

OTARI-WILTON'S BUSH TRUST

News and Views September, 2023

Website: www.owbt.nz

Rā Tūwhera ki Ōtari | Ōtari Open Day 2023

16 September (17 September if bad weather on 16th)
10 am – 2 pm

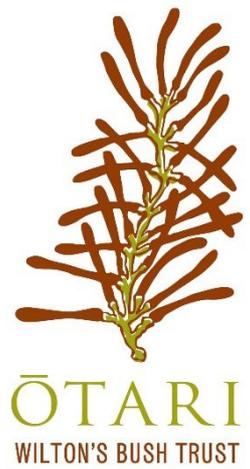
This is our annual showcase, a partnership between the Trust, WCC's Wellington Gardens staff, and other conservation and like-minded groups involved in conservation around the Wellington region, and especially in Ōtari-Wilton's Bush. The theme this year is: what can people do, at home or by volunteering, to help protect and enhance our natural environment.

Turn the page to see the programme



Rā Tūwhera ki Ōtari | Ōtari Open Day 2023

16 September (17 September if bad weather on 16th) 10 am – 2 pm



We have some great speakers lined up. Also, you can meet the people involved in caring for Ōtari, be guided around the native botanical gardens and behind the scenes for a look at the conservation science and botanical expertise of our Ōtari staff, learn about traditional rongoā healing and raranga (weaving), chat with our RAMBO trapping volunteers, or get there early and snap up a taste of home baking off the Trust's cake and preserves stall. (Actually – you can also contribute to this stall – we just know we have some amazing bakers and jam makers among our Trust membership.) Maggie Bayfield, organiser of this stall will email everyone soon with details of where and when to bring your baking and preserves along for the stall. We have some wonderful raffle prizes, including artworks and products from two wonderful local bird and nature artists, Melissa Boardman and Judi Lapsley-Miller. If you need more – there'll be a barbecue on the go throughout the day.

Here's the programme:

Talks (Leonard Cockayne Centre)

- 10 am** Weeds and how to deal to them – Illona Keenan (WCC).
- 11 am** Ōtari-Wilton's Bush Trust – what we do, why, and what you can do with us - Trust Chair Carol West with supporting Trustees.
- 12 noon** Trapping – Jim Tait, of RAMBO (Rats and Mustelids Blitzing Ōtari), one of the first community trapping groups in the region.
- 1 pm** Bird surveys – Ecologist Nikki McArthur summarises the data from 13 years of bird studies throughout Wellington. The results are exciting!



RAMBO stall: Three of Ōtari's longstanding RAMBO trapping team were on hand to talk about their work at last year's Open Day. Look for them again this year.

Guided Walk

Take a guided walk through the gardens with our knowledgeable Trust guides at Open Day. (Options are garden tours with Trust guides, and 'Behind the Scenes' tours with Ōtari staff.) On the hour, starting at 10 am, the Trust will lead 30 minute guided walks. Last one departs at 1 pm. On the half hour, starting at 10.30 am, Ōtari staff will lead 20 minute walks through the nursery and laboratory. For all guided walks, book with Eventfinda so you don't miss out:
<https://www.eventfinda.co.nz/2023/ra-tuwhera-ki-otari-otari-open-day/wellington>



Tāne Whakapiripiri/Visitor Centre (outside) Cake and Preserves Stall

Trust stall – cards, books, raffles, membership.
RAMBO - predator pests and trapping.
Other groups (Kia Mouriora te Kaiwharawhara Sanctuary to Sea/Zealandia, Wellington Botanical Society, Capital Kiwi, Animal/dog control, Invasive Hats – and more!
Tāne Whakapiripiri/Visitor Centre (inside).
Rongoā (traditional Māori health with Sharli Solomon).
Ōtari Raranga Weavers.



Open Lab

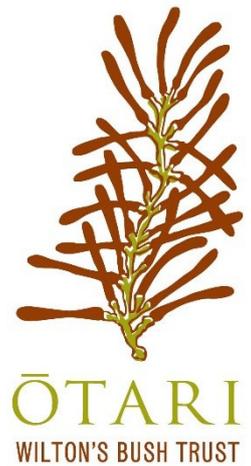
On the Cockayne Lawn. 11 am – 1 pm Tū Mātau Ora, running games..

Message from the Chair



Kia ora koutou katoa

Open Day will be on Saturday 16 September. If the weather forecast is atrocious for Saturday but better for Sunday 17th, then Open Day will happen on that day. We have, in the past, had beautiful weather for Open Day so, fingers crossed! We will be running a baking and preserves stall and welcome donations of cakes, loaves, slices, biscuits, jams, jellies, marmalade, relishes and chutneys. Maggie Bayfield, organiser of this stall will email everyone soon with details of where and when to bring your baking and preserves along for the stall.



