

October Update, 2011 Vol. 4, Issue 3

# GOOD NEWS STORY: The creek is healing itself!

by Helen Mellsop



Mahoe, Melicytus ramiflorus, seedlings.



A young puriri, Vitex lucens.



Native ferns are growing on the stream banks.

With a little help from our volunteers, the bush around Oakley Creek is now starting to regenerate at a visibly faster rate. Without weeds like Tradescantia (wandering jew) covering the ground and with more shade to suppress grasses, we are starting to see lots of native seedlings emerging. The most common plants springing up are nurse species like karamu, mapou and mahoe, but there are also lots of bird spread species like cabbage tree, karo, hangehange and kawakawa. In more open areas on the western alluvial side of the creek, wind spread manuka seedlings are appearing.



Karaka, Corynocarpus laevigatus - a grove in miniature.

Our forest giants are getting in on the act as well, with seedling puriri, karaka and totara trees found in places. They don't always establish themselves in convenient places though - one baby totara was found right beside the concrete walkway.



Karo, Pittosporum crassifolium.



Toatoa is forming a new understorey.

One of the benefits of limiting chemical spraying and stopping wholesale weedeating on the banks of the creek has been the emergence of a great diversity of native ferns. These are also popping up in shady spots along the paths and where rocks provide cool damp growing conditions. Native herbs like toatoa (*Haloragis erecta*) and poroporo (*Solanum aviculare*) are also now common on the lower creek.

The impact of our pest control programme on natural regeneration hasn't been fully established, but it's possible that the successful control of rats has increased the number of seeds left to germinate. Management of possums may also have helped the survival of tender species such as karaka.

We will need to remain vigilant with plant and animal pests for some time to come, but as our new plantings along the creek mature the bush will become more and more a self-supporting and self-sustaining ecosystem. For now, it's exciting for all of us to see this process of regeneration starting.

## Dates for your diary

Saturday 22<sup>nd</sup> & Tuesday 25<sup>th</sup> October - Predator Monitoring

Sunday 6th November - Community Working Bee

Saturday 26th & Sunday 27th November - Rodent Monitoring

Sunday 4th December - Community Working Bee

Sunday 11<sup>th</sup> December - End of Year Picnic - come and celebrate the year's achievements.

See <a href="www.oakleycreek.org.nz">www.oakleycreek.org.nz</a> or contact Wendy John by emailing info@oakleycreek.org.nz or ph 815 3101 for more information about these activities.



Titoki, Alectryon excelsus fruit with cap. Photo: W. John

# The planting on Oakley Creek Te Auaunga has now come to an end for the year ...

It has been a productive season for us with approximately 3750 plants finding new homes throughout the catchment. As with other years, it has also been a rewarding one, with support from a wide variety of people. Our thanks go out to all of you who contributed in some way, including our regular and not-so-regular volunteers - those who contributed through our gift tree promotion; schools - Mt Roskill Intermediate and Mt Roskill Grammar, Waterview Primary, Gladstone Primary and Wesley Intermediate; St Judes Scouts, A Rocha & Kodesh Communities, the Buchanan Rehabilitation Centre 'garden group', the Collectively Kids Child Care & Education Centre children, Cadburys and Conservation Volunteers. And a special thank you to those who assisted with the plants - Auckland City, Portage Licensing Trust, Lottery Environment & Heritage, Te Ngahere and Mt Roskill Intermediate.

### ... but there is lots more planned

At a recent Albert / Eden Local Board Meeting, SLIPs (Small Local Initiatives Projects) funding was allocated for the coming year. Oakley Creek has fared well. The council manages these projects and Friends of Oakley Creek has input into most of the work related to them. It's great to see Oakley Creek getting so much resourcing.

- †† Oakley Creek Waterfall Upgrade Phase 2 top up funds \$10,000 from Auckland Council capital expenditure.
- †† Mahoe Rock Forest Assessment and Ecological Restoration - \$23,500 from Auckland Council operating expenditure (includes assessment to establish the full extent of the Mahoe Rock Forest and Ecological Restoration Work for the whole identified area).
- \*# Oakley Creek Restoration \$25,000 from Auckland Council operating expenditure (\$18,000 for the next phase of tree privet removal, weed control, site preparation etc., and \$7,000 for the purchase of plants).
- †† Underwood Park/Owairaka Park Bridge \$150,000 from Auckland Council capital expenditure (Puketapapa Local Board to contribute \$150,000 too).

