ŌTARI-WILTON'S BUSH TRUST

News and Views June, 2024

Website: www.owbt.nz



Welcome to our newsletter

There is a lot going on in Ōtari-Wilton's Bush.



For example:

Moko, our lofty rimu, has become something of a star since being nominated as New Zealand Tree of the Year Award finalist.

Trust Plant Sales

Held on the second Saturday of every month at Tāne Whakapiripiri, the visitor centre, from 10am to midday. Mark your calendars!
Our nursery specialists will be there to advise you. See page 4.

Trust Volunteer Groups

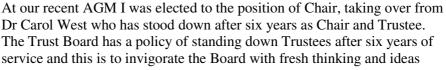
Newcomers welcome: jobs and contacts see page 4.

For information about volunteering, email enquiries@owbt.nz



Message from the Chair

Kia ora



OTARI WILTON'S BUSH TRUST

and to give other members an opportunity to become Trustees.

Carol has been an excellent Chair and has been very generous with both her time and her ecological and botanical knowledge. Carol is committed to the work of the Trust and to helping ensure the long-term sustainability of Ōtari-Wilton's Bush. Many thanks to Carol for all her very much-appreciated work – past, present and future.

Congratulations to Penny Salmond and Kathy Ombler who were presented with Ōtari-Wilton's Bush Trust 'Ōtari Awards' at the AGM to recognise their significant contributions. Penny has been a long-time guide, host, and volunteer. Kathy has with much success been revamping and organising our communications including our social media, website, submissions and newsletter, plus writing articles about Ōtari-Wilton's Bush for magazines. Kathy has also for many years worked alongside Jim Tait helping to deliver the work of RAMBO (Rats and Mustelids Blitzing Ōtari).

There are of course many other people who also make notable contributions, some over very many years. I would like to say thanks to them for their great support and effort for Ōtari-Wilton's Bush. Many are not members of the Trust so they will not necessarily see this newsletter. If you know them, please pass on the Trust's appreciation.

It's exciting to welcome Dr Geoff Ridley as a new Trustee. He will be well known to many already for the very popular fungi walks he guides each year. His background is in forest mycology and pathology, and he leads the national biological research collections (fungi and bacteria, plants, and arthropods) held by Manaaki Whenua (Landcare Research).

Moko, our 800-year-old rimu tree (give or take a few years) is currently a New Zealand Tree of the Year finalist and is up against five other finalists. The competition is a bit of fun but also helps raise the awareness and importance of Ōtari-Wilton's Bush. The competition results are to be announced on Arbour Day on 5 June. Some of you will know the story about how Moko was saved by local conservationists who were instrumental in preventing a road going through Ōtari-Wilton's Bush in the 1980's. (See our story about this in this newsletter.)

The Trust Board recently submitted on the WCC Draft Long-term Plan. In summary, our submission encourages the WCC to continue to invest in the future and sustainability of Ōtari-Wilton's Bush. This includes sorting out the sewage overflow in the northern car park, continuing with track maintenance and upgrades, and maintaining (as a minimum) the \$3.1 million budget for the Ōtari-Wilton's Bush Landscape Development Plan for a nursery and laboratory upgrade. We're optimistic that WCC is committed to these projects, but there are many other competing and worthy projects so we wait to see the final plan – due to be adopted by WCC by 30 June.

Finally, in an update to the 2023/24 Treasurer's Report, included in this newsletter, our new Ōtari-Wilton's Bush Fund has just reached the \$100,000 mark. This is a great start to establishing a long-term funding stream to help ensure we play an innovative and forward-thinking role in the conservation of NZ native flora. Much of the funding to date has been achieved through revenue earned from our cruise ship tours.

If you would like further information or you would like to donate or arrange a bequest to the fund, follow this link: https://www.nikaufoundation.nz/stories-giving-library/a-fund-for-the-future-of-native-plant-conservation-at-otari-wiltons-bush or alternatively give one of ourTrustees a call to discuss.

Kevin O'Connor Chair



Ōtari Update Kia ora koutou

The seasons have definitely changed and we all have noticed that temperatures have dropped! While the weeds have slowed down a little, the ground is still quite dry in places. However, we have started planting in the gardens where the soil conditions allow. Observant visitors may have noticed that the Oval below the Cockayne Lookout has been replanted and the green mistletoe



(*Ileostylus micranthus*) fruit is ripening nearby. We have also recently planted more harakeke for weavers at the Northern Picnic Area to expand the existing pā and to replace a narrow lawn area. We are very pleased with recent upgrades to the entrance to Tāne Whakapiripiri, Ōtari's Visitor Centre as well as the new steel hand rail along the zigzag track down to the Troup Lawn. A replacement of the roof above our office and the Visitor Centre is also happening soon.

It is absolutely fantastic that Ōtari is now home to some kiwi-nui (North Island Brown kiwi, *Apteryx mantelli*), which have been reintroduced to Wellington recently by Capital Kiwi with the support of mana whenua and many other organisations. They travelled a long way from their release site in the Mākara hills to where they were recently radio tracked in the forest near the Blue Trail. Due to the fact that they have also been spotted in Broadmeadows on a security camera and a few other places nearby, it was decided not to relocate them back to the core management area of the Capital Kiwi project as it is likely that they will keep turning up. As such, it is more important than ever that visitors with dogs keep them on leash while at Ōtari.

There are some changes happening in the team at Ōtari, with Megan Ireland being seconded into the Wellington Gardens management team as the Plant Collections Team Manager at Wellington Botanic Garden for just over a year. I am currently recruiting for the team leader role. We have had River Foster with us as an apprentice for the last four months and we will soon get Joel Clement (who goes by Clem).