The Trust will be giving a talk about what we do that we hope will encourage others to join us to take action to enjoy and value our native plants and the fabulous forests and gardens of Ōtari-Wilton's Bush. Come along to hear a significant announcement from our Treasurer, Tim Mason! There will be several other relevant and interesting talks during the day as well. We will also be guiding tours around the gardens, while Ōtari staff will lead tours of the nursery and lab. If you're interested in either of these free tours, please sign up on Eventfinda - don't miss out: <https://www.eventfinda.co.nz/2023/ra-tuwhera-ki-otari-otari-open-day/wellington>

We started a new volunteer activity in the past month – forest weeding. A keen group of volunteers, led by Maggie Bayfield and under the guidance of Ōtari staff, mostly cleared a big patch of English ivy that was getting well established below the skyline ridge. The Weedbusters, as this group is now known, will work on the first and third Thursday of each month from 9 am until noon, taking a break around Christmas/New Year.

Our new Trustees Susan Timmins and Annie Yeates have thrown themselves whole-heartedly into organising guided tours for this summer's cruise ship season. You may have seen that cruise ship numbers are back almost to pre-pandemic levels, which means a busy season for our team of tour guides. This season we have indicated that we won't be guiding tours for a fortnight around the Christmas New Year period so that our tour organisers and guides get to enjoy the break with family and friends.

On the social media front, we now have 587 followers on Instagram and over 1100 followers on Facebook – the numbers keep growing! Kathy Ombler regularly profiles what the plants, birds and people have been up to at Ōtari. There have been two significant events in the past month. The first was the community planting day on the big slip that collapsed down from Wilton Park. And secondly, some of the Makara kiwi have been making their way to the skyline ridge above Ōtari. The fact some that kiwi have come across towards Ōtari so quickly speaks volumes about the effectiveness of pest control on Wellington Peninsula and the quality of the habitat in Ōtari which the birds may well have detected.

Kiwi in Ōtari is fantastic for ecosystem recovery but it will also be very hazardous for them as not all people who walk their dogs in Ōtari obey the rules and keep their pets on leads. The natural hunting instincts of many breeds of dog take over if they smell kiwi, and when they are on leads they can be controlled and kiwi can continue to slumber through the daylight hours. The good news is that dogs can be trained not to follow kiwi scents in a programme called kiwi aversion training. Hopefully dog owners who value kiwi will take up this training for their pets voluntarily. The Trust will be submitting on the Council's Dog Policy – we believe that dogs on leads and kiwi can coexist in Ōtari.

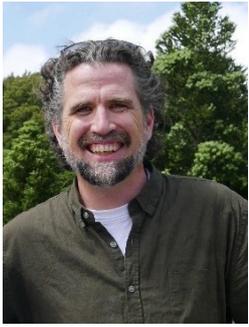
We are looking forward to seeing you at Open Day on 16 September. Maybe try your luck in the raffle. We have some wonderful prizes, including artworks and products from two wonderful local bird and nature artists, Melissa Boardman and Judi Lapsley-Miller. Or you could make a putitputi from harakeke (a flax flower) or perhaps just wander the gardens eating something from the barbecue?

Enjoy the spring flowers and weather!

Thank you for your support of the Trust and Ōtari-Wilton's Bush.

Carol West
Chair

Ōtari Update



Kia ora koutou,

This has been a strange winter. While we welcomed the frosts, it has been quite warm and sunny in the gardens which haven't dried out since the summer before last. The team has been working hard to keep up with the unprecedented weed growth and they are ever grateful for the support of our regular Thursday Volunteers whose sustained efforts mean that we can keep Ōtari looking wonderful. We are working hard to get the gardens looking their best before Open Day.

We have a great line-up of speakers at Open Day. They have each been asked to bring a local restoration focus so that you can understand what is happening at Ōtari and how you can contribute by volunteering, or even at your home. There will be speakers on weeds, volunteering, trapping and the resurgence of the local native bird populations. If you want to understand more about the native plants in the botanic gardens and the work we do here, book into a guided garden tour and/or a behind the scenes tour.

It is fantastic that another volunteer group has established to support the work we do to look after the native forest. Ōtari Weedbusters will be tackling some priority weeds throughout the forest. Get in touch with Trustee Maggie Bayfield, via the Trust website owbt.nz, if you are keen to get involved.

We have been working on a review of our collections and are developing plans to change some of the 30 areas of managed collections which make up Ōtari Native Botanic Garden as a whole. One of these is our magnificent collection of kōwhai. When we reviewed our records we discovered that remarkably we did not have any *Sophora chathamica*. Taxonomic work suggests that the kōwhai on Rēkohu (Chatham Islands) and around Te Whanganui a Tara (Wellington) and Porirua are likely pre-European and the pre-human natural range of this species is the northern North Island. Fortunately, on a recent trip to Auckland I was given some eco-sourced *S. chathamica* from North Auckland to add to our collection.