## Auckland Council Pollution Hotline - ph 301 0101

Recently, there was a major sewage spill on the creek, in Alan Wood Reserve. A dead possum had blocked the drain and the sewage had overflowed into the creek. No one knows how long this had been going on before it was discovered and reported. The flora and fauna in creeks are vulnerable to such incidents and it is important that people report any problem immediately. You can do your part by calling the Council Pollution Hotline.

# Have you paid your 2011/2012 subscription to Friends of Oakley Creek Te Auaunga yet?

If not, it's not too late! We would greatly appreciate your continuing support. Some of our achievements over the last year include:

- ‡‡ 3750 trees planted along Oakley Creek Te Auaunga;
- ‡‡ 11 community working bees held along the stream;
- †† approximately 300 school students involved in stream care activities:
- \*\* significant concessions gained in the SH 20 extension planning process, including increasing the maintenance period of riparian planting from 2 years to 10 years.

But, there is plenty more to do.

Membership is only \$10 and you may wish to also give a tax deductible donation. This may be paid directly into our bank account: Friends of Oakley Creek - Kiwibank - A/c 38-9003-0978224-00 or cheques, made out to 'Friends of Oakley Creek', may be sent to: 4/65 Woodward Road, Mt Albert, Auckland 1025.

#### **SH20**

The weblink to the Environmental Protection Agency decision documents is <a href="http://www.epa.govt.nz/Resource-management/completed/waterview/Pages/report-and-decision.aspx">http://www.epa.govt.nz/Resource-management/completed/waterview/Pages/report-and-decision.aspx</a>

## Monitoring and Pest Control Update by Alicia Warren

# Auckland tree weta monitoring



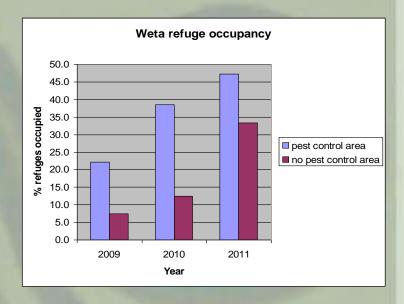
We are monitoring Auckland tree weta (*Hemideina thoracica*) along the Oakley Creek Walkway to find out whether management (pest control, planting and weeding) has a beneficial effect on weta.

Our weta homes are 10 cm long bamboo tubes fastened to tree trunks using 2 fencing staples and a cable tie. The tubes are pressed against the tree trunk with the entrance facing downwards to protect them from the weather. The internal diameter of the entrance is 16-18 mm to protect weta from being eaten by adult mice and rats. We have 8 sites, each with 5 weta homes, in the pest control area and the same in the no-pest-control area. We established them in the autumn of 2009. We monitor weta annually in winter. Winter 2011 is our third monitoring event. We maintain the bamboo tunnels in autumn annually, at least a month before the monitoring.

Some improvements were made to the instructions and data collection forms this year. We now specifically record whether the weta has a visible ovipositor (i.e. definitely female) and note any other animals found in the refuges.

Wendy checks a bamboo weta home for occupants. Photo: A. Warren

Results: The pest control area had higher weta occupancy than the no pest control area prior to the commencement of pest control. Both areas have shown increases in weta occupancy each year since the monitoring began. The pest control area has always maintained a higher occupancy than the no-pest-control area over the 3 years. In the first year the occupancy in the pest control area increased by 1.8 times from the previous year and occupancy in the no pest control area increased by 1.7 times - which is not very different. In the second year, the pest control area occupancy increased by 1.2 times, however the no pest control area increased by 2.8 times - so the degree of difference in occupancy between the no pest control area and the pest control area reduced markedly. This is illustrated in the graph.





The number of suitable refuges available is often the limiting factor for weta. Our increases in numbers over 2 years in both areas could be partly or mostly explained by the provision of extra refuges that provide safety from rodents. If this is the case, then this increase should level off next year.

Auckland tree weta hatch in spring. They have 10 instars (moults) to reach full size, and then breed in their second autumn/winter. Most weta do not survive much beyond this. Female weta cannot be easily identified until the visible presence of an ovipositor appears after the  $5^{th}$  or  $6^{th}$  moult, so we are unlikely to identify females in their first winter. In the no pest control area, of the 11 weta we found, none were identified as female. In the pest control area, of the 18 weta found, 6 were identified as female.

