

OTARI-WILTON'S BUSH TRUST

News and Views September, 2008

Web site: www.otari100.org.nz For all walks meet at the Information Centre, Te Marae o Tane unless otherwise stated. Unless otherwise stated walks are free to Trust members, otherwise \$3. For information re walks and seminars contact the Treehouse on (04) 499 1400

The first Saturday of each month. 9am	Plant care will run on the first Saturday of each month. Also Thursdays 8.30am. See page 4. Contact Wilbur Dovey, 4991044
Friday 29 August 7.30pm	Glow worm walk – take a walk through the bush at night down to the Kaiwharawhara Stream. Have a look at tree ferns, rimu, rata, crayfish – and glow worms.! You will need good shoes, warm clothing and a torch. All children must be accompanied by an adult.. Meet at the Information Centre at 7.30 pm. <i>Leader Dave Burton.</i> Participants must book through the Treehouse 499 1400 before 1pm Friday. \$4 an adult, \$2 for children. For cancellations ring 499 4444 after 5pm.
Saturday 13 September	Open Day and Plant Sale
Saturday 27 September 2pm	Birdwatching in Wilton's Bush. <i>Note this is a Saturday walk.</i> 1 hr long, bird watching, easy tracks, or to suit the group that turns up. Bring binoculars if people have them and good walking shoes (to be able to complete circular track, or part of Blue or Yellow track if the group fitness level is up to it.) <i>Leader: Susan Waugh</i>
Sunday 19 October 1.30pm	<i>Note this is the third Sunday, not the fourth Sunday in the month.</i> This walk is for the fit – the new Otari Skyline Loop walk. This goes along the Blue trail up to and along the skyline and back down the Red trail. There is native bush and extensive views. Medium grade with steps and some steep slopes. Wear stout shoes/boots. 3 hour duration. Bring waterproof/windproof clothing, a snack and a drink. Meet at the Centre at 1.30 pm. <i>Co-leaders: Chris Horne & Barbara Mitcalfe.</i>
Sunday 23 November 2pm	Visionaries: Cockayne, Aston, Martin, Brockie, Mole. Find out about the men and women who were responsible for the formation of the Collections. <i>Leader Sandra Clarke.</i>
Friday 26 September 7.30pm	Glow worm trail. (See above 29 August) <i>Leader Dave Burton</i>

Chairman's Message

With warmer weather now starting to make an impact on the bush we hope members will visit the reserve as there will be more growth to see. Several members recently went on the fern walk with Leon Perrie from Te Papa and enjoyed an excellent overview on this prolific plant group in the New Zealand flora. Check out the fernery soon and see how many species you can identify and how different they are.

Otari-Wilton's Bush is holding its annual open day and plant sale on Saturday, 13 September (part of Conservation week). All trust members are welcome to assist either by helping on the day or providing donations of cakes, muffins, biscuits etc for the Trust volunteers to sell.

The theme this year is the forest and plants from that environment that can be used in your garden. Come and learn from Otari staff and have the opportunity to buy plants later in the morning.

The Trust was fortunate to be successful in the latest community funding round from Wellington City Council. Consequently we have embarked on a small project to produce a series of information sheets on various botanical and people related topics with Otari-Wilton's Bush as a background. We hope to have the first samples completed later this year.

As noted in my last message the landscape plan for Otari-Wilton's Bush is in its second draft and the Trust Board will get to see it shortly. It is early days and funding for any future developments from Wellington City Council budget will be critical. Any assistance in lobbying your local councillor would be welcomed.

The Trust did submit on the draft annual plan expressing our concern at the lack of funding for Otari-Wilton's Bush developments and the deferral of capital budget. We also reinforced the place of Parks and Gardens Group in Wellington tourism.

Following the note on a vacancy on the Trust board following the AGM I am pleased to say John Shrapnell, long time Wadestown resident, has agreed to join the Board.

Our volunteers have been busy planting at the southern end of the Kaiwharawhara track, known as the tip face. Check this out next time you are down at Otari-Wilton's Bush.

We look forward to seeing you on open day and hope for some fine weather.