Kākā and tūī just love Ōtari's kōwhai

Many of the plants that we have collected on recent trips to Chatham Island have been planted this winter in the Rēkohu Garden, just below the Wetland Plants boardwalk. We have even made a sand-bed for the coastal plants which are thriving. A significant feature of this garden is the well-established hoho (*Pseudopanax chathamicus*) and the solid Rēkohu nikau, which were grown from seeds donated in the early 1980s by the late Audrey Eagle. Karin and Jenn are undertaking some excellent cutting-edge research with their plant conservation in the Lions Ōtari Plant Conservation Lab, particularly with our native orchids and kauri. Read more about it in Karin's update.

Work is underway to improve the upper Blue Track (uphill of Moko) and we are investigating a number of options to reopen the Yellow Track which is currently closed. The Wilton Park Slip was planted by an enthusiastic group of volunteers in mid-August alongside the Ōtari team, Zealandia staff and the Trust's revegetation group. Following the removal of the large dead trees that the slip brought down, the stream is working to find its natural path again. Until the plants establish roots and the slip material settles on the banks, we unfortunately expect to see ongoing erosion of the steep stream edges. While we had arborists working on site we also took the opportunity to take down a large pine just downstream of the slip area. Work is also continuing to repair our service drive. We are looking forward to this reopening so we can get back to normal operations.

We are also very excited that kiwi are making forays beyond the Capital Kiwi Projects's core management area on Terawhiti Station, near Makara. One radio-tracked bird was recently found near the Skyline and reports are coming in from locals who have heard kiwi calling on Johnston Hill, right next to Ōtari! Please don't risk your dog grabbing a kiwi or getting a \$300 fine. Keep it on a lead at all times in Ōtari as well as in all council reserves, unless it is a designated off leash area. Kiwi could be nesting anywhere now, and we are getting close to the summer nesting and breeding season when our wonderful native birds are particularly vulnerable.

Ma te wa,
Tim Park

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



August Slip Planting

They planted, then they replanted: the Kaiwharawhara Valley and Wilton Park Slip. In 2001, volunteers with the Trust-inspired Kaiwharawhara Stream Restoration Project began weeding, clearing, then planting 1000s of native plants along the Kaiwharawhara Stream. The track through the valley has become one of the most popular in Ōtari-Wilton's Bush. But in winter 2022, a swathe of that revegetation, along with tonnes of silt and rubbish, collapsed into the valley following in a major slip off the edge of Wilton Park.

Down but not defeated – earlier this year an army of volunteers turned out to pull rubbish out of the slip.

Then, in August, some 50 volunteers turned out to replant more than 900 trees on the lower slip. The planting, aimed to stabilize the slip and restore the native forest and health of the Kaiwharawhara Stream, was a collaboration with Ōtari-Wilton's Bush Trust, Wellington Gardens, Zealandia Te Māra a Tāne Ecosanctuary and Kia Mouriora te Kaiwharawhara Sanctuary to Sea. Joining Trust volunteers were the young team from Zealandia's Rangai Rangatahi, along with many other community minded locals. A BIG thanks to local butchery Cameron Harrison for supplying the barbecue sausages for lunch.

There has always been strong community support for Ōtari-Wilton's Bush and the spade-flourishing turnout of community-minded locals proved the point.



Here's just a few of them!

Trust chair Carol West.



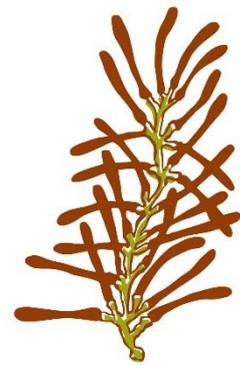
Jim Tait, RAMBO, turns his hand from trapping to tree planting.



Long time volunteer, Don Newman worked with our new Trustee, Annie Yeates.



Jonathan Kennett, who with Bronwen Wall oversaw a lot of the valley's earlier restoration came back to lend a hand.



ŌTARI
WILTON'S BUSH TRUST



Ōtari staff Tom Belworthy and Megan Ireland set up the operation and worked hard on the day.

Charles Sullivan spent many years trapping for RAMBO, he came back to plant some trees.



Ron Fountain is one of our legends, when it comes to volunteer work in Ōtari.

It was a steep climb for those heading towards the top of the slip.



Ōtari's Anthony Kiwi-Scully serves up a Cameron Harrison Butchery barbecued sausage for one of our regular volunteers, Richard Grasse.

Lunch break on the Troup Picnic Lawn, where everyone heard a few words about the work of the Trust, from our Chair Carol West, and developments with Kia Mouriora te Kaiwharawhara Sanctuary to Sea, from Uenuku Phillips.



Tea Ceremony at Ōtari

A calming walk through a garden ideally precedes a traditional Japanese tea ceremony and what better garden could there be than the native botanical collections of Ōtari-Wilton's Bush?

The Trust, in association with the Wellington Sakai Association, was delighted to host His Excellency the Ambassador of Japan, Ito Koichi, Madam Ito, and Wellington Deputy Mayor Laurie Foon, to a garden tour followed by a traditional tea ceremony, in July. Trust Chair, Carol West and Ōtari-Wilton's Bush manager, Tim Park, guided his Excellency and Madam Ito through the fernery, called in to an Ōtari Raranga Weavers workshop in Tāne Whakapiripiri, the Visitor Centre, then walked out to the Cockayne Lookout before moving to the Leonard Cockayne Centre for the tea ceremony.

