

OTARI-WILTON'S BUSH TRUST

News and Views September, 2021

*For all walks meet at the Information Centre, Te Marae o Tane unless otherwise stated. Walks with talks first will start at the Leonard Cockayne Centre. Unless otherwise stated walks are free to Trust members & children under 15, otherwise \$5. Web site: www.owbt.nz
Please note that bookings are essential at Eventfinda <http://www.eventfinda.co.nz> if any members wish to attend any of the walks.*

Second Saturdays	Plant care is on the second Saturday of each month. 9am. Contact Wilbur Dovey, 499 1044.
Friday 10 September 6.30pm	Glow worm walk. See p 3 for details. You'll need good shoes, warm clothing, and a torch. All children must be accompanied by an adult. Meet at the Information Centre. Bookings are essential – search 'Eventfinda' for 'glow worm'. <i>Leader: Dave Burton</i>
Saturday 25 September 10.00am	Open Day. There is no plant sale this year, but there are other attractions including some plant give-aways. See p 8 for details NOTE: Open Day will only proceed at Alert Level 1. A call will be made on Sept 10 whether it is safe to proceed with the Open Day
Sunday 24 October 2pm	Wilton's Bush Walk. From the Information Centre, up the Kaiwharawhara Stream to the Karori Cemetery, check out Harry McNish's grave (he was Shackleton's carpenter on his Antarctic expedition), and return via the lower Blue Trail. Duration: possibly just over 2 hours. Limited to 10 people. <i>Leader: Chris Moore</i>
Sunday 28 November 2pm	Birds of Otari. Meet at the Information Centre, for the very popular 1 to 1.5 hour easy walk with local resident Dr Hugh Robertson, who often does bird counts, learning about the birds that inhabit Otari Wilton's Bush. Limited to 30 people. <i>Leader: Dr Hugh Robertson, Principal Science Advisor. Department of Conservation</i>

From The Treasurer

Thanks to all who have paid their memberships promptly. A gentle reminder to the few overdue subs. Tim Mason, Treasurer.

Message from the Chair

Kia ora koutou

The last few months have been very busy at Otari!

But first we want to offer our condolences to Dave Bidgood following the sudden death of his son Matthew in late July. Our thoughts are with him and his family at this very sad time. A number of members attended his moving funeral service.

In a fitting ceremony on July 6 a plaque was unveiled on the platform below the 800-year old rimu. It commemorates Bob Fantl's contribution to saving a swathe of Otari from destruction and names the tree Moko. More details are in Phil Parnell's article in this newsletter. Thanks are due to him for inviting members of the Fantl family and to Tim Park for arranging details of the ceremony.



Above: The Wiltons' headstone.

Right: The OWBT Trustees and some of the Friends of Karori Cemetery by Job and Ellen Wilton's grave.



At the beginning of Matariki week, several Trustees met with members of the Friends of Karori Cemetery to look at issues that the Friends have with seedlings that establish on graves and talk about ways these seedlings and common boundary weeds can be managed. We walked through a sector of the Cemetery and down into Otari to view some of the restored areas on the old tip face below Ian Galloway Park before returning to the Cemetery and viewing Job Wilton's grave.

During our oral submission to WCC on the Long-Term Plan, I invited Councillors to visit Otari to learn more about its significance. Four Councillors took us up on the offer: Crs Jill Day, Laurie Foon, Teri O'Neill and Tamatha Paul. Tim Park again organised the visit and Wilbur Dovey, Tim Mason and I participated to add to the knowledge kete for the Councillors. All four were very interested and had lots of questions. We managed to dodge the worst of the weather – snowflakes fell during the indoors parts of the visit.



Left: Councillors, WCC staff, Tim Mason and Wilbur Dovey soak up the chilly ambience while learning about native plants and ecosystems.



Planning is underway for Open Day on 25 September though, as I write this, we are on day 2 of Level 4 lockdown so hopefully we'll be out the other side in time for Open Day to continue.

The Trust will be running its usual fund-raiser stalls and we're calling for volunteers to contribute baking and help with tours – see the notice elsewhere in this newsletter. We have been advised that the interpretation upgrade in the information centre is now programmed to occur after Open Day.

