley and Wainuiomata.

One of our team spent a week in the Bay of Plenty with a local wallaby-control expert. The staff were impressed with the night-vision gear and procedures used by our team and requested our help in setting up their own team.

## **BioWorks**

### *Regional Possum and Predator-Control programme*

The team plan to do 106,000 ha of possum and 4,300 ha of mustelid control in the 20/21 year. Currently 44,521 ha of RPPCP possum control and 1,111 ha of mustelid control have been done in the region (40.2% and 26% respectively of each programme).

### *Akatarawa aerial possum-control*

There has been a high level of interest in the Akatarawa aerial 1080 project to protect northern rātā and answering enquiries has kept the team busy. Control is likely to occur towards the end of summer.

### *Predator-Free Wellington*

Predator-Free Wellington Ltd have confirmed funding for the next phase of the programme (\$7 million over next two



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](http://www.govt.nz)  
Department of Conservation  
Te Papa Atawhai  
New Zealand Government

years), and to do the work we're setting up a designated PFW team within our Biosecurity department.

Volunteers and staff have been tackling bush areas at the southern end of the Miramar Peninsula that were still showing signs of rat activity. They have continued focussing on rats in urban zones with the use of cameras (we borrowed some from DOC). The volunteers are doing a great job at the northern end of the peninsula—there are almost no signs of rat activity in the area. This is a long-term project working very much as continuous research and development as we are always learning.

The team will service all the traps etc., installed in Miramar to kill the last rat populations before moving on to the second phase of PFW project.

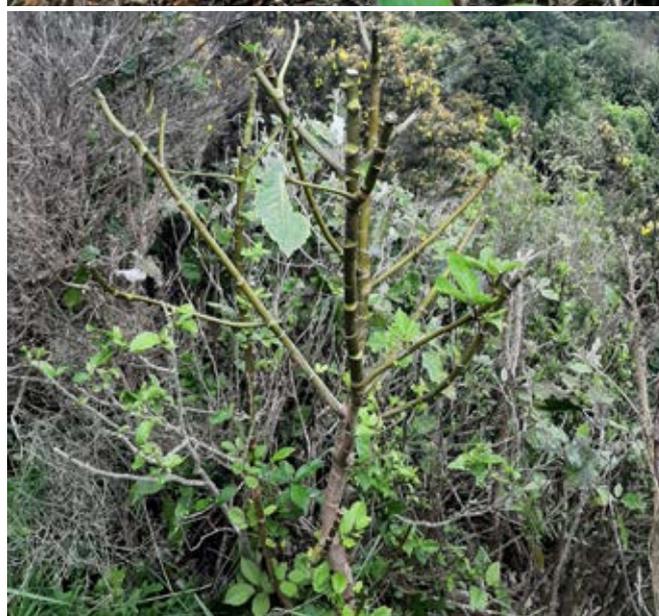
*Katrina Merrifield & Megan Banks  
Biosecurity Officers – Pest Plants Team  
Greater Wellington Regional Council*

## Deer in the Hutt Valley and Greater Wellington Region

In my capacity both as a trampler and working for Downer NZ as a contractor to Hutt City Council doing bush-tracks work and pest-plant control, I am very familiar with our local native forests. Most of you will have heard of reports of deer in areas such as East Harbour Regional Park but the problem is becoming more rapidly widespread and damaging. Some areas particularly like the south end of Stokes Valley, behind Taita Lawn Cemetery and Naenae, Moores Valley, around the back of Hine Road in Wainuiomata and East Harbour Regional Park are being absolutely hammered. Unless some more control is done urgently we stand to lose more of our local flora as well as the erosion of its soils caused by opening up the canopy and elimination of the understorey.

Hutt City Council has had a programme for the last two years but with a budget for only six days hunting, not many deer are being controlled. They can breed prolifically in the right conditions so a budget way above this is essential. Of course there are other problems involved in shooting near private properties but *Trap and Trigger* who were doing the control programme did it professionally and I was impressed with them. They have also done work for GWRC. I'm concerned for some of the areas which the deer are near to such as around Whites Line East and the Te Whiti Firebreak area which has some remnant rimu and hard beech with other species such as white maire, miro, kohekohe, etc. Already this area has climbing asparagus starting to infest it so deer in here too would be a catastrophe.