Regards
Phil Parnell

Keep NZ Beautiful

We are again joining in the annual Cleanup of NZ. This year we have two projects. Both are on Thursday, September 11. We are planning to clean up the streams in Otari and we are going to clean up the boundaries and tracks. These projects will leave Otari looking pristine for Open Day. Members are very welcome to come to help with either project. Meet on the deck at the Information Centre at 8.45. Bags and gloves will be provided. If coming to clean up the stream it would be advisable to wear gumboots.

Otari Report

Hi everyone,

Finally a few days have passed without raining! We were starting to wonder if we were going to be able to work in the gardens at all this winter; the soil has been absolutely saturated at times. At least the bush has really taken advantage of the moisture; while planting several rimu near the red and yellow trails last week we were pleased to see how lush everything was looking.

I hope the weather continues to improve as we head closer to this year's Open Day on Saturday 13 September. We begin at the Information Centre at 9.30am with some workshop seminars, followed by the plant sale at 11am. The Department of Conservation are on board with their Conservation Week activities which they will be holding at the Troup Lawn from 11.30. Make sure you bring your kids this year because we have a Tamariki trail with some great family prizes on offer, including passes to the zoo, Karori Sanctuary and Wellington pools. This Tamariki trail is a pilot to investigate a permanent kids/family trail at Otari.

In between the rain, the staff have been giving a makeover to the garden around Dr. Cockayne's grave. This work will create more space for the coastal collection which is housed here and presents a more fitting surround to the grave than the previous block shaped border. Dave, who looks after this area, has been assisted in the coastal collection by Alex Brinkman, a German landscape architect who left a growing landscape business in Germany to travel to New Zealand. Alex has been working at Otari for the past month, proving himself to be a very capable horticulturist.

The walk down to the Troup Lawn has become a bit more capable with the horse-steps completed recently. These seem to be working well and have mitigated the concerns we had about the slope of this gravel path. Any feedback about these steps is welcome.

Revegetation work has been going well this season. The areas near Ian Galloway Park, the Troup Lawn and Chartwell have all received some attention. I must give a big thank you to all those who have been braving the elements once a month on weekends along the Kaiwharawhara track. The ongoing maintenance that these folk have been carrying out is essential for the survival of the planting that has gone in over the past years.

See you at the Open Day.

Rewi Elliot

Curator/Manager Otari-Wilton's Bush

Trust Board 2008 - 2009

Postal Address: 160 Wilton Road, Wilton, Wellington. 6012

The Board of Trustees for the current year is:

landy@xtra.co.nz

jocelynhoskin@clear.net.nz

.jbuxton@paradise.net.nz

cweag.dovey@xtra.co.nz

moss@xtra.co.nz

Waugh.filippi@paradise.net.nz

cathy.wylie@nzcer.org.nz

After the first full year of Rodent and Mustelid Blitzing at Otari, it's time to assess the effectiveness of trapping at Wellington's premier bush remnant.