Recently, Tim Foote facilitated a workshop on partnerships that all Trustees attended. What we learned will be helpful as we renegotiate the Memorandum of Understanding (MoU) that we have with WCC. We thank Tim Foote, who provided his service for free in support of the aims of the Trust.

We miss having Finn Michalak at Otari but we are pleased that Megan Ireland has been appointed Team Leader and look forward to working closely with her.

Once again, thank you for your support of the Trust and Otari Wilton's Bush. We look forward to hearing from you.

Carol West

Chair

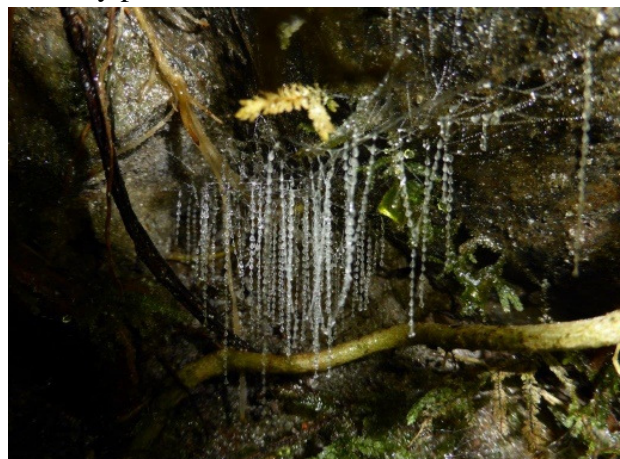
Glow Worm Walks at Otari.

Glow-worms are alive and well and living in Otari – they prefer a moist, vertical bank, dark and sheltered from the wind so that they can hang their sticky-thread nets and light their tails as a lure for midges. You'll need good shoes, warm clothing, and a torch. All children must be accompanied by an adult. Meet at the Information Centre. Cost: \$6, children under 12 free. September 10th, 6.30pm.

Leader: Dave Burton

Bookings are essential – search 'Eventfinda' for 'glow worm'.

Photo: Eleanor Burton



Otari Report

Ōtari Open Day 25 September

Planning is well underway for the Open Day on Saturday 25 September so please mark in your calendar now. Due to COVID and staff changes it has given us some time to rethink the focus of Open Day so things will be a bit different this year. I want to ensure all that we do at Ōtari builds people's understanding of the significance of the place and the work we do. I have decided there will be less of a commercial focus on selling plants and more of a focus of showcasing the amazing native plants, our people and this unique place. Carol and I are working to develop a series of speakers, and other stalls to ensure there is lots to do in addition to regular tours and food stalls. We are encouraging people to book in for guided tours and we will be giving away free native plants to people who complete the tours. (Tours will be on a first-in, first-served basis - so make sure you book in early, but if you miss out there will be places reserved for booking on the day). There will be community restoration leaders and professionals to talk to, along with local raranga and rongoā experts as well as microscopes and activities for children.



Free Mulch!

The mulch pile at the Northern Carpark that staff and local community groups use is getting quite large so we would like to invite Members of the Trust to feel free to collect mulch from the area until further notice. Bring a fadge/woolsack to help keep your car boot clean!

Team update

Sadly Dave Bidgood lost his eldest son to natural causes recently so we are all trying to support Dave at this time and come to terms with this tragedy.

We have recently recruited a new Gardener to replace Megan Ireland who has been promoted to Ōtari Team Leader. We are pleased that Thomas Belworthy-Lewthwaite is joining us from the City Horticulture team. Tom has spent some time working at Ōtari during his apprenticeship a few years ago. Megan has recently attended the Ngutukākā (Kākābeak) Recovery Group in Ruatorea and has also visited Eastwoodhill and the 1769 Garden.

Ōtari has been gifted some Ngutukākā seedlings which were saved from ungulates in the wilds of Tairāwhiti which Megan is bringing home with her. Interestingly we lost a Ngutukākā of unknown provenance during the snow storm last week when Megan was at the wananga.

We have had Fleur Speedy at Ōtari assisting the team lately.

Lions Ōtari Plant Conservation Lab update

Planning is underway to expand the lab into the adjacent flat. We have much of the money needed but are looking for grants and funding to enable us to complete the expansion building work and fit out to make the new lab space fully functional. We are grateful to the Denton Trust who are contributing \$12,700 towards an incubator. We have applied to Lotteries for some funding towards a project that will look to conserve some of the Nationally Threatened orchids native to Wellington that we hope to undertake in the expanded lab. Please get in touch if you would like to contribute to the lab expansion or know of a potential funding source.