Another problem is some land owners actively encourage the deer so they can hunt them, with of course the flow-on effect in the surrounding areas. In one area at the back of Stokes Valley I was told by the owner to keep out while the "roar" was on so I didn't disturb them while doing my bush-track maintenance. This is what we're up against. I don't want to sound all doom and gloom here but unless the control programme has a funding increase and there is more public awareness, our regional biodiversity is going to be even more compromised and will become a monoculture of unpalatable species.



Deer strip bark from sapling trees (top) and defoliate palatable plants.

*John Van den Hoeven*

## Greetings from Ōtari

We have done a lot of planting throughout the collections in recent weeks. This coincides with the annual stocktake of all plants in the nursery. It has been a whole-team effort which I have been promising Eleanor Burton (who manages the Ōtari database) for many a month now. It is very satisfying to get some of our interesting plants which have been sitting in the nursery too long, into the gardens where we hope they will flourish.

The alpine tarn has been renovated, and replanted. Many of the plants there now were collected by Eleanor on the BotSoc summer trip to Central Otago. The team have done an excellent job here. The whole alpine garden has been slowly renovated over the past three years and looks superb. Many plants are putting on a spectacular flowering show. *Ranunculus lyallii* had at least five flowers—pretty good for Wellington!

The big event for Ōtari recently was the collection of *Dactylanthus taylorii* seed from Pureora Forest in October and the sowing of this seed at three locations in Ōtari's forest and in sites at Zealandia. The project was a

collaboration with Zealandia, DOC and iwi representatives for the whole of the Wellington region. Te pua o te reinga, flower of the underworld, is NZ's only fully parasitic plant. There was a great programme on RNZ recently—hear it by following this link:

<https://www.rnz.co.nz/national/programmes/ourchangingworld/audio/2018773163/pua-o-te-reinga-return-of-the-flower-of-the-underworld>

There were several strong applicants for the Ōtari Manager position. The successful candidate will be announced soon and will start in the New Year. I will soon be handing this report responsibility over to a new manager. Watch this space!

I do hope you visit Ōtari over the next few weeks. In twelve years I have never known such a good flowering year in the collections.

Cheers, Finn Michalak  
Manager – Ōtari Native Botanic Garden and Wilton's Bush Reserve

## Male fern *Dryopteris filix-mas* High priority for removal from your garden!

### Identification

Male fern is distinguished from all our native ferns by **dying down in winter** and **having abundant scales** around the base of the fronds and over the young emerging fronds. It is closely related to *Polystichum* and *Lastreopsis*, but distinguished from *Polystichum* by the kidney-shaped indusia, and from *Lastreopsis* by the abundance of stipe-scales and absence of hairs. *Dryopteris filix-mas* is closely related to another introduced weedy fern, *D. affinis*, but can be distinguished by the secondary pinnae being round ended and margins toothed throughout.

### Why is it a problem?

Male fern is from Asia, North America and Europe where it is widespread from Portugal to northern Norway. In New Zealand it is capable of surviving in a very wide range of habitats from coastal to well above the bushline. It is already the most widely dispersed introduced fern in New Zealand. iNaturalist (31/8/2020) shows nearly 5000 records of this species from Auckland to Invercargill and from sea level to about 1000 m.

It is commonly grown in gardens but the wind-dispersed spores are able to travel long distances. It is spreading into places such as the Kaikoura Ranges, St Arnaud Range and Nelson Lakes. In the Nelson region it is common under pine forests where it replaces native ferns in the understorey.

It is often not recognised as a weed and can be missed by anyone not familiar with it.

### Control (how to kill it)

Plants can usually be pulled out or dug out with a garden fork or they can be sprayed with herbicide.

*Nelson Botanical Society Newsletter September 2020*



(left) Male fern with young fronds covered in scales. (right) Young fronds in spring.



(left) Mature male fern. (right) Mature frond of male fern.

## 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](mailto:wellingtonvc@doc.govt.nz)

Web: [www.doc.govt.nz](http://www.doc.govt.nz)

New Zealand Government



Department of  
Conservation  
*Te Papa Atawhai*

## Student grant

We congratulate Colan Balkwill who has been awarded a student grant of \$800.00 for his project mapping *Syzygium maire* / swamp maire / maire tawake in the Wellington area. He is based at the School of Biological Sciences, Victoria University.