We have also had a number of visiting groups recently. It was fantastic to host Ngāti Kuri who are kaitiaki of some very special plants including rātā moehau (*Metrosideros bartlettii*), pūtātara (*Tecomanthe speciosa*), kaikōmako Manawatāwhi (*Pennantia baylisiana*) to name a few. We were updated by Manaaki Whenua researchers, Jessie Prebble and Rob Smissen who have been looking at the evolutionary relationships of pōhutukawa and rātā, with a recent focus on the northern Aotearoa species. We also hosted Te Tira Whakamataki and representatives of a few Aboriginal Australians who were in Wellington to wananga about the brushtail possum, which has high cultural value in Australia but cultural harvest is not allowed. It was great to talk about the results of the three decades of possum control in Ōtari that is best demonstrated by the recent profusion of kohekohe saplings, as the flowers, fruit and leaves of this tree are a favourite of the imported marsupial.

See you at Ōtari soon,

Mā te wā, Tim Park

Kaiwhakahaere Ōtari - Manager Ōtari Native Botanic Garden and Wilton's Bush Reserve

Continued from the cover......

More that has been happening in Ōtari-Wilton's Bush.

- ♦ Kiwi, released near Makara by The Capital Kiwi Project, have been both seen and detected by transmitter in Ōtari-Wilton's Bush. They move around so much, there could be more.
- ♦ Both Tree of the Year and our kiwi visits have brought record responses on Social Media with several thousand 'views' and more than 140 new 'followers'. This all helps increase awareness about Ōtari-Wilton's Bush.
- ♦ In AGM news we have a new Chair, Kevin O'Connor. Former Chair, Carol West, retired according to the Trust's stand down policy. We also welcome one new Trustee, fungi guru Geoff Ridley.
- ♦ The Trust's Autumn Guided Walks and March Seminar Series attracted a host of people, including all ages, and we gained several new members.

Trust Volunteer Groups, newcomers welcome:

Gardens weeding and maintenance – work with \bar{O} tari staff in the botanic gardens' collections. Thursday mornings 8.30 am to midday. Contact Jane Humble 021 636 226

Forest Weeders – help Ōtari staff attack weeds threatening the forest of Ōtari-Wilton's Bush. Every 1st and 3rd Thursday of the month, 9am to midday. Contact Maggie Bayfield 027 545 4333

Kaiwharawhara Restoration Project – continue the legacy of 20 years of stream restoration. 2nd Saturday of each month, 9am to midday, contact Wilbur Dovey, 499 1044

Weekend Hosting – greet visitors at Tāne Whakapiripiri, the visitor centre. Hosts are rostered on morning or afternoon shifts about once a month. Contact Justin Nacey 021 211 3019.

Ōtari Trust Nursery Plant Sales

Four months after starting on a regular, monthly basis, the Trust plant sales are going well. Plants propagated in the Trust's own nursery, by our propagation experts, are on sale on the second Saturday of every month, from 10.00am to midday (or until the plants run out).

Sales raise money for the Trust, which goes back into the development and care of Ōtari-Wilton's Bush and into plant conservation. However, a key aim of the plant sales is to introduce gardeners to some of lesser known New Zealand native plants, and to encourage them to grow them in their own gardens. You can come and chat about our the plants with our nursery folk, and the Saturday morning sales have quickly become busy, interesting social gatherings, says plant propagation manager, Jane Humble.

"The aim is to propagate rather special plants, suitable for growing in Wellington conditions but not always readily

available commercially. We do listen to requests for specific plants but because of the small scale of our nursery we cannot provide plants to order. Nevertheless, there are lots of interesting releases to come.

"Our selection of ground cover and divaricating shrubs has been really popular and there is a constant demand for kākā beak. *Aciphylla* has not really caught on yet but we have sold some fine small plants," she adds.



Ōtari-Wilton's Bush Trust Annual Report 2023-2024

This is the 24th annual report of the Trust, another busy and productive year, the highlight of which was the launch of the Ōtari-Wilton's Bush Fund, administered by Nikau Foundation. Cruise ship tours ramped up this year, providing significant income, and plant sales from our new nursery began



at Open Day. All the funds we generate, one way or another, are used to further the Trust's aims. A new volunteer activity this year was forest weeding, attracting some new volunteers as well as a new activity for some existing volunteers.



It is our members and volunteers who make the Trust an effective group of people who are making a tangible contribution to native plant conservation and Ōtari-Wilton's Bush. Ōtari staff showed their appreciation for Trust volunteers by hosting a BBQ lunch and get together in December. Trustees were invited to the opening of the Pā Harakeke on Wilton Road.

Planning

Continuing with implementation of the strategy developed in 2021, Trustees met with representatives of the Nikau Foundation to discuss setting up a long-term endowment fund with annual disbursements used to achieve the Trust's aims. As you know, the Ōtari-Wilton's Bush Fund was launched in February and has a current balance of \$72,310. Details of the Fund can be found in the news article on our website:

https://www.owbt.nz/about-the-trust/news/ and on the Nikau Foundation website.

Attracting volunteers is another aspect of our strategy. To that end, we have roles for different activities registered with Volunteer Wellington and we have been fortunate to attract several new hosts and guides including some younger people who are working but make themselves available for weekend volunteering. We are currently advertising for weekend hosts and garden weeders on Volunteer Wellington's website.

Viewers of our own website can also get in touch regarding volunteer roles.

The major focus for submissions has been the WCC Long-Term Plan where some very quick action by Kathy Ombler appearing before Council saved the bulk of the budget that had been earmarked for upgrading the nursery and laboratory. The whole budget very nearly disappeared!

Communications

Instagram, Facebook and Website

We have continued to average more than one post per week since our first Instagram post went out on 30 May 2022, garnering a further 166 followers in the past year (as of 20 April 2024). On Facebook we have 1345 followers and some of our posts reach more than 2000 people. These tend to be the ones with local community interest, e.g., whether the mulch pile is open and free for the taking or details of plant sales.