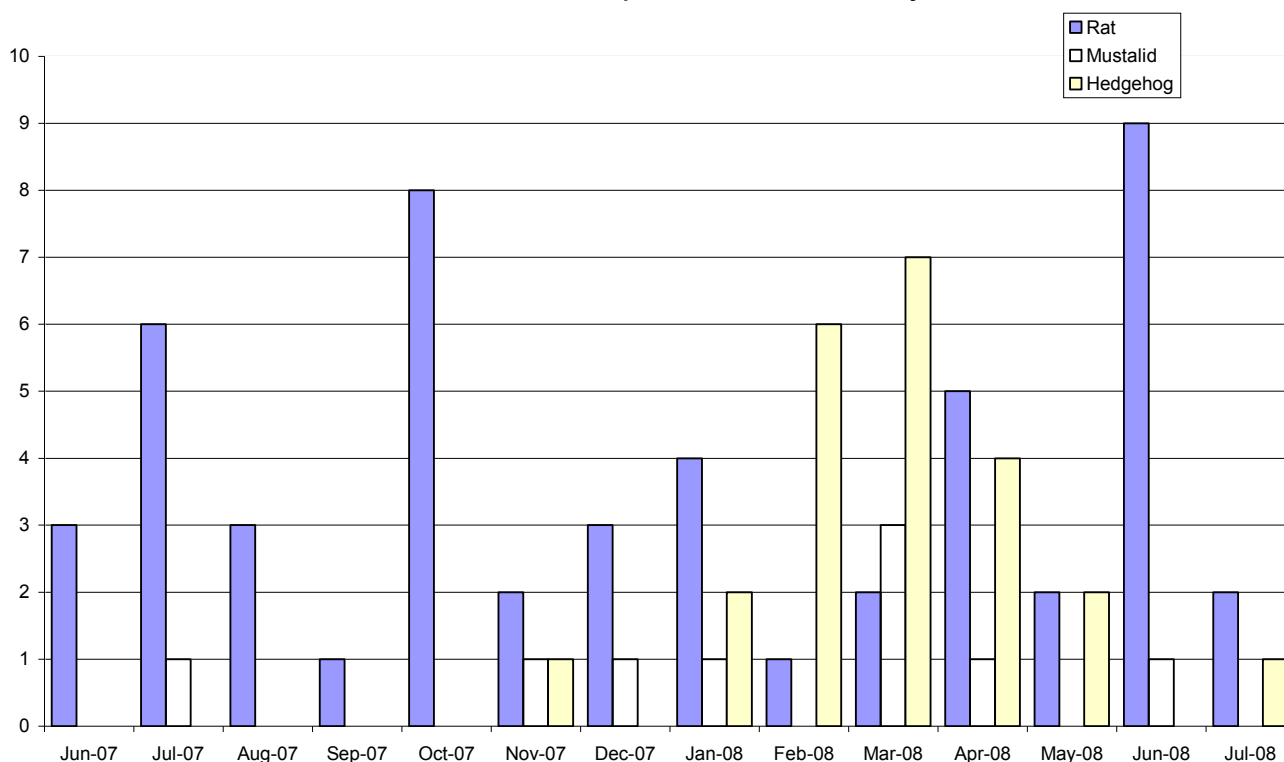
Although DOC's mustelid expert warns that monitoring in such a small area (around 100 hectares) yields inconclusive results due to the large territory that stoats and weasels control, the results of monitoring with tracking tunnels does at least indicate that RAMBO is reducing numbers of predators. Great Wellington's Biosecurity Security Officer Sara Moylan, has been involved with monitoring at Otari since June 2007 and recently summarised that "Monitoring continues to show a low incidence of rodents" and more importantly that in April there were no mustelids detected in Otari. However, it should be noted that in the one month prior to that, four mustelids were caught on the Otari Central trapping line! The point being that a dead mustelid doesn't get the chance to walk through a monitoring tunnel.

Since trapping began just over one year ago, 91 animals have been caught in the 56 traps set by RAMBO volunteers. There have been no birds caught in the traps, and just over half the victims have been rats, followed by a reasonable number of hedgehogs, several weasels and a few stoats.

There have been huge differences between the five trapping lines. The traps within a few hundred metres of the information centre have only caught 5 rats – nothing else. Down in the valley, however, the two trapping lines between the Northern Picnic Area and Ian Galloway Park have caught 37 rats and 8 hedgehogs. Meanwhile, the trapping line right in the centre of Otari, including Bledisloe Gorge, has caught 5 rats and 5 mustelids (stoats and weasels), as well as a mouse and a rabbit. Further afield, the results are even stranger. There is a line of traps above Otari, between Johnsons Hill and Chartwell, which have caught 2 rats, 2 wild cats, 4 mustelids and 14 hedgehogs!

Rats, hedgehogs, weasels and stoats all damage the native flora and fauna ecosystems, and it's sad to think that there have been so many of these killers at Otari-Wilton's Bush. If you would like to help protect birds and our native invertebrates, trapping is one way to do it. We currently need two new members to boost the RAMBO team. Please contact jonathan@kennett.co.nz to be shown a trapping line.

RAMBO Animal Pest Captures for June 2007 to July 2008



Reveg News

In spite of the weather Otari volunteers have continued to make progress with weed control and planting in the Kaiwharawhara Valley over the past few months. In this we've been very grateful for the assistance of the WCC Otari staff. Earlier in the year we were concentrating on weed control, particularly convolvulus,

broom, gorse and blackberry in the valley nearer the Troup Picnic Area, then from May onwards the emphasis has been on releasing plants and clearing weeds on the tip face below Ian Galloway Park followed by planting in the gaps where trees planted some years ago failed to grow. Kahikatea have been planted in the wet areas at the bottom of the tip face and other varieties further up the hill. Saturday volunteers planted 100 trees at their session on the first Saturday in August and Thursday volunteers planted more the following week. Thursday volunteers have also been involved with planting around the Troup Picnic Area. More volunteers are always welcome. Show up at the Information Centre on Thursdays at 8.30am or on the first Saturday of each month at 9am. Contact Liz or Wilbur Dovey 499 1044 if you need further information.