The special ceremony, *ichi you rai fuku*, was a celebration of 'the coming through darkness into the light', acknowledging the Winter Solstice, served by Wellington Omote Senke. Sakai, a sister city of Wellington, is the birth place of the modern tea ceremony, Sen no Rikyu. Ambassador Ito thanked everyone for the invitation to the ceremony, and promised that he and Madam Ito would definitely be returning for walks in the Ōtari gardens. And indeed they have! They've been spotted wandering through the gardens since!



Madam Ito with Roxie Orr, President of the Wellington Sakai Association



Members of Wellington Omote Senke, who served the tea ceremony.



Visiting an Ōtari Raranga workshop



Deputy mayor, Laurie Foon, has a tea making lesson.



Tim Park and Carol West with Ambassador and Madam Ito, discussing a kākā beak, sourced from the wild on the East Coast, now doing well in our garden collection.

Flowers and other things botanical – a look around the gardens

The Trust's social media (Instagram and Facebook) has regular posts looking at the many special plants in the Ōtari collections. Even if you don't follow social media, anyone can look at these via our website owbt.nz. Simply click the Facebook or Instagram logos at the top of the home page, you don't have to join any social media to be able to see them.

In case you missed it, our last newsletter had one example, kaikōmako manawatāwhi (*Pennantia baylisiana*). And now ngutukākā and kākā maybe getting ready to rumble at Ōtari! Come visit the Cockayne Picnic Lawn to see the season's first flowering of a ngutukākā (kaka beak). While the showy ngutukākā is grown prolifically in private gardens, in 2020 only 123 individual plants were known to exist in the wild. These are found in the Tairāwhiti, East Coast region, and now, as part of its rare native plant protection ethos, Ōtari is growing seedlings from some of those few wild plants. The story gets better – last year a kākā, also a nationally threatened species and now successfully re-introduced to Wellington by Zealandia, was seen visiting Ōtari's ngutukākā flowers. According to a noted botanist who witnessed this, it was most likely the first time a kākā had been observed on a ngutukākā, sourced from the wild, in at least a hundred years. So keep a look out, you might be the second witness! Thanks to Andy McArthur for the gorgeous image.



Kiwi are so close

As mentioned by Carol and Tim, and by many media reports, kiwi have been found on the Skyline Ridge, just over the hill from Ōtari-Wilton's Bush. And kiwi calls (as yet unconfirmed) have been reported from around Johnston Hill. Just months after the release of brown kiwi into Capital Kiwi's project area, on Terāwhiti Station near Makara, they've headed out and about to explore their new territory, and perhaps we are not surprised that they reckon heading Ōtari way is a good idea.

This is hugely exciting, it's also a potential issue – and while we'll be preaching to the converted to readers of this newsletter, we're keen for everyone's support in keeping kiwi safe from dogs. No matter how well trained the dog, natural hunting instincts will take over if they smell kiwi – and dogs have an amazing sense of smell.

Dogs must be on a leash in Ōtari-Wilton's Bush, and all city council reserves (unless it's a designated, signposted, dog free area). If nothing else is a deterrent the potential \$300 fine if caught with your dog off a leash should be! Council rangers are out and about. Spread the word!

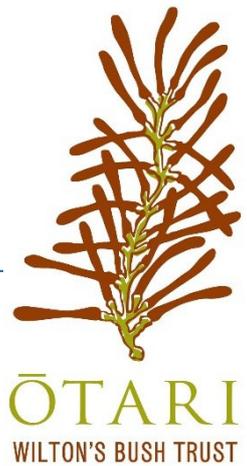


Please keep your dog on a leash, and encourage others to do likewise.



Brony and Scout.

Trust Board 2023 – 2024



The Board of Trustees for the current year is:

Chair: Carol West	carolwest@xtra.co.nz	Ph: 387 3396
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
Kevin O'Connor	oconnorkevin170@gmail.com	Ph. 027 270 9787
Kathy Ombler	kathy@ombler.co.nz	Ph: 027 275 5152
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

Duke of Edinburgh Award opportunity

We've been delighted to welcome two rather younger than usual weekend hosts for the past few months. Newlands College students, Zyla and Lainey, are currently going for their Duke of Edinburgh Bronze Award for Volunteering. A quick check with Volunteer Wellington led them to the opportunity to volunteer as weekend hosts at Ōtari-Wilton's Bush.

The girls have worked alongside our rostered hosts, helped to sort the books and cards, cleaned inside Tāne Whakapiripiri, engaged with visitors, learned a lot about Ōtari-Wilton's Bush and enjoyed the ambience. Zyla says talking with people has been interesting, and when things weren't too busy they've been able to head off for a few walks to get their bearings. "The atmosphere here is very calm and relaxing, with people coming and going. It's been nice when the weather is good and we've been able to sit outside." Lainey has enjoyed learning something of the history of Ōtari-Wilton's Bush. "It was interesting to learn that some of this place was once farmed and Job Wilton, one of the farmers, saved some of the big forest from being cut down."



