OTARI-WILTON'S BUSH TRUST News and Views September, 2018

Web site: www.owbt.nz 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 and children under 15, otherwise \$5. For information re walks and seminars contact the Treehouse on (04) 499 1400

The second Saturday of each month. 9am	Plant care is on the second Saturday of each month. Contact Wilbur Dovey, 499 1044.		
Fridays September 7, 21, 28 7pm	Glow worm walk. See p 8 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'. Leader: Dave Burton		
Saturday 22 September 10am – 2pm	Open Day For details of the programme and how you can help see page 4 for ways you can help, page 6 for the programme.		
Sunday 30 Sepember 2pm	Hosts and Guides Refresher Course Hosts and Guides are invited to a refresher tour and opportunity to learn more about the plants and trees of the Otari reserve. Further info see page 8		
Sunday 25 October 2pm	Myrtaceae at Otari. A 'walk and talk' to introduce the genus Myrtaceae in Otari-Wilton's Bush, and illustrate the potential extent of the myrtle rust threat to the NZ flora. Leader Bev Abbott		
Sunday 25 November 2pm	Mistletoe A walk on the Gibbs's covenanted land at Eastbourne. Hopefully the mistletoe, <i>Peraxilla</i> , will be in flower. See page 8 for more details		

Chairman's Message

Hi everybody,

Spring is upon us again and the gardens and bush are showing that flowering and growth is happening to all our plants and trees. The gardens have been particularly busy on sunny days with many family groups, church groups and play centre groups enjoying the many walks in the Native Botanic garden and bush reserve.



The monthly walks are going well with sixteen people on the latest walk by Chris Moore "Plants and trees that deserve a second look". These are excellent walks for trust members to build up a better knowledge of what is around in the reserve as it does change often.

Hosts and guides are getting ready for the busy season and elsewhere in the newsletter you will see a call for new people to join us as we need more people who can help with introducing visitors to the reserve we all love and support.

The new plant laboratory has now got structures and landscaping surrounding it and the equipment is mostly installed now. At the opening I met some scientists from the Plant and Food Research in Palmerston North who invited me to visit and I was able to do this last month. They have other facilities elsewhere as well and are the largest Crown Research Institute. I was shown around some of the horticultural research they are doing on a wide range of fruits and plants including some for other countries for which they get revenue. I came away most impressed with the level of work being done and the knowledge and friendliness of their staff.

Overall they have been of great assistance to Wellington Gardens Conservation and Science person Karin Van der Walt. She is the main user of the plant laboratory.

Next month there is a walk to talk about Myrtaceae like Bartlett's rata which may be at risk of Myrtle rust.

The Rimu board walk is now underway again and hopefully we will see this project finished and the installation made to help secure the oldest tree in Wellington city - the 800 year old Rimu.

We are also preparing for open day on September 22. Contact Jocelyn Hoskin if you can help in any way.

The Board looks forward to a excellent year and would welcome any new members who wish to join the Trust. I look forward to seeing you at Otari and again many thanks to all our volunteers for the great work they do.

Kind regards
Phil Parnell
Chair Otari-Wilton s Bush Trust

Otari Report

Kia ora koutou,

I'm pleased to announce the appointment of Megan Ireland as gardener based here at Otari. Megan comes from a background of horticulture in England and Scotland and has also worked in a few New Zealand gardens since arriving, including Dunedin BG, for Annabel Langbein in Wanaka and has worked twice previously at Otari. Megan replaces Nas Mulligan who has moved to a horticultural position in Christchurch.

in Christchurch.

We have almost come to the conclusion of the establishment of the Lions Otari

Plant Conservation Laboratory, 90% of the lab equipment has arrived, resource
consent has been signed off and building consent follows very shortly. The laboratory will support
plant conservation through research into seed storage behaviour, assessing seed viability, in vitro
propagation and establishing germination protocols.