Kathy Ombler has thoughtfully selected a broad range of topics and this helps to grow our audience. We also think the recent rise in membership we have experienced is due to the regular social media posts, including some much younger volunteers.

Kathy also keeps the news items on the website updated and keeps the newsletter archive up to date with a small lag before posting to support membership benefits but also allow for people to find information that they know they read somewhere but just can't find in their filing system. The link to the newsletters is:

https://www.owbt.nz/about-the-trust/newsletters/

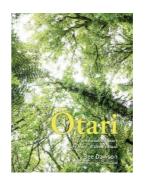
Thanks to Andy McArthur and other photographers who provide high quality images to Kathy and thanks to Kathy for showing the public the many faces of Ōtari-Wilton's Bush.

Newsletter

Our quarterly newsletter is jointly produced by Kathy Ombler and Vera Burton. Kathy sources a lot of the material, writing some of it herself. Vera receives all of the copy and proficiently lays it out to produce the PDF file that gets sent out mostly electronically with a few via snail mail by Maggie Bayfield. As Chair, I help to proofread the content. It's a real team effort. Fitting the copy on the pages in an appealing fashion and making sure there are no major errors is not easy and we are grateful to Vera for her skills and expertise in editing Ōtari-Wilton's Bush News and Views. Thanks too, to Eleanor Burton for the plant drawings in every issue and for assisting with proofreading – the more eyes, the better!

The Book

Sales of Ōtari: Two Hundred Years of Ōtari-Wilton's Bush continue to be steady and I was pleased to meet some proud owners of a copy recently – they clearly value the stories in the book. We are keeping an eye on the stock to hand, mindful of the centenary of Ōtari-Wilton's Bush in October 2026. We may publish a second edition which will correct a few errors that have been brought to our attention and update the content where relevant.





Project RAMBO

The energetic and busy RAMBO team is ably led by Jim Tait. Plants and animals in Ōtari-Wilton's Bush are thriving because of their efforts. The forest weeding group is regularly enthralled by decent-sized native snails, a variety of gorgeous spiders, big stick insects and great diversity of native seedlings. Jim's full report of the successful rat and mustelid trapping and detection programme is attached to this report.

Hosting

Justin Nacey capably manages the Host register. He has welcomed some new hosts this year, including some teenagers who volunteer to contribute to their Duke of Edinburgh Award and stay on while they can because they enjoy the role. We have also seen a few retirements of older volunteers who have contributed over many years and we thank them for their service. The Hosts sometimes have to deal with difficult behaviours and we thank Tim Park and Wellington City Council for providing training in de-escalation of situations. The Hosts really appreciated gaining knowledge to keep themselves and the public safe.

Guiding

Our two new Trustees, Susan Timmins and Annie Yeates, stepped into Wilbur Dovey's shoes to organize guided tours for the season that runs from October to April. It was a steep learning curve for them both especially as the number of tours requested ramped up. Over this season there were 55 tours and you can see from the Performance Report that this generated considerable income for the financial year. Susan shoulder-tapped many fit and interested people in her neighbourhood so we now have a healthy number of volunteer guides and tails. However, more volunteers are always welcome. For many years Dave Burton has led night time glowworm tours over the winter months. He has reluctantly decided to hang up his boots and Susan and Annie will take over organisation of these very popular walks. Thankfully they have been able to learn the ropes from Dave and are also being assisted by Julia Kaspar from Te Papa and DOC entomologists Will Brocklesby and Eric Edwards.

Plant Propagation

The Trust's nursery is up and running well with an automatic watering system installed to facilitate watering over the dry summer we've just had. The Trust funded some of the system and we're grateful to the Ōtari team for installing it. Sales of plants began at Open Day with lots of keen customers. Regular monthly sales began in February and you'll see from figures in the Performance Report that considerable revenue is now being generated. Huge thanks to Jane Humble and Lynley Trower who have been helped in this venture by one or two other volunteers.

Weeding

Every Thursday morning for years now, a group of volunteers has worked with Ōtari staff to weed the gardens, pulling out introduced species and natives that are growing in the wrong place. Jane Humble leads this group and would greatly appreciate more volunteers joining the group as it's hard to keep on top of all the weeds especially when we have plenty of rain and warm weather. This year the Trust has also established a group of forest weeders who operate under the Weedbusters banner. Maggie Bayfield is leading this group that works on Thursday mornings also but just twice a month on the first and third Thursdays.



Ōtari staff support this group too, providing tools, hi-vis vests and a cuppa at morning tea time. Environmental weeds like ivy, old man's beard, montbretia, *Tradescantia* and *Selaginella* are targeted by this group, nipping incursions in the bud and rolling back the more widespread weeds particularly along the Kaiwharawhara Stream, thus complementing the work of the revegetation team.

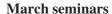
Revegetation

The revegetation group continued to meet during the year on the second Saturday of the month. Large amounts of Tradescantia have been removed during the year and in one of the sessions, volunteers from Zealandia's Sanctuary to Sea helped out enthusiastically. With one large weed bag full, another one was supplied by the Ōtari team. The group has also removed woody weeds from the new plantings on the 2022 slip face. Wilbur Dovey continues to lead this team of dedicated volunteers.

Monthly walks

Kevin O'Connor organises the programme of Sunday walks. By far the most popular walks in the autumn programme are the two fungi walks led by Geoff Ridley. We always have a waiting list and many disappointed people who have missed out. Other walks sometimes have a few more than the ceiling of 20. Often the weather determines how many turn up on the day. These walks are free for members and we are gaining new members as a result of this opportunity. We are grateful to the members and non-

members who lead the walks and to Wellington Gardens for supporting the registration system.



A varied programme of speakers this year attracted good audiences, many of whom were new faces. We received great support from Amalia McLaren-Brown, Visitor Engagement Coordinator from Wellington Gardens with publicity on-line and local posters. We are grateful to all of our speakers for interesting presentations.