*Eleanor Burton*

## Baring Head/Ōruapouanui

Like the rest of humanity, 2020 has been a really interesting and disruptive year for the Friends of Baring Head. Nowhere was this more apparent than with our scheduled planting programme on the river flats alongside the Wainuiomata River. Not only did we lose two months of prime planting time, but we also lost the services of Conservation Volunteers' international volunteers and most of their corporate groups. However, largely thanks to the herculean efforts of our Chair, Paula Warren, we eventually finished up with more than 7,000 plants in the ground. The last planting took place on 1 November which is far later than normal, so we're hoping for a wet summer. We've chosen wetter sites and are providing some "mulching" with woollen and jute mats so it'll be interesting to see whether they lead to better survival rates in what is quite an extreme climate. Putting mats on plants and providing care for them will continue over the summer so if you like to help, let me know.

Many thanks to our Million Metres for their crowdfunding endeavours during what was quite a tough year for them as well, Conservation Volunteers who rustled up their conservation work skills trainees and a couple of corporate groups (Z and the Garage Project), and GWRC for their logistical support and some welcome cash. And, of course, our community volunteers, particularly the Hutt Valley Tramping Club (who turned up every week) and a small band of regulars, provided much of the spade work.

In addition to the pioneer species mentioned in the last Newsletter, we also planted some other species, notably *Plagianthus divaricatus* and *Cyperus ustulatus* to provide better conditions at inanga spawning sites. We also put in the first of the rare plants that Matt Ward is propagating for us—*Senecio greyii* from the one remaining natural population on a steep rock bluff.

We have just received a very good and informative report on the management of the river and its margins. I was surprised by a number of recommendations about future planting strategies and species selections. For example, it suggested that several stretches be left unplanted so the banks can revert back to more natural slope and that we begin planting certain species (e.g., tutu, kowhai, rimu and mamaku) elsewhere to better stabilise the banks. We've yet to discuss the report and to develop an implementation strategy but it all looks quite exciting.

I'll let you know what we decide in the next Newsletter as well as tell you about several other ideas we're considering. In the meantime, Merry Christmas. Where did the year go?

Colin Ryder  
Treasurer

Friends of Baring Head  
[rydercj@xtra.co.nz](mailto:rydercj@xtra.co.nz)

## Jubilee Award 2020 – Applications sought

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

### Purpose of the award

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

### Applications for the Award

Applications should be made in typescript to: Secretary, Wellington Botanical Society, PO Box 10 412, Wellington 6143, or by e-mail to Eleanor Burton [esmereldadoris93@gmail.com](mailto:esmereldadoris93@gmail.com) or 479 0497 by **15 DECEMBER 2020**.

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

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

### Selection

The Award will be made to one or more applicants selected by a subcommittee nominated by the general committee of Wellington Botanical Society. Award(s) will be Made and applicants informed of the results in writing, by 18 December 2020.

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.

## 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*

## TRIP REPORTS

### 3 October 2020: 331 Valley Rd, Paraparaumu

The bush block at Valley Road is unlike any other bush I have visited in the Wellington area. There are very large trees, presumably remnant from the original bush. It has been the subject of a restoration project for some time. There is extensive pest control within the forest area. There is very good seedling recruitment as well as a diverse assemblage of bird life. The forest composition is unusual, with a lot of maire, so we spent much of the day discussing which maire species we were looking at, with a disappointing failure to locate any black maire. On the ridges were large specimens of rimu, narrow-leaved maire / *Nestegis montana*, and northern rātā. The gullies had nikau, pukatea / *Laurelia novae-zelandiae* and kiekie.



*Nestegis montana*. Illustration: Eleanor Burton.

The day was very well organised by the owners of the property, Diana and Peter Kiernan, with signs at the drive entrance, maps and lists, morning tea and lunch all provided. There was a very good turnout, 33 of us (including owners and neighbours as well as BotSoc). We split into small groups for the day. Our group started along the ridge towards the south end of the property, notable for numerous saplings of *Nestegis lanceolata*, also one tree of southern rātā. Going off the ridge a bit added considerably to the diversity. There were a couple of side tracks, one leading to a very large northern rātā and the other to a very large *Nestegis montana* / narrow-leaved maire, a tree most of us had not seen often. From here we dropped steeply into a gully characterised by nikau, kiekie and pukatea. We climbed back out of this on to 'Tōtara Ridge', past a large rimu and northern rātā, and back to the house for lunch.