The Lions Karori Club initiated funding for this project. I thank them for the funding they have made available and for their genuine interest and perseverance with this project. Thanks also to the Otari Trust Board who helped to top up the funding and successfully applied for other grant money. A huge thanks from me goes to David Sole and Karin Van Der Walt for the hours of work they put into the design, consenting process, and equipment hire. A bit challenging at times, but shows the commitment he has to supporting us in building our plant conservation activities.

The laboratory project is a milestone for us. No other botanic garden in New Zealand has this type of facility; it enables us to achieve work we have not been able to achieve before, increases our ability to partner with others and shows that we mean business in ex-situ plant conservation. Further information about the lab is included within this newsletter.

The laboratory heralds the beginning of possible further changes to our nursery over the coming years. We've recently embarked on a project with Victoria University School of Architecture to look at possible changes. Landscape architecture students have been developing concept designs for the Otari nursery and surrounds. Over time we would like to upgrade the nursery infrastructure and equipment, rearrange the nursery layout to better enable efficiency and safety and integrate the nursery into our visitor experience. The concept designs will be displayed at the Central Library, on the mezzanine floor adjacent to Clarkes Café from 14-23 September. The concepts will be subject to public voting so if you are passing the Central Library please pop in for a quick look and vote for your favourite.

With the creation of Te Tauihu, Te Reo Māori policy for Wellington City Council we now have a platform from which to incorporate Māori into our signs and interpretation her. Over the coming months and years you will notice this beginning to show as we replace and install new signs. Otari Open Day is shaping up well. Our programme includes the usual plant sale (10am), Trust BBQ and stalls. Capital Compost is joining us this year along with a pop-up market in the Leonard Cockayne Centre featuring nature inspired goods by local makers. In the Information Centre the Open Lab will feature real lab equipment to investigate what creatures are out there on a microscopic level.

Hope to see you there,

Kind regards,
Rewi Elliot
Team Manager – Otari-Wilton's Bush
rewi.elliot@wcc.govt.nz

Trust Board 2016 - 2017

The Board of Trustees for the current year is:

Chairman Phil Parnell 93 Amritsar St, Khandallah. <u>landy@xtra.co.nz</u>

Phone: 479 2239

Secretary: Wilbur Dovey 40 Warwick St., Wilton. cweag.dovey@xtra.co.nz

Phone: 499 1044

Treasurer. Jocelyn Hoskin 14 Warwick St, Wilton. jhoskin62@gmail.com

Phone: 475 8696

Bev Abbott 40 Pembroke Road, Northland <u>bevabbott@xtra.co.nz</u> Phone: 475 8468

Peter Buxton 106 Weld St, Wadestown. pebuxton@xtra.co.nz Phone: 472 3456

Jane Humble 16 Izard Road, Khandallah jhumble 16@gmail.com Phone: 971 6970

Sumitra Sarkar 23B Thatcher Crescent. tandssarkar@xtra.co.nz Phone: 479 1173

Ian Stockwell 2 Paisley Terrace, Karori . <u>stockwellian@hotmail.com</u> Phone: 476 3630

Carol West 9 Mamari Street Rongotai <u>carolwest@xtra.co.nz</u> Phone: 3873396

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. veeanddaye93@gmail.com

HELP!

Otari-Wilton's Bush Open Day, Saturday 22 September

We need your help in different ways:

_We need help to mind the refreshment table and the barbecue.

_We also ask you to help by providing cakes, muffins, loaves, biscuits etc to sell

The Cake stall, refreshment stand and barbecue are our great fundraisers, but they can only be successful with your help. Contributions can be left in the meeting room of the Information Centre on Friday afternoon, 21 September, or delivered to the cake stall on Saturday morning

For any questions or to volunteer please contact:

Jocelyn Hoskin, 475 8696, jhoskin62@gmail.com



New for Otari Native Botanic Garden - the Lions Otari Plant Conservation Laboratory

In September 2017 the Karori Lions Club (Wellington) approached Otari Native Botanic Garden regarding funding they had available to celebrate the Lions Centenary during July 2017 – June 2018. After discussing several projects, it was decided that a Plant Conservation Laboratory at Otari fitted with equipment to effectively germinate and store plant germplasm such as seed, pollen, cuttings and embryos suited their requirements for a Centennial Legacy Project.