Open Day

It was good to return to near normality for Open Day. Each year there is a theme and the activities are organised to reflect that theme. The Trust had a strong presence with the plant sales stall and the cakes and preserves stall doing brisk trade and raising a good sum of money. A steady stream of people enjoyed the walks and talks on offer. Thanks to all those from the Trust who were involved with the event.



Open Day Cake Stall 2023

Membership

A special welcome to all new members this year! As noted above membership is increasing in response to the greater presence we have generated through social media and organised activities: walks, talks, Open Day, etc. We have also attended some local community events to raise awareness of Ōtari-Wilton's Bush.

Finances

The Trust's finances are very healthy – see the details in the Performance Report. Cruise ship income provides the biggest boost to revenue and most of that will be invested in the Ōtari-Wilton's Bush Fund to further plant conservation and education. Membership subscriptions cover the regular bills and income generated from plant sales and other activities will cover the costs of grants and projects that directly benefit Ōtari and development of its staff. We thank Tim Mason for his exceptionally capable management of the Trust's finances and his sage advice to the Board.

Succession planning

In line with the Trust's new procedural rule where the maximum continuous term of Trustees is six years, I will be stepping down as Chair. This means we are seeking new Trustees and encourage anyone who is interested to seek nomination. Please contact any of the Trustees for insights into what may be involved. We have now set up a good rolling front of experienced Trustees, so you'll be joining a strong and capable team if you are interested.

Conclusion

The Trust is in good heart with many keen members and committed volunteers! In presenting this report on behalf of the Trust Board, I would like to acknowledge and thank fellow Trustees, Trust volunteers and members, the Ōtari Native Botanic Garden and Wilton's Bush Reserve staff and WCC managers for their support during this year in all activities of the Trust. Grateful thanks are extended to non-members who support the Trust's activities by giving talks and leading walks. Carol West, Chair



Dr Carol West

Treasurer's Report 2023/24

On behalf of the Trust Board I present these notes to be read in conjunction with the formal annual Performance Report which has been prepared in the form required by the Charities Commission. In the Treasurer's Report for 2022/23, I alluded to our discussions with Nikau Foundation about the possibility of forming our own foundation. Members will be aware that this has resulted in the formation of the Otari-Wilton's Bush Fund, managed by Nikau Foundation in perpetuity, which was launched in February 2024 with an initial endowment by the Trust of \$70,000. The Fund has received further donations since and once it reaches \$100,000 the Trust will be offered an annual payment based on the previous year's returns. We anticipate making a further contribution to the Fund very shortly now the accounts have been prepared and to continue to do so from any surpluses each year in the future, and we hope to attract bequests and other larger donations over time.

Otherwise, Trust activities have settled to a post-COVID new norm. Members have been very supportive, with a steady stream of new members and a total membership now of around 350 people. Members have also made generous donations of money and of time, especially as volunteer guides for tours, for various working groups, for hosting in the Visitor Centre during weekends and for many other Trust activities which often go below the radar but which remain valuable to the smooth functioning of the Trust.

Again, the most significant income has been from guided tours offered to overseas visitors from cruise ships. Sales of the centenary book by Bee Dawson have continued but lately at a reduced pace. The Open Day was well attended by an interested public and produced good income especially when compared with the previous year. Late in 2023 the plant propagation project reached the stage of having plants available for sale and now has monthly sales to very keen buyers and is generating an increasing income, thanks to the efforts of a small group of dedicated volunteers.

Our financial situation overall remains sound, with a reliable cash flow covering month to month costs, a surplus to enable support of worthwhile projects, a comfortable cash cushion, rolling

term deposits available to be drawn on quarterly for an unplanned larger project and an outlook of income and expenditure maintaining at around present levels into the foreseeable future.

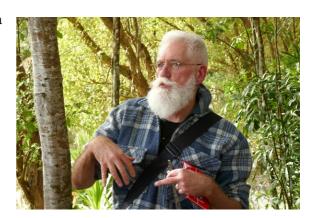
Tim Mason 19 April 2024

Welcome Geoff

We welcome our new Trustee, fungi guru Geoff Ridley. Geoff has a distinguished background in forest mycology and pathology, and is well known for the incredibly popular fungi walks he's guided around Ōtari-Wilton's Bush for several years. Geoff currently leads the national biological research collections (fungi and bacteria, plants, and anthropods) held by Manaaki Whenua (Landcare Research), and previously worked at the NZ Forest Institute (now Scion).

Geoff first became involved with Ōtari when he helped with the Ōtari-Wilton's Bush Bioblitz, in 2007.





We are honoured to add someone with such esteemed knowledge to our Trustee ranks.

Geoff Ridley sharing his fungi knowledge

Trust Board 2023 - 2024

The Board of Trustees for the current year is:

| Kevin O'Connor | oconnorkevin170@gmail.com | Ph. 027 270 9787 |
|----------------------------|---------------------------|---------------------|
| Secretary: Maggie Bayfield | bayfield@xtra.co.nz | Ph: 027 545433 4333 |
| Treasurer: Tim Mason | timmason429@gmail.com | Ph: 479 0544 |
| Justin Nacey | justinnacey@gmail.com | Ph: 021 211 3019 |
| Kathy Ombler | kathy@ombler.co.nz | Ph: 027 275 5152 |
| Geoff Ridley | Ridley.geoff@gmail.com | Ph: 027 422 4102 |
| Susan Timmins | Stimmins@xtra.co.nz | Ph: 027 516 2979 |
| Annie Yeates | annieontour74@hotmail.com | Ph: 027 440 0129 |



The trustees welcome individual communications from members on any matters relating to Ōtari-Wilton's Bush Reserve or the Trust, particularly from those who would like to assist and participate in our activities.