Slug and snail inside a bamboo weta home. Photo: W. John.

Other animals found occupying the bamboo tubes were: tunnel web spiders, cockroaches, slaters, slugs (including a veined slug), and tiny snails. One of the things that seem to prevent weta occupancy of the bamboo tubes is occupancy by tunnel web spiders. Sometimes, bamboo tubes are found that are blocked by webs, and this reduced the total number of bamboo tubes that were available for occupancy by weta. We have decided that, in future, if we find spider webs in our tunnels, we will remove them.

In conclusion, it's not possible to attribute any increase in weta numbers to pest control because similar increases have been detected in the no pest control area. However, pest control and other management does not appear to be causing significant harm to the weta population in the pest control area. The monitoring technique of providing artificial refuges for weta may well have been advantageous to weta.

Thanks to Dr Chris Green for a design for simple cost-effective weta refuges and advice on weta monitoring. Thanks to the many volunteers who installed, maintained and monitored the weta tunnels.



#### Books about weta:

Keeping wetas in captivity by Paul Barrett 1991 Wellington Zoological Gardens, New Zealand The Weta Book - A guide to the identification of wetas by Mike Meads 1990 DSIR Land Resources, Lower Hutt

New Zealand weta - the Reed Species Guides George Gibbs 1998 Auckland: Reed Books The biology of wetas, king crickets and their allies edited by L H Field 2001. Wallingford: CAB International 2001.

#### Websites about weta:

New Zealand Department of Conservation's page on weta <a href="http://www.doc.govt.nz/conservation/native-animals/invertebrates/weta/">http://www.doc.govt.nz/conservation/native-animals/invertebrates/weta/</a> Museum of New Zealand Te Papa Tongarewa website <a href="http://collections.tepapa.govt.nz/theme.aspx?irn=2499">http://collections.tepapa.govt.nz/theme.aspx?irn=2499</a>

Rosemary Phillips helped with the limbo weta check too! Photo: W. John.

### Possum monitoring news

We are monitoring possum to provide feedback on the effectiveness of our possum control. We are controlling possums because of the damage they do to native plants and animals. Possums eat the new growth and fruits of many native plants and compete with native birds for food and nesting sites. They also eat the eggs and chicks of native birds. To allow native birds and plants to flourish, it is necessary to control possum numbers.

Possum monitoring is undertaken twice each year using 6 lines of 20 waxtags left out for 7 nights. The set months are February and August, but sometimes we may be one month out. There are 3 lines in the pest control area and 3 lines in the no pest control area. The lines are 200 metres long and 200 metres apart. In the pest control area, 2 lines are on the west side of the creek and one line is on the east side of the creek. Possum monitoring began in March 2009 and has now been done 6 times.

Possum control began in November 2009, using Timms traps on the east side of the lower creek, and in April 2010, on the west side of the creek. In February 2011, we relocated the traps on the west side and reduced the number because we had problems with human interference near the waterfall and near the Great North Rd bridge. The lack of traps below the litter-trap on the west side since then has reduced our impact on possum numbers in Monitoring Line 1. There is no monitoring line on the west side of the waterfall, the other site where we removed the traps.

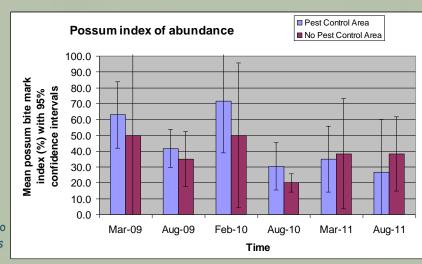


Waxtag after being chewed by a possum. Photo: A. Warren.

Results: The results are expressed as a "bite mark index" which is the percentage of waxtags bitten by a possum. The graph (below right) shows the average bite mark index for all 3 lines in the pest control area (blue bars) and all 3 lines in the no pest control area (burgundy bars). The pest control area started with higher abundance of possums than the no pest control area. It is likely that the planted trees create a better possum habitat than the predominance of weeds in the no pest control area. In the first year of trapping, possum numbers remained higher in the pest control area than in the no pest control area, in spite of our trapping efforts. In the second year of trapping, we started to make headway with possum numbers reduced to lower numbers in the pest control area than in the no pest control area, however, we didn't make as much headway as we hoped to achieve. Our target is 5% bitemark index and so far we have achieved 27%. This number would probably be lower if we had traps on the lower half of Line 1 downstream of the litter-trap.