We are now working on all four fleshy Myrtaceae species in NZ, all of which are threatened species:

Rata moehau (*Metrosideros bartlettii*) - We have germinated more seed obtained from the hybridisation with *M. excelsa*. Viability is higher than crosses with other *M. bartlettii* but the seedlings still don't survive for more than 4 weeks. With these results verified, we will now submit a paper to the journal Pacific Conservation Biology (authors are Karin van der Walt, Jennifer Alderton-Moss and Carlos Lehnebach).

Ramarama (*Lophomyrtus bullata*) and *L. obcordata* - Based on the storage data obtained from seed collected over 3 years from a number of populations it is clear that there is a problem with seed banking for both species; the problem seems worse for *L. bullata*.

Dried seeds stored at 5°C have the best viability after 24 months which hints to freezing sensitivity but there is also viability loss following drying.

Using lipid analysis (results show that *L. bullata* has almost double the amount of fat compared to *L. obcordata*), isotherms (where seeds are dried to various moisture contents with viability determined at each step) and thermal analysis to understand where the problem is (or likely to be) for these two species. There also seem to be differences in the storage behaviour of seed collected from different populations. *Neomyrtus pedunculata* - Determining germination protocols (seems to have dormant seed) and assessing impact of desiccation and storage temperature on seed viability. This will help us establish a long-term banking method.

Karin is also working on:

Kauri (*Agathis australis*) - Seed has been in storage (5, -18 and -196) for a month now, so viability assessments will be done over the next week or two to see what the impact of drying and drying & freezing are on viability loss.

Pua o te reinga (*Dactylanthus taylorii*) - Lots of seeds are now splitting (seeds on agar kept in the incubator). Based on this, 500+ seeds will now be plated on agar and kept in the incubator. This will give us split seed (hopefully producing a radicle root soon), these seeds will then be placed with a host seedling so we can see how successful we are to get the germinated seed to attach to the host root (which might be the biggest challenge for *Dactylanthus* in the wild). The next flowering season Karin aims to collect flowers and pollen so we can work out how to store *Dactylanthus* pollen, which is an important conservation action for this species.

Jennifer is continuing her work on the mycorrhizal fungi associated with native orchids as well as seed germination. She has recently collected soil samples from the *Corybas carsei* population at Whangamarino wetland in the Waikato and will compare the fungal communities before and after the prescribed burning that DOC does there to try sustain the wild population.

Gardens update

We are about to replant the Wellington Coastal Garden. That along with the renewal of the Native Daisy Garden, Banks Entrance and a couple of spots in the Brockie Rock Garden will be complete before Open Day.

We have ongoing issues with rabbits and are working to find a practical solution.

TeWharangi/Skyline is teeming with rabbits at the moment due to the warm summer (pie anyone?). The long legged pests are now throughout the forest and as such they are very hard to control in the gardens.

You might have noticed a new bus stop near the Wilton Bowling Club also.