Newsletter: Vera Burton. Phone 938 8207. veeanddave93@gmail.com

Looking after your dogs in Ōtari-Wilton's Bush - an update

Wellington City Council's updated Animal Bylaw (2024) requires all people with dogs in public to carry dog poo bags. This means they have to supply their own, not rely on supplies at city parks and reserves. At the Botanic Gardens they have already stopped providing them. There are just a few rolls left at Ōtari-Wilton's Bush, once they are gone there will be no more supplied (an annual saving of some \$2000). So please, start bringing your own. And take them away with you!!

Leaving dog mess of any kind behind is unhygienic and offensive. Visiting families with young children and volunteers weeding and trapping throughout Ōtari's forest and gardens can all be affected.

And while we're on dogs, here's a gentle reminder that all dogs must remain onleash at all times in Ōtari-Wilton's Bush. This is to protect other people, and our wildlife including the kiwi that have been both seen and detected by transmitter within Ōtari within recent weeks. There are handy off-leash areas next door to Ōtari at Ian Galloway Park and Izard Park.

Kiwi aversion training can help, but it's never an absolute guarantee that your dog won't get excited and lunge for a kiwi. Even the DOC kiwi experts muzzle their trained, working kiwi dogs. Also, the effectiveness of aversion training can diminish in time, and needs constant revision. Plus it's not just about kiwi in

Ōtari, which has one of the highest densities of native birds anywhere in Wellington City. Let's keep it that way.



From the Lab

It was a busy summer and autumn at the Lions Otari Plant Conservation Laboratory, with up to five people focussing on solving various plant mysteries. Karin and Jennifer continued the orchid propagation, seed banking and cryopreservation while Ben Carson did his summer scholarship, plus some added short term technician work on onion orchids. Sally Paine joined as a casual research technician and provided invaluable support across all the projects by helping with media preparation, assessing orchid germination, transferring *Drymoanthus* seedlings to new media and doing background research to guide orchid relocation. Meanwhile, Sarah Goldberg has started her exciting Masters project on podocarp seed germination and short-term storage.

Ben Carson's 2023/24 summer scholarship, supported by the Deane Endowment Trust, enabled him to focus on onion orchids (*Microtis*). You can read his fantastic blog about his findings on *Microtis* oligantha and *M. unifolia* on this Te Papa link: https://blog.tepapa.govt.nz/2024/02/27/how-do-you-grow-onion-orchids-peeling-back-the-layers-of-an-overlooked-native/



After summer, Ben was offered a contract to continue his work through until this month, before heading overseas. Just before flying off to Canada, Ben wrote a story for us about his time working with orchids in Ōtari and other nearby spots. It's a fascinating insight into the intricate and tricky world of orchid germination, which has become a stand out feature of the conservation science undertaken at Ōtari. Thanks Ben.

Sally Paine and Ben Carson

I am fortunate to have spent the last six months working at the Lions Ōtari Plant Conservation Laboratory, aiming to elucidate the ecology of our native onion orchids. I focused my attention on germinating the Regionally Endangered species *Microtis oligantha*, comparing this with the abundant, weedy *M. unifolia*.

I was overjoyed to continue my work after my initial Summer Research Scholarship ended. Each day has extended the thrilling (and occasionally frustrating!) journey of discovery in the vital surroundings of the lab. During my time here, highlights have included finding a new population of *M. oligantha* at Rangituhi/Colonial Knob and rediscovering another at Ōtari, both of which should downgrade its threat status.

Orchids often require a specific fungal partner to germinate and produce leaves. My work has proven that both species of *Microtis* conform to this rule and identified methods we can use to grow them!

First, I isolated fungi from the roots of *M. oligantha* and *M. unifolia* growing in multiple locations. I then established fungal cultures at Ōtari and sequenced their DNA to identify them. I have found only one strain from the rarer *M. oligantha*, whereas I have obtained a broader range from *M. unifolia*. When I introduced various strains to seeds of both species, only one type of fungus allowed seedlings to develop green leaves. Perhaps *M. oligantha* requires a specific fungus throughout its life cycle, whereas *M. unifolia*, despite requiring a specific partner to germinate, associates indiscriminately in its maturity. Could this contribute to why *M. unifolia* is much more abundant than *M. oligantha*? I have also stored seeds of both species through refrigeration, freezing, and preservation in liquid nitrogen. I am now testing whether seeds can still germinate after being stored for different periods.

I find it so exciting to think about these plants and their complex interactions, and I am honoured to have contributed to their conservation. (Hopefully I will soon have some publications to show for it too!) My time in the lab has allowed me to develop technical skills such as collecting specimens, preparing media, designing experiments, and undertaking genetic analysis. It has affirmed a passion for threatened plant research that I will be sure to carry into my future. I am thankful to have had the unqualified guidance and expertise of Karin van der Walt, Jennifer Alderton-Moss, and Carlos Lehnebach (Te Papa); I have been hugely inspired by them and the indispensable conservation work happening at Ōtari. This extends to the Ōtari team and everyone I have been lucky to connect with along the way.

Ben Carson

City Nature Challenge

Ōtari-Wilton's Bush was a key location for this year's iNaturalist City Nature Challenge, held over a weekend at the end of April. And what a result we got!

In this annual challenge, cities around the world compete to log as many observations of nature as possible using the iNaturalist app. Wellington is one of the only cities globally where we know that the biodiversity is growing, and huge involvement in the challenge this year proved the point.

As a region, we made 18,297 observations of 2,500 different species, all recorded in iNaturalist and

second only to Ōtautahi Christchurch in New Zealand. We recorded an increase on our 13,000 observations from 2023, the number of citizen scientists increased to 275, and there were several new recordings in iNaturalist in our area. The well-known kawakawa (*Piper excelsum*) was the most observed species, with plants dominating the top spots in the region. Our highest-ranking animal was the knobbled or garden orbweaver spider at 8th, and the pīwakawaka/fantail led the birds at 13th.