The possum monitoring shows us it is quite difficult to get possum numbers right down to the desired low level of 5% bitemark index using our current trapping regime. Monitoring shows us that even though few possums are now caught, there are still possums in the trapped area on both sides of the creek. To get possum numbers lower, we can look for ways to get more efficient at trapping.

Thanks to Dr Malcolm Thomas of Pest Control Research for advice on using waxtags to monitor possums and identifying bitemarks. Thanks to the possum trappers who have trapped a lot of possums in 2 years and the possums just keep coming. Thanks also to the many possum monitoring volunteers over 3 years who put out and collected up waxtags.



Possum monitoring volunteers: (top left to right) Jee Yang & Dee Song's first experience, Josh Strong and Craig Watson; (below left) Alicia with the Line 3 & 4 team. Photos: W. John.









Websites about possums:

Department of Conservation <a href="https://www.doc.govt.nz/conservation/threats-and-impacts/animal-pests-a-z/possums/">www.doc.govt.nz/conservation/threats-and-impacts/animal-pests-a-z/possums/</a>

See <a href="http://www.youtube.com/watch?v=pJa18ooroQk">http://www.youtube.com/watch?v=pJa18ooroQk</a> for information about the damage possums can do and other possum videos by TrakaBat on YouTube. TrakaBat is Ian Gill who works for the Department of Conservation and presents the Department's case regarding the use of 1080 for possum control.

Landcare Research

http://www.landcareresearch.co.nz/research/category\_list.asp?SciCategory\_ ID=8



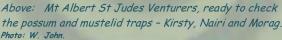
Meet the Locals Series 3 Episode 20 - Sam, from St Judes Venturers and Alicia show the Meet the Locals presenter, James Reardon, the trapping that is done in Oakley Creek

http://tvnz.co.nz/search/ta\_ent\_search\_tv\_skin.xhtml?requiredfields=type: media.format:full+episode&partialfields=programme:meet-thelocals&q=meet+the+locals+video&tab=tvmedia&start=0&sort=date:D:S:d1&view=all

## Take a look - DOC offers online training courses

You can learn skills as diverse as how to identify birds or how to use a VHF radio - online and for free, on the Department of Conservation's website, <a href="http://www.doc.govt.nz/getting-involved/get-trained/">http://www.doc.govt.nz/getting-involved/get-trained/</a>. DOC has seven different online courses, four of which are particularly applicable to our Oakley Creek activities: Introduction to Natural Heritage, Field Skills, Animal Ecology and Bird Identification.

Field based courses are also offered for a fee, with topics such as animal pest control methods, historic heritage principles and plant identification.









From left: Kumerahou or gumdigger's soap, Pomaderris kumeraho; new Doodia australis fronds; and kowhai, Sophora sp.

#### Weed Watch

Over the years, it is estimated that 25,000 plant species have been introduced by people into New Zealand. About every 39 days, one of these species will escape into the wild and 1/4 of these escapees will become problem weeds. Weeds threaten our ecosystems by altering their structure and composition, by changing the nutrient status of soils and by affecting hydrological regimes. These effects remain, even if the weeds are successfully eradicated. Weeds in New Zealand are a ticking timebomb. (Source: L. Hayes - see inset box below.)

This section of the newsletter features details about weeds that threaten the native plants along Oakley Creek. You can help by tackling these at the stream and in your garden, if present. In this issue:

## Asparagus scandens, Asparagaceae - Climbing asparagus





A native of South African montane forests, climbing asparagus is classified as a pest plant in New Zealand. And unfortunately, as with so many of the weeds at Oakley Creek, abundant healthy specimens can be found upstream from Harbutt Reserve and on down to Phyllis Reserve, threatening our mahoe rock forest remnant. Climbing asparagus is a particularly difficult weed to eradicate because it is shade loving and thrives under a forest canopy. As the name suggests, this species is a climber - however it will also form a thick groundcover, dominating the understorey as it does in its own South African habitat. This growth habit has a smothering effect, preventing the regeneration of native seedlings. It prefers shady moist sites, but can also tolerate dry periods. In New Zealand, most of the spread of climbing asparagus is vegetative, but birds also eat the seed and disperse the plant more widely.