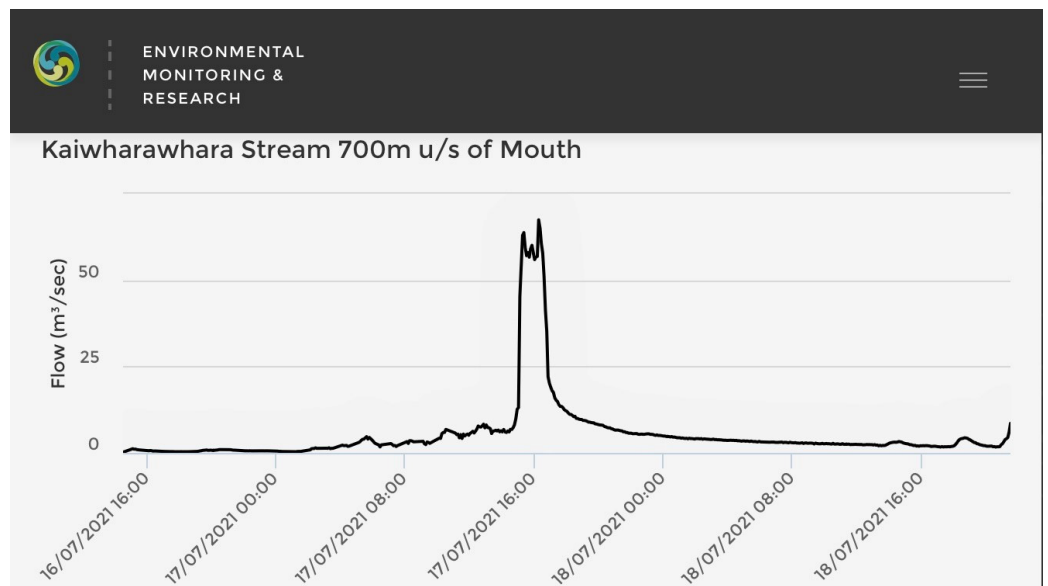
Forest update

We are looking to upgrade and reroute the track to Moko the 800 year old rimu this summer. A short section of new track from the upper yellow track to the lower blue track will avoid 50 giant steps. We are also going to review the signage and wayfinding throughout Ōtari with a view to making planning a visit to the forest simpler for new visitors. Titiponamu (Rifleman) which were reintroduced to Zealandia last year have recently been seen on Ahumairangi so please keep an eye out for them at Ōtari. Please also report any korimako (bellbirds), popokatea (whitehead), tieke (saddleback) and hihi (stitchbird) in the general area using eBird or iNaturalist. These species are yet to establish self-sustaining populations at Ōtari, so it would be good to know more about them.



Lake Ōtari

Following the extreme weather event recently, a new water feature appeared in the Northern Carpark. A lake around two metres deep formed when debris blocked both culverts that drain to the Kaiwharawhara Stream. The water reached the mulch pile and when the water receded it left a large sloppy mess for us to clean up. All up however Ōtari was otherwise unscathed with no slips or slumps, which points to the resilience of native forest in the face of new climatic extremes as the world warms. The Kaiwharawhara Stream was so swollen during this event it moved large tanks below Trelissick Park.



Ma te wa,
Tim Park
Kaiwhakahaere Ōtari |
Manager Ōtari Native Botanic Garden and Wilton's Bush Reserve
0212479739
Tim.Park@wcc.govt.nz Wellington.govt.nz



Finn Michalak
*Above: Finn at Mangaweka to rescue the last individuals of *Celmisia* 'Mangaweka' in the wild.
Right: Finn at Mt Stokes. Photos: Eleanor Burton see p 7.*



Trust Board 2020 - 2021



The Board of Trustees for the current year is:

Chair: Carol West	9 Mamari Street Rongotai	carolwest@xtra.co.nz	Phone: 387 3396
Secretary: Wilbur Dovey	40 Warwick St., Wilton.	cweag.dovey@xtra.co.nz	Phone: 499 1044
Treasurer: Tim Mason	54 Cashmere Ave, Khandallah.	timmason429@gmail.com	Phone: 479 0544
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Maggie Bayfield	67 Weld Street, Wadestown	bayfield@xtra.co.nz	Ph: 027 545 4333
Peter Buxton	3 Ngaio Road, Kelburn, 6012,	pebuxton@xtra.co.nz	Phone: 475 3848 027 4723455.
Jane Humble	16 Iazard Road, Khandallah	jhumble16@gmail.com	Phone: 971 6970
Kevin O'Connor	48 Ngatoto Street, Khandallah	oconnorkevin170@gmail.com	Ph. 027 270 9787
Phil Parnell	93 Amritsar St, Khandallah.	landy@xtra.co.nz	Phone: 479 2239

The trustees welcome individual communications from members on any matters relating to Otari-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

We are sorry to lose you Finn

Some comments from our members.



It is Otari's loss that Finn departed to new position up the coast. Finn was the public face of Otari, hugely knowledgeable, always approachable, always cheerful, always practical, always with his inimitable grin and can-do attitude. I always found him very knowledgeable about the plants and happy to answer any queries. I am not a biologist like many others so was on a steep learning curve. He will be missed by everyone who walks through Otari Wilton's Bush especially in the days of taking tours. I was impressed when Finn started how quickly he got to grips with the flora, and how fast he built a network of contacts throughout the country. When collecting Finn was very good at getting good viable material, nothing was left to chance. He leaves a big gap. Finn was totally dedicated to all things botanical, and rapidly became very knowledgeable about New Zealand flora after his arrival here. He was happy to share his knowledge and skills, and was whole heartedly committed to Otari Wilton's Bush. He relished the chance to go on collecting trips to out of the way regions and bring back rare treasures to propagate and nurture. I have precious memories of working with Finn at Otari. His enthusiasm was palpable and he was always willing to share his huge knowledge of horticulture. There have been numerous occasions when he has helped out with plant identification. We miss him and wish him well for the future.