Kawakawa

Over the weekend there were two events at Ōtari, Trustee Annie Yeates reports:

The first event, an 'evening of discovery' with local experts, kicked off the entire City Nature Challenge Campaign.

We had a great turn out for this night exploration tour. Around 40 people were hosted by William Brocklesby, an entomologist working for DOC. Will, with friends from Te Papa, set up a light trap down by the big slip to attract moths.



It was a great family event. The children present became dab hands at capturing the insects in sample tubes so they could be identified. Visitors were also thrilled to see glow worms, numerous tuna in the awa, and various species of wētā. It was a beautifully still, clear evening, perfect for making observations.

Did you know you can also make sound recordings on iNaturalist? Several people recorded two ruru calling to one another across the valley. Maybe next year we will hear kiwi!

What have they found? Ōtari night exploration

Sunday was another cracker of a day. Te Papa's Leon Perrie and Lara Shepherd hosted a guided walk through Ōtari's gardens and forest, looking at everything from the big trees through to the little ferns, mosses, fungi and the animals around them. A key was introducing people to the art of identifying native plants. Leon gave excellent advice on what to look out for, and how best to photograph them so they could be identified on iNaturalist.

Observations recorded on iNaturalist are valuable in numerous ways. For example, during the City Nature Challenge one person recorded some plants they didn't recognise. Leon was able to identify them as goat's rue (*Galega officinalis*), an invasive weed uncommon in the Wellington region. The weed, which was thought to have come in on the wheels of heavy machinery working on the Omāroro Reservoir, in Mt Cook, has now been removed and the area will be monitored in case more of the weeds pop up!

And Marley Ford, a visiting lichen expert from Northland, observed around ten new records of lichens for the Greater Wellington region, including in Ōtari, on iNaturalist. Lichens are a fungus growing with a photosynthetic partner and are often overlooked.

If you're keen to learn more about the wonderful findings in the City Nature Challenge, check this blog, from Lara: https://blog.tepapa.govt.nz/2024/05/14/highlights-from-the-2024-city-nature-challenge-in-greater-wellington/

Ōtari Awards



Penny receives her Award from incoming Chair, Kevin O'Connor

Penny Salmond

Penny has been a volunteer host and guide for nearly 13 years. She says she will never forget her first time as a host, when she was rostered on with John Dawson, one of our Trust founders and a learned, prolific writer of definitive guides to New Zealand trees and plants.

"John took me out for a walk and told me some of the stories of the plants. I'll always remember learning about the *Blechnum filiforme*, and its different stages, which he said made early botanists think they were all different species.

Penny has always loved the bush, since she was 'knee high to a grasshopper going out with my Grandfather,' she recalls. That learning experience with John Dawson encouraged her to also put her hand up as a tour guide, and guiding has provided many

highlights over the years. She recalls going out with American Fullbright Scholarship students, and one memorable time guiding the French Ambassador and his extended family on a walk to Moko when they arrived, while she was on hosting duty, for a scheduled walk that unbeknown to them had been cancelled.

Hosting has not been without its dramas – calling emergency services and helping to rescue a lady with a sprained ankle from the Flax Clearing being one. She's also had people concerned about the 'health' of the eels, and on the plus side she's enjoyed finding forest geckos and varied insects including the 'biggest stick insects I've ever seen'.

'Overall, there are some lovely people who visit Ōtari, they just want advice or a chat. Being a volunteer here has been a huge learning curve and I've loved every minute of it. I feel honoured to have been chosen for the award,' says Penny. And as the citation on Penny's Ōtari Award states: Penny has introduced many people to Ōtari-Wilton's Bush. She is a highly competent guide and helpful host who provides constructive input into those roles. Without the consistent help of volunteers like Penny, Ōtari would not be fully appreciated by as many people.



Outgoing Chair Carol West presents Kathy's Award.

Kathy Ombler

Kathy became a Trustee in 2022 but has been active throughout Ōtari-Wilton's Bush, trapping pests with Ōtari's RAMBO team, for more than a decade. As a local resident, it feels good to be able to help safeguard such a special place, and trapping is good for the fitness, she says.

Most of the traps are located near tracks however twice a year Kathy joins other volunteers checking monitoring tunnels. These are placed every 50 metres in a straight line through the bush, they are baited one day and collected the next. 'My line starts near the cemetery and goes directly to way above the Kohekohe Track. It involves crossing steep little gullies and scrambling up damp, slippery banks through tangled vines, sometimes it's incredible to think we are so close to the CBD!'

As a Trustee, Kathy has applied her journalist background to help with our newsletter, upgrade our website and boost our social media content. These contributions, along with stories she has

written for other magazines, have helped raise awareness about Ōtari-Wilton's Bush, which is one of the key aims of the Trust. She has also lobbied councillors and helped make submissions to Council to safeguard funding for Ōtari developments, and has recently guided popular heritage tours of Ōtari.

The last two years have been an incredible learning experience, says Kathy. 'When you write about something you need to get your facts right. Having the support and expertise of Tim and his staff, Karin and Jennifer in the lab, and fellow Trustees and former chair Carol, with their wealth of botanical and Ōtari knowledge, has been pretty special.'

More on Blechnum filiforme (pānako, thread fern, climbing hard fern)

Ōtari Award recipient, Penny Salmond, recalled learning from John Dawson about the three forms of *Blechnum filiforme*. They were each so distinct, he said, early botanists thought it was actually three different species. In this article, originally published by the Tararua Tramping Club, we learn much more about this interesting fern. Thanks Chris Horne for sharing it, and to Jeremy Rolfe for the images.

July in the hills with Barbara Mitcalfe and Chris Horne

If you're tramping in forest and notice a fern climbing high on tree trunks, it's almost certainly pānako, *Blechnum filiforme*, the only *Blechnum* species which is high-climbing. It is found in coastal and lowland forests in the North Island and the northern coast of the South Island. This NZ endemic fern is unique in having three types of fronds: juvenile; sterile adult; fertile adult.