Climbing asparagus has feathery 'leaves' (0.5 to 1.5 cm long) that are actually flattened stems, known as cladodes. The feathery effect occurs because the cladodes are slightly curved and generally grow in threes from each node, with one of the cladodes being a bit shorter than the other two. The small white flowers can be seen in spring, followed by round orange to red fruit, which contain a single round black seed. The roots are tuberous.

Control: Biosecurity New Zealand recommends that the best control method is to cut back the foliage and dig out all the tubers and roots. The tubers should be well composted, buried deeply or placed in a plastic bag in the sun to prevent reestablishment. Alternatively, herbicide can be applied - in spring or early summer, for best effect. Unfortunately, there are no suitable biocontrol agents for climbing asparagus (See What's New in Biological Control of Weeds? Issue 50, p. 6).





**Did you know** that gorse will never be eradicated from New Zealand? Gorse has a seed bank in our soil which remains viable for 50 years - and more seed is being added to this bank every year ...

Lynley Hayes, Programme Leader, Biocontrol of Weeds, Landcare Research, recently spoke on National Radio about the ticking timebomb that weeds pose in New Zealand. You can hear it again at http://biosecurity.org.nz/news/lynley-hayes-weeds-the-ticking-timebomb/



#### Kahikatea Care

This young kahikatea, Dacrycarpus dacydioides, looks dead - but it isn't, so please don't weed it!

Kahikatea often look most unwell, but look carefully at the shoots and you will see signs of life.

Photos: A. Stanton



NOW THAT SPRING IS HERE WE NEED TO STAY ON TOP OF THE WEEDS -ESPECIALLY AROUND OUR YOUNGEST PLANTS.

## Did you know ...?

One in thirteen of New
Zealand's native plants is
threatened with extinction Threatened Plants of New
Zealand by Peter de Lange,
Peter Heenan, David Norton,
Jeremy Rolfe and John Sawyer.

## Gift Tree Planting

A big thank you goes to those who gave, received and/or helped plant the gift trees, following our promotion over the last few months. A most enjoyable morning was spent putting the young plants in along the Walkway, downstream from the Unitec Residence. It will be wonderful to keep track of these special trees and see how they grow in the years to come.





Photos: A. Stanton

A morning's work produces a great result - thank you!

# No, not a pine cone ... ... what is this?



What is on the branch, top centre?

# Oakley Creek Rainbow Match

Can you match these colours to the following Oakley Creek fauna and flora?

Silver Warbler
Silver Coral fungus
White Skink
Pink Pine
Red Tree fern
Copper Shag
Lenon Faced heron
Grey Bird

Black Eye Black Wood

Check the solutions at the end of the newsletter.

## Rubbish or refuge?



These concrete blocks may have been dumped, but they provide quite a good refuge for stream life, slowing down the water current. Photo: A. Stanton

# Oakley Creek trees may feature in Unitec Arboretum database

As part of a plan to develop the campus in a sustainable way, Unitec is to create an arboretum and online directory of its tree collection, over the next year. Unitec has allocated \$9500 from its Environmental Sustainability Fund to be spent on tagging trees, planting, documentation, a research assistant, website development and creating an interactive map of the trees. The project has been planned by Penny Cliffin, Landscape and Architecture Senior Lecturer, who has studied urban forests and the management and promotion of tree collections. She hopes to include trees growing in the Oakley Creek Walkway in the arboretum, along with trees in the Kowhai Grove and Wetland Walk at Unitec.

Mel Galbraith, Unitec School of Natural Sciences, has also been awarded \$7,200 from the Environmental Sustainability Fund. This funding will be used for research on the biota of the Wairaka Stream (which flows into Oakley Creek), to provide baseline data about the stream and its surrounding environment. Future restoration plans will be based on the results.

#### More Oakley Creek limericks

There once was a boy of Al-bert Who planted a tree in the earth, It grew high that puriri, Made a home for the tui Such an admirable boy of Al-bert There was once a young weed named Bill,
'Til Wendy came in for the kill,
And then as for weed Fred,
She cried 'Off with his head!'
See, weeding is really a thrill!