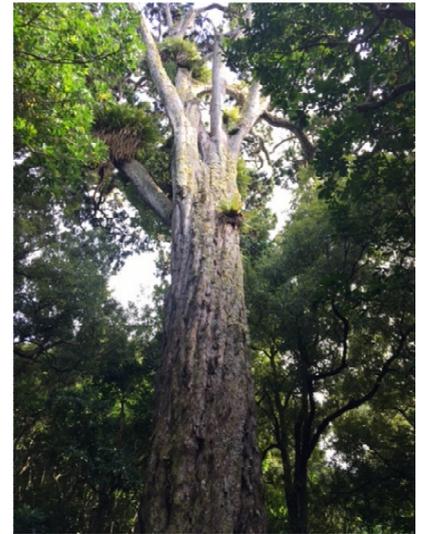
Our weekend hosts Zyla (left) and Lainey.

Moko Trail



Almost a year after its opening, the new, easier track to Moko (Ōtari's 800+ year old rimu tree) has proven incredibly popular. The old trail, on a steep, exposed ridge with ageing trees, involved climbing 156 steps. The new route has just 36 steps, including some carefully built to protect roots and vines. Ecological sensitivity was a key component of the track design, which was carried out by trail building experts, the Kennett Brothers. The same track team is now employed doing some small improvements on the upper Blue Trail, above Moko, improving drainage and adding a few steps where needed. *Moko trail photos: Phil Parnell*

Dean working on the upper Blue Trail.



Green-fingered volunteers?

One of the Trust's longer-standing volunteer groups is the Thursday gardens maintenance and weeding group. They are a dedicated lot, meeting every Thursday morning and, with the support and guidance of Ōtari gardens staff, work in the internationally recognised native botanical collections. They play an extremely valuable role in keeping the gardens looking amazing and all enjoy the privilege of working in such an esteemed botanical collection.

This year we've had a lot of rain and warmer temperatures and the weeds are thriving. If any members are interesting in joining this group, you will be most welcome. You don't need absolutely impeccable plant knowledge, garden staff will be on hand to guide you. Hours are from 9am to 12 midday, with a break for morning tea with Ōtari staff (possibly including the day's five minute quiz challenge). If you're interested, contact Jane Humble (021 636 226 or jhumble16@gmail.com).



An update from RAMBO

(Rats and Mustelids Blitzing Ōtari)

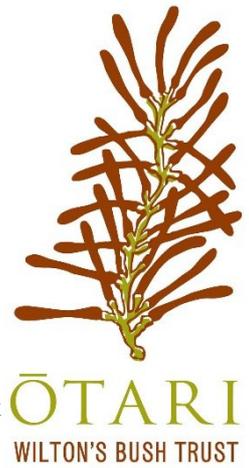
Ōtari's volunteer predator control team is continuing the onslaught against unwanted critters. We now have ten lines targeting rats and mustelids throughout Ōtari-Wilton's Bush, also in neighbouring reserves, plus we help keep watch on a Timms trapline that's targeting possums along the Skyline Ridge above Ōtari. We also help the city council's biodiversity team carry out a monitoring exercise along the western hills every six months.

These efforts must be contributing hugely to the health of the forest and the incredible birdlife now seen in and around Ōtari. And now there are kiwi to think about! Who would have thought we'd have brown kiwi pottering towards us, so soon after being released to the Capital Kiwi project area near Makara. Perhaps they know a good thing when they sense it!

Details – thanks to RAMBO's tireless organiser and data keeper, Jim Tait: we know that this year, so far, we've caught 94 rats, four hedgehogs and no mustelids, which must be a good sign. More than half the rats caught have been alongside Kaiwharawhara Stream or side streams. The Skyline Timms traps have caught a total of 39 possums – bear in mind this line extends along the Skyline Ridge from Kaukau to Makara Road and only a few of the 39 have been caught above Ōtari. We keep vigilant nevertheless. Monitoring for predators is carried out in Ōtari-Wilton's Bush by both by the Regional Council and by RAMBO volunteers as part of a WCC project. Monitoring is achieved by putting cards with ink and bait under weatherproof tunnels overnight. Inky footprints on the cards tell us what animals are around. These tunnels are mostly set in deep bush, in 'straight lines' so getting to them can be fun! Who knew what a tangled profusion of vines, ferns and unyielding shrubbery grew in steep, slippery little gullies in the heart of Ōtari, so close to the CBD of our capital city!

The Regional Council carried out its most recent monitoring in August, covering 85 ha using 60 tracking tunnels. Informal results were very positive: just one card showed rat sign (a monitoring rate of 1.7%). For mice the monitoring rate was 18.6%, anecdotal evidence from Jim Tait tells us there certainly are a few mice running around Ōtari-Wilton's Bush. On the positive side, monitoring cards also show an increasing presence of wētā – an indication that the health of the forest is being restored.