1. Juvenile (photo left)

On the ground and the bases of tree trunks you will see some small, deep-green, juvenile fronds creeping over banks and rocks before beginning to climb. These little fronds are narrowly elliptic, usually no wider than 5 cm, and only up to 25 cm long, with 15–20 pairs of coarsely-toothed segments either side, each only 5-25 x 2–8 mm.

2. Sterile adult ((photo right)

As pānako's thin, dark, scaly rhizome elongates itself and begins to climb vertically, clinging closely to the tree trunk, it sprouts dense trusses of adult, sterile fronds as it goes. These bright-green fronds get much bigger as they mature, often reaching c. 60 x 15 cm, and almost completely covering the tree trunk. They have up to 30 pairs of segments arranged pinnately on the rachis, (i.e., in pairs along the stem), each segment narrowly elliptic, toothed, stalked, up to 9 x 5 cm, and tapering to a fine point, rather like *Asplenium polyodon*.





3. Fertile adult (photo left)

You may recall that the sterile fronds of all *Blechnum* species are different from the fertile fronds. When pānako's growing tip has reached a height of c. 2 m up the tree trunk, it starts to produce its third type of frond. These are about the same size as the sterile ones, i.e., c. 60 x 15 cm, but otherwise they are completely different - delicate and fertile. Many fine, flexuous, thread-like strands sprout from each side of the rachis. They are so flimsy that even a light breeze causes them to quiver. Hence the names, "filiforme", and "thread fern".

Reproduction

Despite their apparent fragility, these fertile fronds contain the spores, which ripen and reproduce as usual, via prothalli, etc., just as we have described for other ferns.

Uses

Pānako is highly decorative, adding its own distinctiveness and amenity to the forest ambience. Along with all other green plants, it contributes to the supply of oxygen.

Just another Ōtari Thursday morning

Ōtari-Wilton's Bush can be a busy place on Thursday mornings. First, there's the Trust's gardens' maintenance group, long standing volunteers who work with Ōtari's garden staff weeding and maintaining the garden collections – all five hectares of them – every week! We just wouldn't be able to do the work we need to do without the help of these volunteers, Manager Tim Park is often heard to say.

Then there are the Forest Weeders, or Weedbusters. More volunteers. You might see them at work, beside a track or road boundary waging war on invasive weeds, before they invade too much into Wilton's Bush. When they're working in a handy spot they'll meet with the gardeners and staff for morning tea. Or they'll be on a more remote track, that's when the tins of home baking and the thermoses come out. The Forest Weeders started up last year.

But that's very recent, compared with Ron Fountain's solo crusade. He's been on a personal picking up rubbish mission pretty much every Thursday morning, for the past 17 years! He'll head off on the same route, in by the Leonard Cockayne Centre, past the Rock Garden, down to the Troup Lawn and around the Circle Track and back to the start. He also gathers up the nikau fronds. One recent Thursday he came across the Forest Weeders, carrying an old

egg beater he'd found, tossed into the trees. We asked Ron, was that the strangest bit of rubbish he'd ever picked up? What else has he found in 17 years?

Here was his list: an electric safe with a smashed lock, a woman's empty purse, a bike frame, electrical fittings, \$10 and \$20 notes, two large dead fish, porcelain fittings from a demolished toilet, artificial flowers, petals and florist's equipment, a wine glass, supermarket baskets, car number plates, an election hoarding (Green Party), golf balls, car tyres, spectacles, soda-stream capsules, paint brush and spray paint can, a carton of rotting kiwi fruit, and an egg beater.

Thanks Ron!



A note from our Treasurer

For some years we having been using Xero to keep our accounts and membership records. We have recently become aware of a potential problem with production of receipts for donations, which may not be compliant with IRD requirements for donations to charitable organisations such as ours. It is proving more difficult than we had expected to get this sorted out within Xero, but we remain hopeful. If anyone making a donation has had a receipt rejected by IRD, please email me at treasurer@owbt.nz or my personal email timmason429@gmail.com and I can provide a manual receipt. In the meantime, we will happily provide receipts on request but will not send them routinely as we have been doing. As always, your support is appreciated.

Tim Mason, Treasurer

Matariki

Details are still being confirmed as to whether Ōtari-Wilton's Bush will host any Matariki events this year, for example a workshop on Rongoā Māori Health as was held in 2023. Watch our Facebook and Instagram for an update.

Moko and the road that wasn't: the real story

In the March newsletter, our story about Bob Fantl's role in stopping a road being built through Ōtari-Wilton's Bush was well received. But not quite correct. Thanks to Trust member, Margaret Crimp, for pointing this out. Our story mentioned that the proposed road aimed to connect the

northern Ngaio/Khandallah suburbs with Karori. However, Margaret recalled an article written in 2021 by Bob's niece, Helene Ritchie, that says otherwise. The Council's plans, Helene passionately wrote, were to 'cut a swathe through Ōtari, to smash and destroy all in its way, to leave Ōtari a wrecked mess as the road carried on its merry way to a proposed new tip – Wharangi'.

It turns out another longtime Ōtari stalwart, Chris Horne, was also involved. He confirms the details thus: "Bob Fantl,

Chris Horne

Henry James and I appeared before the Planning Tribunal to support Bob's submission opposing the proposed landfill and access road, and to speak to our supporting submissions. Bob and Henry were architects and environmentalists.

"The purpose of the proposed road was to allow rubbish trucks to climb from near Karori Cemetery across the slopes of Te Wharangi - the ridge between Johnston Hill and Mt Kaukau - then descend to the valley floor of the North Mākara Stream, the site of the proposed new landfill. The Planning Tribunal disallowed Wellington City

Council's application for consent for the landfill and access road, so we won our case. The road would have destroyed parts of Ōtari and polluted others with wind-blown rubbish," he added.