The Plant Conservation Laboratory will support plant conservation through

research into seed storage behaviour, assessing seed viability, in vitro propagation and establishing germination protocols. It will also enable us to store plant germplasm in the long term through seed banking, cryopreservation and possibly tissue culture. It will equip us to study the ex situ conservation (storage, germination and propagation) of exceptional species such as fern spores, orchids, fungi and other desiccation sensitive species.



WILTON'S BUSH TRUST

A Portacom building was selected to store the equipment in one facility. The Portacom provides space for incubators, freezers, media and chemicals and enables us to create a sterile environment. The decision to purchase new equipment, housed in a dedicated facility is driven by conservation objectives in the Wellington Gardens Management Plan (which includes Otari) and Wellington City Councils Biodiversity Action Plan; some of these objectives can only be effectively achieved with suitable facilities.

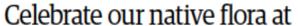
As an example of the work the lab will enable us to build on is the positive outcomes we (Otari Native Botanic Garden and Te Papa Museum) have had recently with *Metrosideros bartlettii*

(nationally critical). Baseline information collected during the 2017/2018 flowering period for *M. bartlettii* will be expanded using the laboratory through the following:

- Assessment of pollen viability from parent plants through germination and staining. A new microscope with camera will enable us to effectively record viable pollen.
- Determine pollen viability over time and under various storage conditions.
 We intend to collect and store pollen from multiple parent trees, which can be used to pollinate individual trees.
- © Phil Parnell
- Assessing seed viability from hand pollinated flowers.
- Storage of genetically diverse seed and/or dormant buds at -20°C and in liquid nitrogen (-196°C);
- Germinating seed in sterile environments.

The lab will also be used to house duplicate storage of seed by the NZ Indigenous Flora Seed bank.





Otari-Wilton's Bush Open Day

Saturday 22 September 10am to 2pm



10am Native plants for sale

Where: Cockayne Lawn

10am Nature inspired market

Featuring goods by local makers Where: Leonard Cockayne Centre

11am Open Lab

Work with real lab equipment to investigate what creatures are out there on a microscopic level.

Where: Information Centre

11am Free guided walk through Otari-Wilton's Bush

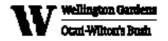
Come hear stories about New Zealand native plants. 1 hour Where: meet at the Information Centre.

1pm Free guided walk through Otari-Wilton's Bush

Come hear stories about New Zealand native plants. 1 hour Where: meet at the Information Centre.

Otari-Wilton's Bush, 160 Wilton Road, Wilton Number 14 bus from Wellington City. For more information, phone O4 499 4444 or go to wellington.govt.nz/otari





WILTON'S BUSH TRUS

Alpine garden renovation

The alpine garden 4 (near main Otari car park) was renovated between beginning of June and end of July 2018. The soils in this area were depleted and a different soil mix was chosen for the renovation. After the soil, stone and mulch had been removed they were replaced with 13 cubic metres of the new mix. This was a good time to check the irrigation and move some of the larger stones transferring them onto the fresh soil and removing the old soil beneath, allowing us to change the planting spaces between the rocks.

The plants here were chosen to from the range of alpine plants growing above 1300m such as *Ranunculus insignis, Oreobolus pectinatus, Celmisia semicordata* and *Carmichaelia nana*. Thanks to Percy's reserve who donated some plants from their collection too. The new browner stone mulch varying in size and colour gives a more natural look and is less inviting for foot traffic.

It was a very muddy job but finished in time for spring growth. Come see what we have been up to this winter.

Megan Ireland







WILTON'S BUSH TRUST



Reminder from the Treasurer

Subscriptions for the next financial year fall due in March. If you pay early you won't be plagued by reminders.