RAMBO's Jim Tait, seen here guiding a walk through Ōtari, has been overseeing predator control in Ōtari for more than a decade. He also runs local community trapping groups, and spreads the word about predator control to schools and groups in the area. .



Weedbusters!

See next page....



Look out weeds: the Weedbusters are coming after you

'Weedbusters' is the Trust's latest volunteer team, caring for Ōtari-Wilton's Bush. In August, six energetic souls celebrated the group's inaugural turnout by decimating a patch of ivy (*Hedera helix*) high up near the reserve boundary.



Weedbusters plan to meet on the first and third Thursday every month, from 9am to midday. They'll be guided and supported by Ōtari garden staff.

If you want to know more, contact Maggie Bayfield (bayfield@xtra.co.nz)



Keep a lookout for this plant!

On the topic of weeds, we're surely all aware of rampagous weeds such as English ivy and tradescantia (wandering willie), there's quite a few others to keep on top of. Here's one we can all look out for, identify its whereabouts and do something to stop it spreading.



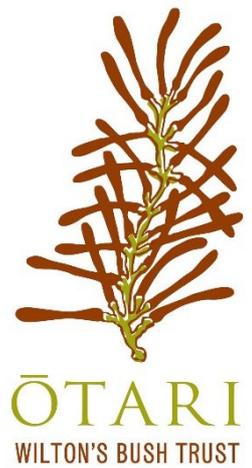
Black Bryony, a potentially problematic weed for Ōtari-Wilton's Bush, has become established around the old Job Wilton residence on Wilton Road (by the Bowling Club). Black Bryony (*Dioscorea communis*, formerly *Tamus*) is a herbaceous vine growing to 2–4 m tall with deep tubers. It has the potential to spread through the forest and be a huge problem so please keep an eye out. If you see it report it to Tim Park (Ōtari-Wilton's Bush Manager) or list your observation on iNaturalist: <https://inaturalist.nz/taxa/82691-Dioscorea-communis>

This will help us to control the weed before it becomes a bigger problem. For more information, check it out on the New Zealand Plant Conservation Network website:

<https://www.nzpcn.org.nz/flora/species/dioscorea-communis>



Conservation science progress, international collaboration and teabags



An update from Karin van der Walt, Conservation and Science Advisor at the Lions Ōtari Plant Conservation Laboratory

One may be forgiven for thinking winter is a quiet time for New Zealand plants as not many species flower or fruit during this time. Although this is probably right, it hasn't been a quiet time in the lab.

As many of you will know, it seemed like this year was a mast year for many of our gymnosperms, especially kahikatea (*Dacrycarpus dacrydioides*) and totara (*Podocarpus*). While watching tūi and kākā feast on the orange fruit (well technically the receptacles) of all the kahikatea in the nursery, I received an intriguing phone call from DOC in Motueka about seed germination and short-term storage of our gymnosperms and beech trees.

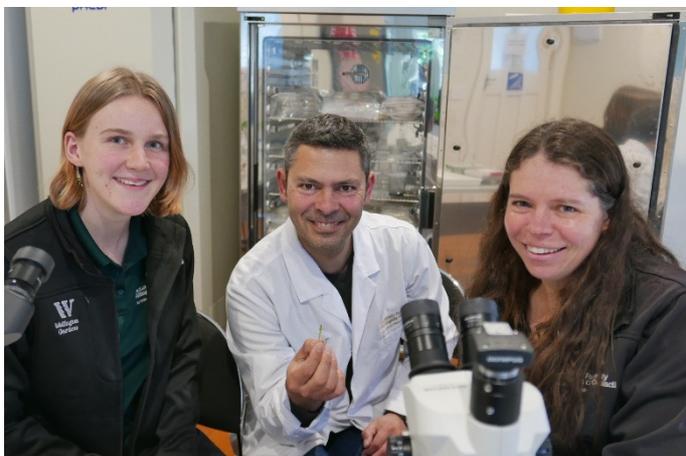
Discussion led to action, and boosted by a bit of funding, Jennifer and I established baseline germination information for eleven tree species earmarked for restoration via seed pods distributed by drones. After this relatively small study, we now at least have a little better understanding of our native species and what they need, or don't need, to grow.

However, this didn't mean that our kauri work took a back seat this year! As background, I have been looking into kauri seed storage since 2020. This was due to a paper, published in the 1990's by Kew Millennium Seed Bank, indicating kauri in storage is short lived (10 years). Of course, to study seeds, you first need to get good seeds at the right time. So, we have been working on establishing baseline information for seed collection, determining what a viable seed is, germination, desiccation and freezing.

Thus, kauri cones were once again collected from the Ōtari trees this year. Within days of collection four boxes were dispatched to our helpers, Dianne, Jane, Lynley, and Ros, who processed the seed for me with even more efficiency and enthusiasm than previous years, saving us countless processing hours. The seeds were promptly processed for storage and biochemical assays, with all the data waiting to be written into a new publication.