Chris says he met Bob in 1981, through the pair's involvement with the Environment and Conservation Organisation (ECO), which is recognised now as one of our first environmentalist organisations.

So a heartfelt thank you to everyone, to the early environmentalists for saving our forest, and to Margaret and Chris for helping get the facts right for such an important story.



Margaret Crimp

Glow worm tours

Glow worms were, not surprisingly, a feature of the Ōtari night exploration tour during the City Nature Challenge, in April. On that note, we can confirm that yes, we will soon be running our winter evening tours to learn about the glow worms, along with lots of other night life that comes out to party in Ōtari when the sun goes down. After many, many years of wonderful guiding our glow worm specialist, Dave Burton, is taking a deserved rest, thanks for all your time and expertise Dave. We now have new guides ready to host you. They have been able to learn the ropes from Dave and are also being assisted by Julia Kaspar (Te Papa's Curator Terrestrial Invertebrates) and DOC entomologists Will Brocklesby and Eric Edwards.

While we are currently confirming tour dates, we do expect to run some during the school holidays – keep an eye on our social media and website for the dates and times.

Wonderful Autumn Walks

From birds to botany to building rock gardens with crowbars and manpower – a wealth of knowledge, heritage and history has been shared at this year's Sunday Autumn Guided Walks, held most Sundays from early March through until late May. Nearly all the guided walks were full, some even had long waiting lists, and most were attended by family groups and individuals of all ages and nationalities. Topics ranged widely: discovering the insect life of Ōtari, learning the secrets of how plants defend themselves, cutting-edge research in the lab by our conservation scientists, the importance of tawa, restoration throughout the Kaiwharawhara catchment, fungi, more fungi, and a walk through the heritage of our Ōtari Native Botanic Garden and Wilton's Bush Reserve.

ŌTARI WILTON'S BUSH TRUST

We are incredibly grateful to our panel of guides, experts in their fields who readily gave up their Sunday afternoons to share their knowledge, promote awareness about Ōtari-Wilton's Bush and our native flora, and inspire future conservationists, scientists and gardeners.

Here's a little photographic record from some of the walks.





That's a tawa up there, or maybe it was a kākā hogging the limelight in Carol West's talk about tawa.





Nate Rigler, Kia Mouriora te Kaiwharawhara Sanctuary to Sea, talks about communities working together



Leon Perrie introducing common native plants for beginners



Finding fungi with Geoff Ridley



OTARI WILTON'S BUSH TRUST



Finding insects with William Brocklesby



Evolutionary biologist, Lara Sheperd, talks about the crafty self defence techniques of native plants

Beware the self-defence spikes of a speargrass, says Lara Shepherd.

A flash new welcome

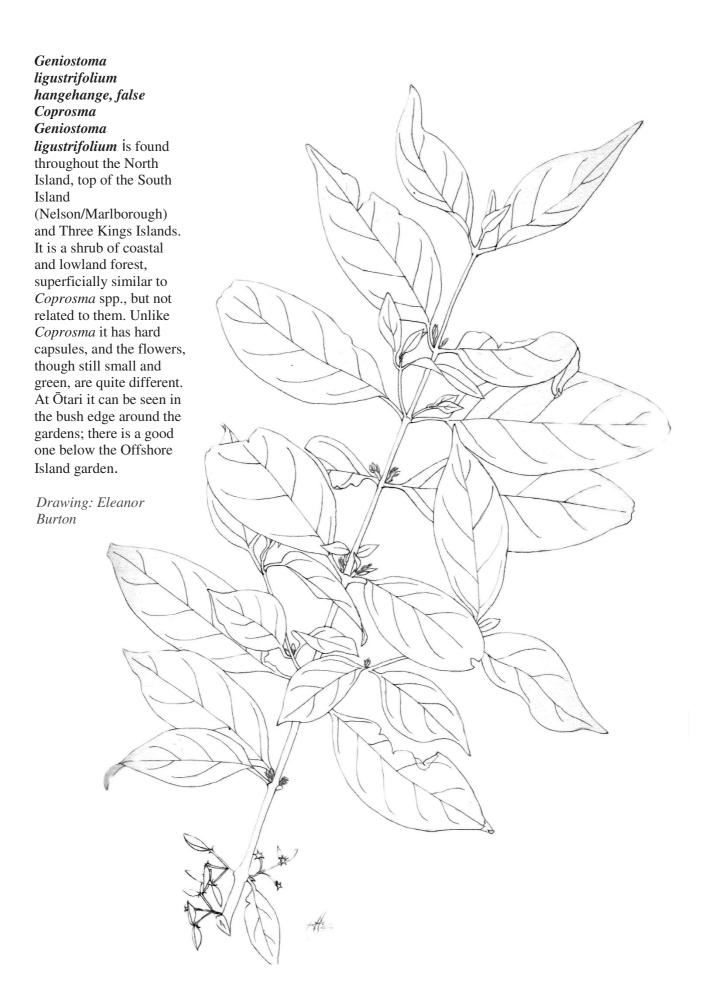
Regular Ōtari visitors will have noticed the new signage in many places along Wilton Road, the 'writing on the wall' on Tāne Whakapiripiri, the Visitor Centre, and the grand new boardwalk approaching the visitor centre, which was just completed at the end of May. The new signage and boardwalk – put in place by Wellington City Council, all provide a welcoming effect – as well as help people find Ōtari-Wilton's Bush. They do Ōtari proud.

Next on the upgrade list is the visitor centre's rusting roof. Scaffolding is in place for this job, which is expected to take a few weeks. Tāne Whakapiripiri will remain open throughout. And hopefully by July remedial work will begin on the broken and closed footbridge, near the northern car park.









Membership Application/Donation form.

Please note there is also one on the website which can be completed and submitted electronically or downloaded and printed and sent by post or email.







Supporting Otari-Wilton's Bush Reserve

MEMBERSHIP / DONATION FORM

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