After lunch we went towards the other end of the property, through less mature bush with more weeds around the margins. This area still had very good seedling recruitment, and a slightly different range of species. From here we went down to the road and followed this along to come back up the south boundary

via the grassy knoll. Just off the road in one of the streams we saw *Fuchsia excorticata* in flower. As we went up the south boundary we found two species of *Gahnia*, *G. pauciflora* and *G. setifolia*. We had been asked to look at the grassy knoll to see if there was anything special growing there. It is in the early stages of regeneration with bracken and *Paesia scaberula* growing in the grass and two species of *Juncus*, but nothing that we hadn't seen anywhere else. The main value in letting this regenerate would be as a potential additional area of forest and less of a source of weed seed.

**Participants:** Helen Bichan, Kim Broad, Eleanor Burton (*co-leader / scribe*), Gavin Dench, Joe Dillon, Jenny Fraser, Julia Fraser, Ken Fraser, Ian Goodwin, Jill Goodwin, Jan Gosnell, Mark Gosnell, Richard Grasse, Chris Hopkins, Chris Horne, Peter and Diana Kiernan (*leaders*), Winifred Long, Tom Mayo, Pat McLean, Viola Palmer, Mick Parsons, Leon Perrie, Lynne Pomare, Lara Shepherd, Darea Sherratt, Sunita Singh, Roy Slack, Julia Stace, Nick Thompson, John Van den Hoeven, Carol West, Julia White.

Thanks everyone for an excellent and interesting day

Eleanor

### 17 October 2020: Workbee, Te Mārua Bush, Upper Hutt

A small but capable bunch were busy weeding, especially a patch of storksbill / *Erodium cicutarium* near the gate, 'light-welling' of pioneer species and collecting a little rubbish. We pulled out many sycamore seedlings in the southern section.

A well-developed yew/*Taxus baccata* sapling near Twin Lakes Road was positively identified—it is similar to miro—and destroyed. We removed several patches of montbretia and attempted veld grass control. This is the first time we have not seen any tradescantia—the result of about twenty years of continuous weeding. We released from blackberry and convolvulus the winter plantings in the northern triangle near SH2.

The plantings in the southern

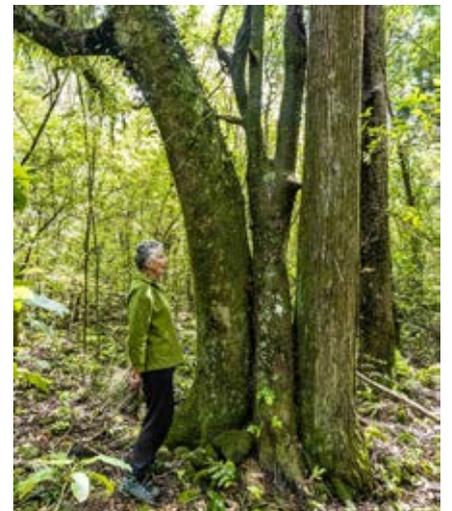
block (>2004) are now reaching the stage where the *Coprosma robusta* and *Veronica stricta* are dying off – a combination of age and very poor soils.

#### Background

This area was the construction site for the SH2 Kaitoke Hill deviation and while the area was ripped to make planting easier, in retrospect we should have asked for some topsoil! In some places the roots are above the ground as the trees hunt for sustenance. Next winter we should replace these dying trees – possibly with the same species but it will take time to restore a complete soil layer.

**Participants:** Steve Edwards (GWRC), Chris Hopkins, Chris Horne, Kate Jordan, Allan Sheppard, Graeme

Sheppard. Co-leaders and scribes: Sue Millar, Glennis Sheppard.



Glennis Sheppard admires three trees growing together: (from left) hīnau, mataī, tōtara.

## 14–15 November 2020: Koromiko and Dandaloo stations, Wairarapa

After postponing a week due to forecast rain we were off at 7.30am on Saturday, met Chris H at 8 a.m. and drove over Remutaka Hill for the 9.30 a.m. meeting of the eight trip participants at Gladstone Township (Wairarapa). To our delight, we were greeted by a very warm sunny day (26 °C recorded in Carterton). Kate joined us in Greytown Soldiers' Memorial Campground on Saturday night. People stayed in several locations in the Wairarapa overnight and on Sunday morning, we again met in Gladstone for a second warm sunny day.