The kauri work also inspired us to secure a Catalyst: Seeding fund through the Royal Society of New Zealand. This fund is used to facilitate new small and medium pre-research strategic partnerships with the view to develop full collaborations that could be supported through the Catalyst: Strategic fund. Our project will be looking into seed conservation and restoration of Araucariaceae species in the Pacific Region. Ōtari is project lead and supported by co-researchers from Plant and Food Research (Palmerston North), Victoria University of Wellington, PlantBank (Australia), Pacific Community's

Centre for Pacific Crops and Trees (Fiji), University of Valencia (Spain) and Kew Millennium Seed Bank (UK). The project officially starts in February 2024 (in time for the seeding season) and runs until February 2026.



Jennifer Alderton-Moss, Carlos Lehnebach (Curator of Botany, Te Papa) and Karin van der Walt, at work in the Lions Ōtari Plant Conservation Laboratory.

During this time, we will see several researcher exchanges between the countries and organizations aimed at conducting research that will improve the state of Araucariaceae, in particular *Agathis* (kauri), in the Pacific region.

In case you are wondering if all this tree related work means that there is nothing happening with the orchids, the answer is no. Jennifer has been invaluable and we continue to make fantastic progress. Of the five species targeted for the project funded through Lottery Environment and Heritage, four have been successfully grown in the lab. Two of these, *Drymoanthus flavus* (perching orchid) and *Gastrodia cooperae* (black potato orchid) seed and/or seedlings are being returned to the wild.



You may have heard about some of our experiments using seed bags to return *D. flavus* seed and fungi to the wild. We were featured on One News



(Google teabags + orchids + 1news). Various methods of attaching seedlings to trees are being trialled, including teabags containing *Drymoanthus flavus* seed and fungi trialled on beech trees at Ōtari and returned to Eastbourne. (see photos). Interestingly, we probably have more *D. flavus* growing in the lab (over 1500) than the entire known population in Wellington region.



Growing *D. flavus* on nutrient rich media has proven to be highly successful, largely because of our fantastic clean rooms, thanks again to Darea for making this possible!

Work also continues on the swamp helmet orchid (*Corybas carsei*) and although progress is a bit slower for this challenging species, Jennifer has published a great paper in the New Zealand Journal of Botany illustrating the fungal complexities associated with *C. carsei*. Together with Carlos Lehnebach we continue to investigate the germination and seedling establishment of this critically rare species.



This summer we are once again offering a summer scholarship through Victoria University of Wellington. This has been made possible by the Endowment Trust, who generously offered a full scholarship to enable a student to learn about orchid conservation. The student will be focussing on onion orchids (*Microtis*) to enable us to look after *M. oligantha*, one of Wellington's regionally threatened orchids. With all this increase in our work, we will also be employing a casual technician to help us achieve our milestones across various projects.

Wellington Heritage Week Walks

For the first time, the Trust will offer walks through Ōtari-Wilton Bush as part of Wellington Heritage Festival (also known as Heritage Week). We plan to introduce visitors to the rich history and heritage sites that makes Ōtari-Wilton's Bush the special place it is today, acknowledging mana whenua, early farmers (and forest protectors), and the rich collection of native plants from all over New Zealand.



The tours will run twice, on consecutive Saturdays, October 28 and November 4, from 2 to 3.30pm. Spread the word. Bookings can be made on www.eventfinder.co.nz (once the Festival is officially launched).

A key site marking the heritage of Ōtari-Wilton's Bush is the Leonard and Maud Cockayne memorial stone, at the Leonard Cockayne Lookout. Here, five-year-old Sarah Phillips stands beside her grandparents' grave, on the occasion of the unveiling of the memorial tablet some 70 years ago. (See story page 14.)

Our legacy of members: Geoffrey Moss

Visitors to Ōtari a decade or so ago might recall being offered the loan of a beautifully carved walking stick, at the Visitor Centre, to assist their safe passage around the gardens. These were carved by Geoffrey Moss, a longtime Trust stalwart, volunteer weekend host and former Trustee. Geoffrey also has a close family connection with the city's gardens. His grandfather, Walter Henry (Harry) Moss, trained at Kew Gardens, then after moving to New Zealand in 1912 worked at the Wellington Botanical Gardens before heading off to war. He returned wounded and took on light duties back at the Botanical Gardens before becoming foreman of the City Council Gardens.