Photo: Finn about the time he started work at Otari, 2010. More photos p.6.

Otari Open Day, Saturday 25 September

Open Day returns this year (we hope!) with all the usual fundraisers by the Trust operating. The main difference is that WCC will not be selling plants this year. Instead, there will be a programme of talks, and community conservation groups that surround Otari have been invited and they, including RAMBO, will occupy the Cockayne Lawn.

The Trust's sausage sizzle, drinks, cakes, cards, books and raffles will be on the deck outside the Information Centre.

Guided walks will depart from the Information Centre deck every half hour from 10 am until 1.30 pm and will be of two types: those leaving on the hour will be a gentle walk through the fernery, 38 degree garden and alpine rockery; those leaving on the half hour will take in the fernery, 38 degree garden and nature walk, ending on the Cockayne Lawn. The nature walk goes down lots of steps and comes back up again.

Talks will be held every half hour in the Information Centre, also from 10 am to 1.30 pm, inclusive.



We need your help in different ways:

- **Helpers to mind the different stalls – cakes/biscuits, drinks, sausage sizzle and cards/books/raffles;**
- **Providers of cakes, muffins, biscuits, loaves etc. to sell**
- **Guides and tail-enders for walks.**

The cake stall, refreshment stand and sausage sizzle are our great fundraisers, but they can only be successful with your help. Contributions for the cake stall can be left in the meeting room of the Information Centre before 4 p.m. on Friday afternoon, 24 September, or delivered to the cake stall on the Saturday morning.

For any questions or to volunteer, please contact:

For the cake stall: **Maggie Bayfield**, ph. 027 545 4333, bayfield@xtra.co.nz

For the guided walks and other stalls: **Carol West**, ph. 387 3396, carolwest@xtra.co.nz

Thanks to those who have already offered/agreed to help.

Naming MOKO and unveiling of plaque on platform for 800 Year old Rimu.

This took place on Tuesday 6th July 2021 as part of Wellington's Matariki celebrations. Luckily the weather was on our side.



Above: Plaque. Photo by Wilbur Dovey



Right: The plaque is unveiled by Mayor Foster with Dan and Ezra - two grandsons of Robert Fantl. Photo: Phil Parnell



The ceremony involved The Mayor, WCC staff, Otari Trust Board members, the Fantl family and Liz Mellish from Te Atiawa who was part of the Council's naming committee. The photos show the plaque and the Fantl family including Robert (Bob) Fantl's two grandsons. The Fantl house was very close to Otari and Bob was seen often walking around the circular track before he passed in 2015. The Fantl family gave a bequest to the Trust after his funeral.

The Trust Board agreed we would use this as part of our assistance to WCC for the building of the platform.

The ceremony included a karakia and naming by Liz Mellish and short speeches by The Mayor, myself and Helene Ritchie as part of the Fantl family.

It was a quiet informal ceremony which suited the occasion and the Mayor and Fantl family thanked the Trust for their help.

Phil Parnell

Trust submission influences future management of Karori Cemetery

There's a much stronger focus on the management of the wider Karori Cemetery environment following input from the Otari-Wilton's Bush Trust Board to the development of the new management plan for Council's three cemeteries.

The draft management plan for Karori Cemetery acknowledged deferred vegetation maintenance issues such as the damage trees were doing to graves and the problems created by large flax plants among graves, but the final plan, approved by Council in June 2021, demonstrates a much wider understanding of the work that will need to be done as the cemetery becomes a historic reserve.¹

The Trust Board's submission identified three main ways that weeds from the cemetery can become established at Otari. Pieces of *Tradescantia* will be carried downstream to Otari particularly when the streams flood, and there are likely to be more flood events as the climate changes. Light seeds from old man's beard, grasses, and dandelions in the cemetery may be blown into Otari. But more worrying is that berries and seeds eaten by birds in the cemetery are likely to be dropped into Otari's forests. Within the next few years, intensive predator control in and near the cemetery is likely to increase the numbers of indigenous and introduced birds, not just in the cemetery, but in nearby private gardens and on road reserves. All those birds may carry seeds and berries from introduced as well as indigenous species of plants into Otari.