The Otari Wilton's Bush Natural Area - Where did all those species come from?

Rodney Lewington

Due to pressure on space we have left out the footnotes and references attached to this report. If you would like a full copy including these, please email the editor: davee@paradise.net.nz

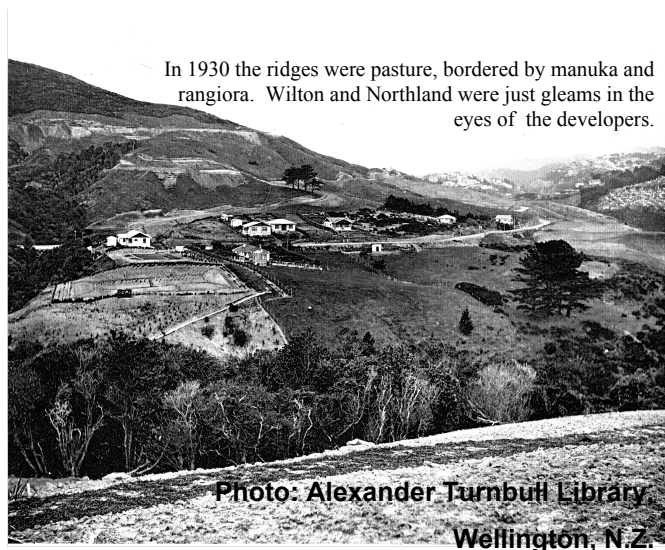
The list of plants found during the BioBlitz and the list of all vascular plants, mosses and liverworts ever found in the natural area of Otari-Wiltons Bush up to the time of the BioBlitz is finalised. A paper on this will be in the next Bulletin of the Wellington Botanical Society.

Preparing that paper has raised more questions – How did some non-Wellington plants come to be in Otari.? Why are some so poorly represented? Trying to answer these questions had me looking at the records of botanical exploration in Otari over the last century.

In this note I summarise the history that has affected the vegetation in Otari and mention some of those who have botanised in Otari-Wilton's

In the early 19th century the area we now know as Otari-Wilton's Bush would have been a mature broadleaf/podocarp forest typical of the southern North Island and missing only beeches, which conventional wisdom states had not returned to the Wellington peninsula since the last ice age. Maori were trapping and hunting in the valley ("Otari" can mean "place of snares"). They had

With the European settlement came logging and then farming. Logging would have taken out many of the podocarps – totara, rimu, matai, and kahikatea all had their uses for building and fencing. Maori are known to have cut nikau and other species to sell as firewood to Europeans. Early farmer settlers Job and Ellen Wilton shut up part of what is now Otari as early as 1860. Other areas, such as the Bledisloe Gorge appear to have been hardly touched by farming.



As a consequence there is a good representation of the original mature podocarps and northern rata on the north face of the Kaiwharawhara valley, as well as mature podocarps and broad leaf trees such as pukatea (*Laurelia novae-zelandiae*) in the gullies on the south face of the valley. Mature tawa (*Beischmedia tawa*)

are not uncommon. Rewarewa (*Knightia excelsa*) are pushing through the canopy. There are a few places where mature podocarps have a full complement of epiphytes.

By the time Otari was gazetted as a reserve (1906) the ridges were pasture grass with the forest limited to the valley and gullies. Much of this forest was open tree land so that John Riseborough, writing about the late 1920s and early 1930s when depression work schemes provided a lot of the labour, says

- "... parts of Otari were more woodlands than forest. Heavy predation had cropped much of the understory. And in parts, it was possible to see from one path to another. Certainly it was possible to run from one path to another. Paths were kept smooth and clear, and fallen timber was burnt. Most work sites had a small bonfire, carefully turfed in at the end of the day."

In 1926 when Dr. L. Cockayne and Mr. J.G. MacKenzie started on their scheme for an Open Air Native Plant Museum half the area was pasture or reverting pasture on which they could plant the artificial communities representing natural associations from different parts of the New Zealand botanical region.