Or pay by internet banking:

Westpac Bank 030518:0205713:00 Otari Wilton's Bush Trust. Please add your name for a reference

Jocelyn Hoskin, jhoskin62@gmail.com Phone: 475 8696



HOSTS AND GUIDES SUNDAY 30th SEPTEMBER 2PM

You are invited to a refresher tour and opportunity to learn more about the plants and trees of the Otari reserve. This is being held prior to the cruise ship season so everybody has a chance to be up to date. Anyone interested including potential hosts and guides are welcome and it should be over by 4pm. Further information to Jane Humble jhumble16@gmail.com

There will be a further week day session later to meet staff, get a Health safety briefing and other information if you can't make September 30th.

Walk on The Gibbs Property.

Walk on The Gibbs Property.

George and Keena Gibbs have covenanted part of their property at Eastbourne where George has been successfully propagating mistletoe (*Peraxilla*) for a number of years.

Trust members are invited to visit this garden on 25th November, though at the time of going to print we cannot guarantee that the mistletoe will flower, we are optimistic because the season has been good for everything else.

Whether or not there is mistletoe in flower, this property is worth seeing for the excellent demonstration of the garden planting of NZ native plants.

2 pm 291A Muritai Road, Eastbourne.

Glow Worm Walks at Otari

Walks on Fridays: for August 31, September 7, September 21, and September 28

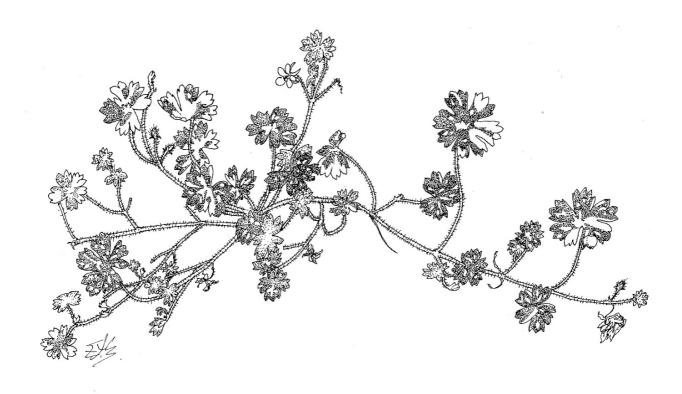
These walks have been so popular, these extra ones have been scheduled.

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.

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

Cost: \$6, children under 12 free.

Leader: Dave Burton



Geranium microphyllum var. discolor

Small herb, hairy all over, with mottled green/yellow leaves and small white flowers. I haven't found a lot of information about its range, though it is certainly found in Marlborough and Banks Peninsula. In cultivation it is a good rockery plant, seeding itself around generously. At Otari it can be seen in the Alpine Rock garden.

OTARI-WILTON'S BUSH TRUST

(Supporting Otari-Wilton's Bush Reserve)

Membership Application Form

We are delighted to welcome new supporters and there are a number of ways you can help us to preserve this internationally significant native botanic garden and bush reserve for future generations. Our membership year is from 1 April to 31 March.

New members joining after 1 January will have the membership accredited to the following year. Please fill out the form below.

YOUR DETAILS		MEMBERSHIP	\$	
Name(s):		Student/Unwaged \$	5 \$	
Address:		Individual \$10	\$	
PHONE Number(s):		Double/Family \$15	\$	
Email Address:		Corporate \$30	\$	
Billing name & address: (if dirrerent from above)		Total Payment:	\$	
Cheque enclosed (Please make out to Otari Wilton's Bush Trust		Paid electronically (please mark DONATION & your NAME in reference. Westpac account # 030518 0205713 000		
_	_	donations over \$5.00 qualify f	or a tax	

VOLUNTEER

We have over 100 volunteers who are active regularly at Otari. It's up to you how much time you commit – and you can choose how you would like to get involved from a range of activities, from hosting and guiding tours to working in the Otari nursery, pest control and forest restoration. Please contact Secretary Wilbur Dovey cweag.dovey@xtra.co.nz