### Day 1

Our convoy of four cars stopped at Koromiko Station, Admirals Rd, to explore two bush areas. The first remnant was a stunning stand of scattered giant trees which, despite showing scars from blasting gales, were still standing straight in a park-like setting with the understorey a golf-course-like green grazed paddock. The limestone substrate was evident with small limestone outcrops throughout the pasture. We marvelled at the size, shapes and diversity of trees in that very small area. Amongst them were numerous *Plagianthus regius* / manatu / lowland ribbonwood, *Nestegis cunninghamii* / black maire, *N. lanceolata* / white maire and *Pittosporum eugenioides*, to name a few. A large *Lophomyrtus obcordata* (ca. 25 cm DBH) and 12–15 m tall was covered with pūriri moth holes. We found the exuviae of the moth near many holes suggesting that a vibrant and active pūriri population was living there. Also present was a very large specimen of *Neomyrtus pedunculata* (40 cm DBH) and 15–18 m tall—so tall the foliage was hard to identify. Fenced, was a single tree of another threatened species, *Olearia gardneri* (Nationally Critical), whose deeply-furrowed-bark, and multi-branched trunk must have reached 25 cm DBH. The tree was in full blossom with beautifully perfumed flowers. A little way away and near to the stream in rank pasture, a small patch of very old and threatened *Coprosma wallii* nationally (At Risk – Declining) and regionally (Critical), has been fenced from grazing and enhanced with planting (Now 1–2 m tall) by DOC

management—a wonderful work by Tony Silbery and others.

The second remnant was a fenced and more densely vegetated forest, with some mature emergent podocarps, large areas of canopy dominated by native lianes, occasional clearings of tall exotic grasses and old restoration plantings of *Coprosma rubra* and other divaricating shrubs. Interestingly this remnant from which stock have been excluded, did not seem to have the diversity of native tree species found in the grazed section. *Coprosma autumnalis* (kanono, previously known as *C. grandifolia*), *Melicactus ramiflorus* subsp. *ramiflorus* (māhoe/whitey wood) and *Pennantia corymbosa* / kaikōmako were common, reaching up to 2 m. Less common were *Alectryon excelsus* subsp. *excelsus* / titoki, *Nestegis lanceolata* / white maire, *Neomyrtus pedunculata* / rōhutu, *Dicksonia squarrosa* / whēkī / hard tree fern), and hybrids of *Hoheria angustifolia* × *H. sexstylosa* and *Coprosma robusta* × *C. propinqua*. A young *Fuchsia excorticata* tree was sighted in flower at the margins of a clearing.

Both bush remnants had an abundance of climbers: *Passiflora tetrandra*, and *Metrosideros colensoi* were rich in inflorescence and perfume, while *Clematis foetida* was covered in fluffy seeds as profuse as old man's beard. As we were crossing the first remnant again to make our way back to the cars, we sighted a large *Tupeia antarctica* (white mistletoe) high up (c.a. 10 m) on a branch of a metal-ringed *Nestegis cunninghamii* (black maire). A second *Tupeia antarctica* plant was seen in the same paddock later on from the road, possibly on a kaihikatea.

### Day 2

After a peaceful night at Carterton Holiday Park for two of us and the Greytown Campground for others, we met again at Gladstone Township to travel in convoy over Admirals Road to Dandaloo Station. Here we were very warmly welcomed by the owners, Trish and Angus Thomson, who introduced us to the station's Angus stud farm. Trish explained the intricacies of managing a modern stud farm, the multitude of external agencies they need to deal with, and audits done to make sure they keep



*Tupeia antarctica* (white mistletoe) growing high up (ca. 10 m) on *Nestegis cunninghamii* (black maire). Photo: Owen Spearpoint.