Implementation plans include preparing a Karori Cemetery weed list, an ongoing programme of proactive vegetation management, and applying for dedicated implementation resourcing. Preparing the submission enabled the Trust to tell Council about the work the Trust has been doing near the cemetery for many years, e.g., RAMBO trap lines, and the weeding and revegetation work on the old tip face. As the cemetery and Otari become adjacent reserves, there are likely to be many opportunities for joint planning, e.g., catering for recreational visitors with a track network with integrated signage, information and interpretation. But given the different purposes of the two reserves, one scenic, one historic, solving some issues will be more complex. For example, Council intends to work with the community and experts to investigate how to manage the riparian bank above the Kaiwharawhara Stream for stream health without damaging the graves on the lower slope.

Bev Abbott

¹ When all remaining ash plots have been purchased, Karori Cemetery will be closed under the Burial and Cremation Act.

Planting, managing and monitoring for ecological restoration.

The Sunday walk in Otari on 25 July was led by Dr Stephen Hartley, Director of the Centre of Biodiversity and Restoration Ecology, School of Biological Sciences at Victoria University of Wellington – Te Herenga Waka.

19 people participated in the walk which featured the revegetation programme that the Trust has undertaken since 2001 from the Troup Picnic area to the southern end of Otari at Ian Galloway Park in cooperation with the City Council's Otari staff and up to 2007 with some funding from the Greater Wellington Regional Council. This was one of the early revegetation projects undertaken in Wellington and there are now many others throughout the Wellington area. Quite a few of the participants on the walk were from revegetation projects in the Ngaio and Karori Peak areas who were interested in our experiences, and we were able to compare notes with them as Stephen took us through the various stages of the Otari project, including what had worked and what hadn't, and the lessons that could be drawn from that.