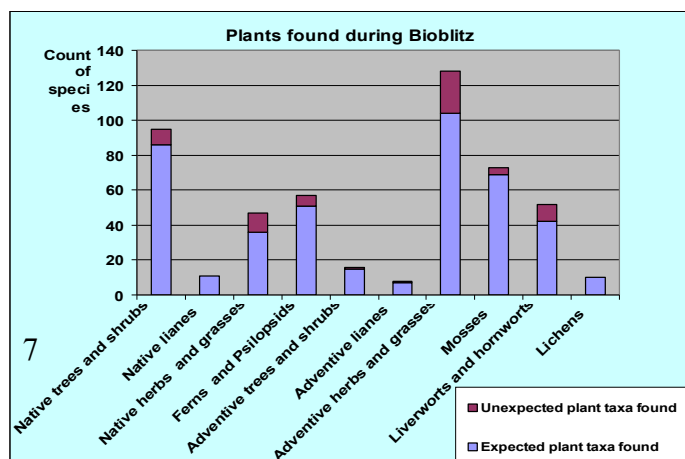
Hence by 1926 Otari already had a good representation of pasture grass and farm weeds and soon had kauri and beeches, these still stand in the bush above the flax clearing. Akeake, (*Dodonea viscosa*) was being planted to form shelter hedges, some of these remain. Forty rimu were to be planted out in the 1931-32 season. Mountain ribbonwood (*Hoheria glabrata*) had been planted across the stream from the Alpine garden at the north entrance. In 1932 kowhai had been planted with the intent that they "should form a graceful avenue along the Richard-D'Urville Path". (Now the Circular Walk up from the North "Solander" Entrance). There may be one of these remaining. Stan Reid noted totara, *Halocarpus bidwillii* and *Pomaderris apetala* on the slope south-east of the Troup picnic ground. *Toronia toru*, *Halocarpus kirkii*, *Phyllocladus trichomanoides*, and *Ackama rossifolia*, were noted in 1996 near the Flax Clearing as survivors of the "North Auckland" planting. The last two of these were reported during the BioBlitz.

Others have added species to the natural area since the days of Cockayne and Andy McKay, the first head gardener, caretaker, curator and officer-in-charge. Walter Brockie planted rimu, kahikatea and totara in the period 1947 to 1950. More recently, the beeches established to the east of Wilton House probably have Cockayne smiling benignly, considering the problems he had with hares eating the beeches he had planted. Upstream from the Troup picnic area regeneration plantings in recent decades, using locally sourced stock, have nudged nature along. The mistletoe (*Paraxilla tetrapetala*) noted in the BioBlitz is the only one of 200 implantations made by Tim O'Leary.

Much of the work during the 1920s and 1930s was on the formal area, not covered by the BioBlitz. Some of the representative plantings proposed for the natural area were never started. Others have been overrun. For example, the Gresley Lukin Alpine Garden was thriving in 1931, extant until at least 1939, and overgrown with local trees and shrubs when abandoned in 1948. The Chatham Island's collection is mapped but there is no trace of this now. Some were never started, such as the Marlborough Cliff association proposed in the Cockayne/MacKenzie scheme.

Over the years a few species have escaped from the formal areas, the neighbours have added an interesting selection of garden plants whilst pigeons and other birds have brought in seed of karaka, barberry and, probably, corokia. Wind has brought such plants as Mexican daisy.

This all adds to the mix, so that in the 24 hours of the BioBlitz we found 497 species of plants. Note in the histogram that many are adventives (that is non-New Zealand plants from farm and garden), these account for 40% of the vascular plant species found in the native area of Otari Wilton's Bush.



Many of the species found during the BioBlitz had not been recorded before (66 of the 497 found) - this in spite of the effort that went into field trips, and searching herbarium records and earlier reports. The most notable new find was an adventive species, *Veronica javanica*, new to New Zealand.

On the other hand, 187 species previously reported where not found. Some, such as ground growing orchids, had already finished for the

year. Under Walter Brockie willow, plane, cherry, sycamore, gum and walnut trees were removed. Obviously many other “weed” species have been reduced, if not eliminated, over the years.