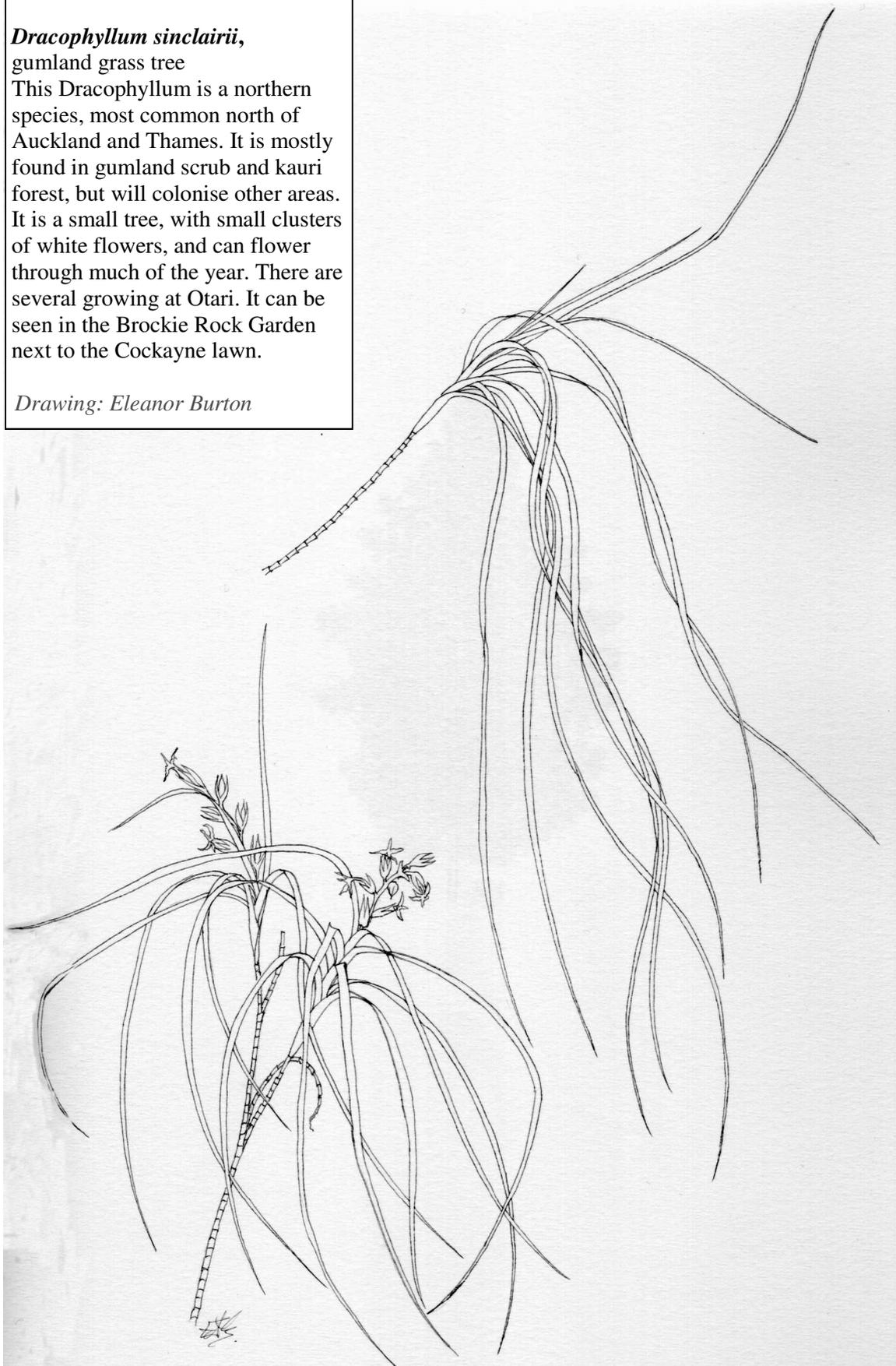
Today Geoffrey's granddaughter, Jennifer Alderton-Moss, works as a plant conservation researcher at the the Lions Ōtari Plant Conservation Laboratory. She has been a key part of the team achieving ground breaking success with the conservation of native orchids (see our story on page 13).

Geoffrey, now a young-looking 90 year old, still lives in the Dorset Way home that he moved to in 1965. He has enjoyed a fascinating career, including international positions with the United Nations Development Programme throughout Asia, related to agricultural and horticultural sciences. He is also the author of many books, some of which could be yours – if you win the right raffle at our Open Day. Thank you, Geoffrey for the generous donations of your books and a walking stick as prizes for our fundraising raffles

***Dracophyllum sinclairii*,**
gumland grass tree

This *Dracophyllum* is a northern species, most common north of Auckland and Thames. It is mostly found in gumland scrub and kauri forest, but will colonise other areas. It is a small tree, with small clusters of white flowers, and can flower through much of the year. There are several growing at Otari. It can be seen in the Brockie Rock Garden next to the Cockayne lawn.

Drawing: Eleanor Burton



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.



MEMBERSHIP / DONATION FORM

YOUR DETAILS

NAME/S

ADDRESS

PHONE NUMBERS

EMAIL ADDRESS

BILLING NAME & ADDRESS (if different from Above)

NEW MEMBER OR RENEW \$

INDIVIDUAL \$20 \$

DOUBLE/FAMILY \$30 \$

CORPORATE \$30 \$

NEW MEMBER

DONATE

\$20 \$50 \$100 Other \$

I would like a receipt for my donation

P

Paid electronically to account 030518 0205713 000 (please mark your NAME and MEMBERSHIP and/or DONATION in the fields)

COMMENTS