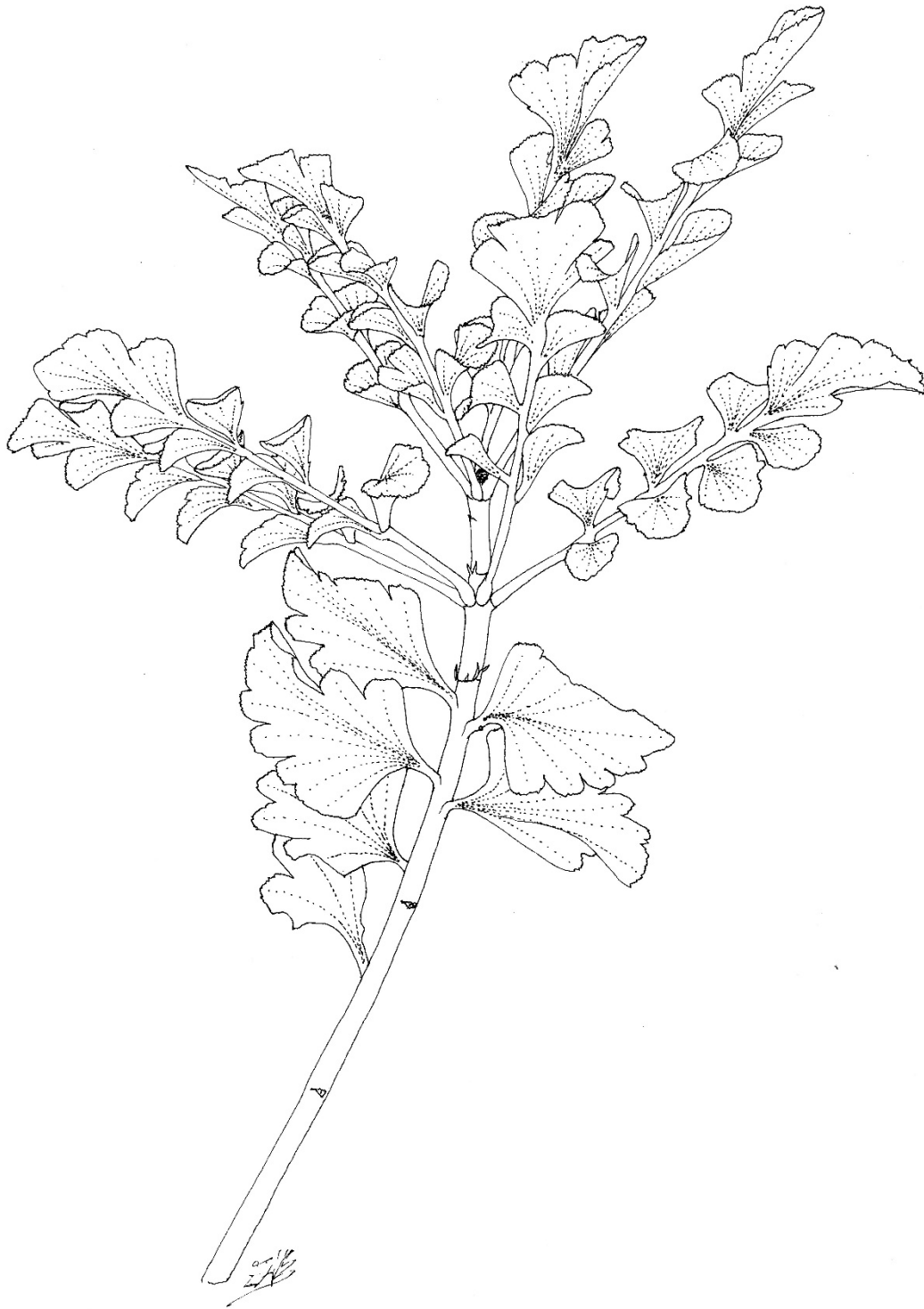
Stephen was very appreciative of the work done by Jonathan Kennett and Bronwen Wall in the early years which was organised by the late Jock Fleming. It was good to have Jonathan's twin brother Simon as one of the participants who could point out one or two of the features that they had introduced. Stephen commented that the close proximity of the trees planted in the earlier stages of the project, with only around one metre between each tree, had encouraged the trees to branch out rather than grow upward, thus forming a good shelter canopy which has allowed larger trees such as totara to regenerate underneath the canopy and prevent the return of the gorse and broom which was such a feature of the regrowth in the early stages of the project. It was interesting to note the varieties of tree that have flourished, almost a monoculture in some places, although the planting has always been of diverse varieties in the same area.

We have now reached what we hope is the final stage of the project on the slope below the rugby club buildings, which was formerly the tip face of the Wellington Landfill, which was closed in 1973 and replaced by the Southern Landfill. When the Trust started working on that area in 2008, following two largely unsuccessful attempts at replanting by the Council in previous years, it had very poor soil with a lot of rubbish in it such as pieces of concrete and steel, as well as gorse, blackberry, broom and fennel and some leaching of rusty coloured liquid. Since then, it has been encouraging to see that with regular attention to what had been planted and constant removal of very persistent weeds, the success rate of planting has improved so that there is now something of a soil layer and better retention of moisture, making for a more favourable environment for plants to grow successfully. Unfortunately, illegal dumping of garden waste in the area plus bird propagation of seed, has brought a new selection of weeds such as tradescantia, montbretia, Darwin's barberry and in the last year or so, bear's breeches, which has replaced the gorse and broom. The blackberry remains a problem, but it is becoming less so as the trees planted are becoming established. Some old timers fondly remember gathering blackberries in autumn in that area in past years.

Thanks go to the Council for supplying us with eco-sourced plants in the winter months and to all the regular volunteers over the years who have worked so hard to realise the project.

Wilbur Dovey





Phyllocladus toatoa

toatoa

This is a small tree to about 15 m. It is found in the North Island, from Lake Waikaremoana and Awakino to Ahipara and Mangonui. The 'leaves' are actually flattened branchlets, called phylloclades, and on this species are larger than the other two species. Branchlets are arranged in whorls, about four to six attached to the branch at the same place. Phylloclades are pinnate along the branchlets. This is a Gymnosperm and a podocarp, so the cones are small and fleshy, with small black seeds. At Otari at the moment it is growing in the nursery.

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)

☐

Cheque enclosed (Please make out to OTARI-WILTON'S BUSH TRUST)

COMMENTS