Past records used to build the initial plant list came from the Otari data base and from Stan Reid (Reid S. J 1985, 1996), Ruth Mason (Mason. R 1941), and Shona Myers (Myers, S.C. 1985). These botanists were not interested in non-natives except where they presented a threat. They mention barberry (*Berberis darwinii*), *Tradescantia fluminensis*, *Selaginella*, onion weed (*Alium triquetrum*), elder (*Sambucus nigra*) and gorse (*Ulex europaeus*).

Interpreting these records has required some detective work to find the track and other location names used in the 1930s, 40s and 50s - that is another story.

A few species are present in the native area but are under-represented. For example five-finger (*Psuedopanax arboreus*), pate (*Schefflera digitata*) and tree fuchsia are there but not in the quantities one expects in Wellington bush. Initially these would have been eaten out by cattle and goats. Subsequently hares and possums have taken their toll. Cockayne instituted what is probably the first possum control programme in a New Zealand reserve in 1926. Since then there have been spasmodic programmes to control possum. Now they are well under control but it will take many years for the seed source to be replenished and a balance reached where an understory will limit the view through the trees.

Less obvious is the lack of a generation of podocarps. There are mature rimu, miro, matai and totara and one can find young saplings but little in between. There are few nikau, many were taken for firewood. Hinau (*Eleocarpus dentatus*) from within the reserve was used for fencing as late as the 1940s. Rats and mice may well have all but eliminated the seed bank of these and other tree species.

The bush may well develop in a different direction and never come back to the species mixture it had when European settlers arrived. The invasion of kohekohe at the expense of hinau, tawa and mahoe, noted by Stan Reid in 1982 and Yvonne Marjot in 1992 is even more apparent now in 2008.

TWO HOUSES AND A BLACK BRIDGE; an outline history of Otari- Wilton's Bush Native Botanic Garden -- Sandra Clarke 2006. Part 2 of a three part series.

WELLINGTON'S FIRST DIRECTOR OF PARKS AND RESERVES 1918- 1947

A. 1918- OCTOBER 1926

In 1918 J.G. Mackenzie (1880-3 October 1953) was appointed the first Director of Parks and Reserves for the Wellington City Council. He had been born in the South Island and since 1912 had been Director of Parks and Gardens in Oamaru. He was completely New Zealand trained. He remained as Director between 1918 and 1947 when he retired to Otaki.

The Wellington Botanic Garden in Tinakori Road had been established in 1868 and at the time of Mackenzie's appointment had 8 men employed. However he faced quite a challenge on his arrival as the Wilton Bush Reserve had been transferred to the Wellington City Council in 1918 on payment by the Council of \$700. By the time Mackenzie was appointed the first report on Otari (as the Wilton's Bush Reserve) was available. It is this report which first called the area a living museum of plants. In his first year as Director, Mackenzie reported cutting new tracks for visitors to see the bush in this reserve. One of these tracks is probably the one now disused beside the Mackenzie Burn which was originally cut by Henry Burling when the first Survey of the Otari Maori Reserve was made in 1847. Later fences were built, the stream was bridged and grazing was forbidden within the reserve to give the forest a chance to regenerate. More importantly Mackenzie raised the issue in the local press of establishing a special collection of indigenous plants. This led to a delegation in 1924 headed by F.J. Nathan president of the NZ Institute of Horticulture to present a case to the Reserves Committee of the City Council. A few days later Leonard Cockayne honorary botanist to the Institute of Horticulture was asked to prepare a report that was published in the daily newspaper. In 1932 this was republished as **A scheme for the development and arrangement of the Otari Open-Air Plant Museum**. This plan is still the basis on which the Otari Botanic Garden is managed today.

In 1924 Martin Chapman had died and his land was bought by the Council and added to the reserve. Since that time a large number of smaller pieces of land have been added to the reserve.

During 1925 a very substantial house was built adjacent to Otari at the end of Blackbridge Road, now renamed Wilton Bush Road, by the O'Connor family. The house was originally called St Helena Lodge but is now known as Wilton House. It was designed by John Swann architect and built by Ernest Turksma of Ngaio.

During 1926 a Supervisor's house was built on the Chapman land and on 26 October 1926 the Otari Open-Air Native Plant Museum was opened by the Mayor C.B. Norwood. The first occupant of the house was Andy McKay who remained there between 1926 and 1946.