their stud-farm status and comply with all the animal welfare needs. Trish then asked us to sign in and scan the COVID app, showed us the facilities we could use in the woolshed, then gave us a health and safety briefing, before leaving us to devour a large chocolate sponge cake and cups of tea. Trish accompanied us to the entrance of a fenced bush remnant, 100 m from the woolshed, where we spent the full day botanising. The site had several large podocarps including *Podocarpus totara* / tōtara), *Prumnopitys ferruginea* / miro, *P. taxifolia* / matai, *Dacrycarpus dacrydioides* / kahikatea and some seedlings of these species. The understorey was rather open with occasional dense patches of *Urtica ferox* / ongaonga / giant nettle, small-leaved shrubs—*Coprosma areolata*, *C. rhamnoides*, *C. rotundifolia*), *Streblus heterophyllus* / tūrepo / small-leaved milk tree) and some fern species which attracted our attention: *Paesia scaberula* / mātātā / ring fern), *Pteris tremula* / turawera / shaking brake, *Polystichum neozealandicum* subsp. *zerophyllum* / pikopiko / shield fern, *P. vestitum* / pūniu / prickly shield fern, *Parapolystichum glabellum* / smooth shield fern and *Blechnum fluviatile* / kiwakiwa. We saw some recent fresh possum scratches on *Pseudopanax arboreus* / whauwhaupaku / five-finger. There was some deer browse. Dense patches of climbers, including the delicate *Clematis forsteri* / pikiarero / small white clematis and *C. paniculata* covered the crown of trees from lower to higher canopy. In the north-west corner of the site, previous plantings of native trees were overgrown by exotic grasses, thistles and large-leaved dock. Our attempt to find the threatened *Brachyglottis sciadophila* / climbing groundsel was unsuccessful. As we were leaving the bush to return to the woolshed where the cars were parked, we found the most magnificent giant putaputawētā / *Carpodetus serratus* c. 80 cm dbh and with many epicormic shoots. The largest specimen any of us have ever seen!

First thing Sunday morning those who had stayed at the Greytown campground explored the adjacent O'Connors Bush. Walking the pathways, they marvelled at the mature trees in this podocarp

remnant and the lush native understorey. They were impressed by large size of the rangiora leaves near the camp office, with their vivid white tomentum, much whiter than seen around Wellington. Details of the reserve's management can be found at <https://www.swdc.govt.nz/parks-and-reserves>.

**Participants:** Gavin Dench, Chris Horne, Kate Jordan, Pascale Michel, Sunita Singh, Jenny Fraser, Pat Mclean, Julia Stace and Owen Spearpoint / leader. Scribes: Pascale and Owen.

*Pascale Michel and Owen Spearpoint*

### O'Connor's Bush

This impressive forest is protected as an historic reserve by the South Wairarapa District Council. There's a [Reserve Management Plan](#) which sets strict rules for not changing the bush or removing the natives trees within the campground. There are eight policies regarding O'Connor's Bush itself.

*Kate Jordan*

### Planting recommendations

Trish requested ideas for native species to plant on their driveway. We recommend the following:

#### *Evergreen*

Trees—*Pennantia corymbosa* / kaikōmako, *Pittosporum eugenioides* / tarata / lemonwood, *Pittosporum tenuifolium* / kohuhu, *Neomyrtus pedunculata* / rōhutu, *Lophomyrtus obcordata* / rōhutu;

Shrubs—*Myrsine divaricata* / weeping māpou; *Pseudowintera colorata* / horopito / pepper tree; *Myrsine australis* / red matipo

#### *Deciduous*

*Plagianthus regius* / lowland ribbon wood / manatu; *Fuchsia excorticata* / tree fuchsia / kōtukutuku



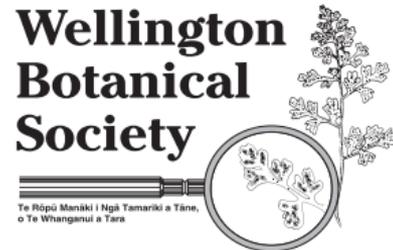
BotSoccers in front of giant putaputawētā (*Carpodetus serratus*) at Dandaloo Station. Photo: Owen Spearpoint.

# Subscription Renewal Form

(For cheque paying members.)

Attention:

Membership Secretary,  
Wellington Botanical Society,  
PO Box 10-412,  
Wellington 6143



**Charities Commission  
Registration: CC10518**

Membership fees for the 2020/2021 are now due. The membership type and cost is listed below. Any specified donation goes to the Jubilee Award Fund and is receipted and tax-deductible.

**Subscriptions:** Ordinary \$35  Country \$30  Joint/Family \$40  Student \$10 .

Full name: .....

Your subscription: .\$. .....

Donation : .\$. .....

Total: ..\$. .....

Please make cheque payable to the Wellington Botanical Society and post it with this completed form to the above address.



# 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 2021 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 [helenamywhite@gmail.com](mailto:helenamywhite@gmail.com)

or post to: **Membership Secretary, Wellington Botanical Society Inc, PO Box 10 412, Wellington 6143**

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

*Alternatively you may make your cheque payable to Wellington Botanical Society Inc, and send it with this form to:*

**Membership Secretary, Wellington Botanical Society Inc., PO Box 10 412, Wellington 6143**

## 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 are agreeable 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, 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.***