B. OCTOBER 1926 - 1946 ANDY MCKAY, SUPERVISOR AND LEONARD COCKAYNE, HONORARY CURATOR

When the Otari Plant Museum was opened in October 1926, Andy McKay (1895-1946) who was previously working for another part of the Wellington City Reserves Department moved with his family into the new supervisor's house. During his time as supervisor many collections were established including the Hebe collection, the Gresley Lukin Alpine garden, the entrance garden and various plant collections on the former Pipitea block including the Kauri grove, the podocarp collection and the North Auckland indigenous collection. McKay was born in Scotland and trained in the gardens of Dupplin Castle, in Perthshire. He came with his family to Wellington in 1913 and then fought in the First World War. On 26th November 1946 McKay died at Wilton Road and his funeral was held at that address.

Shortly after the Plant Museum was open the currently-titled Royal New Zealand Forest and Bird Protection Society established its first plant nursery at Otari. It is not known when the Forest and Bird Nursery was moved elsewhere and the present City Council Nursery established at Otari.

From the opening of the museum until his death in 1934, Leonard Cockayne (1855-1934) remained as honorary curator of Otari and he and his wife Maude are buried near the lookout.

During this period the basic structure of the cultivated gardens were laid out and the zigzag track down to the Troup picnic ground was developed and planted. A rimu on the zigzag track, a row of podocarps leading up to the Flax Clearing, and also the Kauri forest can now be quite clearly identified some 70 years later. Although McKay remained the only employee working at Otari a lot of the development in the 1930s was completed by men who came from the city on relief work.

One of the most significant events shortly after Cockayne's death was the electrification of the Johnsonville rail in 1938. The trees in the Reserve started to thrive when not coated with soot. After the death of Cockayne the oversight of Otari reverted to Mackenzie till his retirement. (To be continued).

BIBLIOGRAPHY

At the AGM there was some discussion on publications on or with references to Otari. To help anyone interested in the history of Otari there is a bibliography compiled by Sandra Clarke, 2006 which was printed in the June 2008 newsletter.



***Melicope ternata* x *simplex* (syn. *Melicope mantellii*)**

This plant is a naturally occurring hybrid of *Melicope ternata* (wharangi) and *M. simplex* (poataniwha). It forms a small tree to about 4 metres, which can be seen in the Gymnosperm border at Otari just before you get to the Information Centre.

Both parents have a coastal to lowland distribution from North Cape southwards. *M. simplex* is a divaricating shrub with juvenile plants often trifoliate, and *M. ternata* is a very attractive small tree with pale green trifoliate leaves with wavy margins. Both can be seen in the Wild Garden at Otari, and *M. simplex* also grows in the Divaricate border, currently undergoing renovation.

I have shown all three plants: a., *M. ternata*, b., *M. ternata* x *simplex*, and c., *M. simplex*.

OTARI-WILTON'S BUSH TRUST

(Supporting Otari-Wilton's Bush Reserve)

Membership Application Form

We are delighted to welcome new members - whatever your interest in Ota

- from a desire to participate in active friendly volunteer support and educational activities, or just the satisfaction of being associated with this wonderful native plant reserve.

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.

Yes, I would like to join the Trust.

Name (s) :

Postal Address :

.....

.....

Telephone contact number/s : ().....

E-mail address: < >

Billing Name and Address :.....

(if different from above)

Subscription	Corporate	\$30	\$
	Double/Family	\$15	\$
	Individual	\$10	\$
	Student/Unwaged	\$5	\$
Donation*			\$
Total payment	(please enclose cheque**)		\$

*The Trust is registered as a Charitable organisation and donations over \$5.00 qualify for a tax rebate to individual taxpayers. (annual limits apply) We will provide a donation receipt to support your tax rebate claim

**We regret we cannot process payments by Credit Card.

If you are interested in becoming a volunteer, please indicate the areas of interest to you from the following list:

- | | |
|--|--|
| <input type="checkbox"/> Work parties | <input type="checkbox"/> Hosting at the Information centre |
| <input type="checkbox"/> Administration | <input type="checkbox"/> Guiding |
| <input type="checkbox"/> Historical Research | |

Please send this completed form with your cheque to:

**The Treasurer,
Otari-Wilton's Bush Trust,
160 Wilton Road, Wilton,
Wellington 6012**