By Adrienne Stanton





Top: Bag moth case on a miro tree, Bottom: Lichen and budding rewarewa flower, Photos: W. John











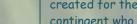


# Not quite a limerick or haiku

Man plays trombone beside the Plane Tree Bridge. Mallards glide upstream, applauding with their feet.

By Kennedy Warne

Kennedy Warne's Oakley Creek photo gallery website, The Creek Abides, has changed address to http://thecreekabides.tumblr .com/



Auaunga waterfall. It was created for the local combined contingent who attended the 17th NZ Jamboree, held at Manfeild Park, Manawatu, in 2005. It is interesting to see the alternative spelling of 'Te Aunga', which has been used by the Scouts for many years. The building is the Block House of Blockhouse Bay.

Waterfall Scout badge

features the Oakley Creek Te

This Scout badge (right)



Photo: W. John.

"Do unto those downstream as you would have those upstream do unto you."

Thanks, also, to Kennedy Warne for sharing this quote by Wendell Berry.

# Have you been here?







Photos: left, W. John; centre and right, A. Stanton.

Planted by Metrowater, this wetland in Oakley Creek's upper catchment is in Freeland Reserve. Access is from Freeland Ave, which is at the back of May Rd school and southwest of Mt Roskill (which can be seen in the background, above left).

Out and about Photos: W. John

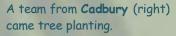
The planting season has seen many groups help out...



Before and after planting at the Mt Albert St Judes Scout site and the Venturer planting team - Reuben, Hamish, Tim & Jess.



Auckland contractors, the **Downer Team** (left), planted the steep bank by the Gabion Wall below Phyllis Reserve.









Gladstone Primary School sent 50 children along to the creek for water monitoring and tree planting (left and below left). Thanks to Taryn and Selene from Wai Care.





Waterview
Primary students
planted too (right).



Students from the **Open Polytechnic** (left) came planting as part of their course work.

Regular volunteers, James Lawson and John Maskell, staked specimen trees in Harbutt Reserve (below left and centre).







These plants, ready and waiting, were supplied by Te Ngahere, who also provided the labour,







A Rocha planted more at their Cradock St Bridge site - from left, Jim Hunt, David and his son, Sarah Woodfield.

## Community plantings by the Unitec Residence and at Phyllis Reserve.







Green MP David Clendon lent a hand and Archie Bowden followed in the footsteps of his dad.



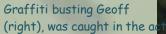
Yolanda van dem Bemd mentored two young friends (left).

Conservation Volunteers NZ local team took a break (right) on what may be the 'longest park bench' in New Zealand (and maybe the world!).





Some Oakley Creek weedbusters got busy (left) - David Smith, Margaret McConnell, Keith Anyon and Jean Barton







Mt Albert Grammar School students, Mandy and Sam, tested the water (left) ...

... and so did Jagjeeta Kaur and Jeffrey Lang, seen here being trained by Taryn Pearce, local Wai Care Co-ordinator (right).



#### Puzzle solutions

## No, not a pine cone





### Oakley Creek Rainbow Match

Silvereye
Silver tree fern
White faced heron
Pink coral fungus
Red pine (rimu)
Copper skink
Lemar wood
Grey warbler
Black shag
Blackbird

Photos: C. Casey

The mystery object is a guinea fowl in Alan Wood Reserve. Wendy notes that, unfortunately, most of its habitat will be destroyed when the creek is realigned for the proposed SH20 motorway extension.





We gratefully acknowledge the support of WWF-New Zealand, ASB Community Trust, The Trusts Charitable (Portage Trust), Auckland Council and Community Organisation Grants Scheme (COGS), Ministry for the Environment and NZ Lottery Grants Board,

#### Next Newsletter

News, articles, contributions and comments for the next newsletter are welcome and can be sent to <a href="mailto:info@oakleycreek.org.nz">info@oakleycreek.org.nz</a>

#### New Members Welcome, Donations Too!

We would welcome more members (\$10.00) and/or donations towards the work we are doing to protect and restore our wonderful urban 'taonga' - Oakley Creek Te Auaunga. Donations over \$5.00 are tax deductible.

Contributions can be made directly into our bank account:

Friends of Oakley Creek - Kiwibank - A/c 38-9003-0978224-00

or cheques, made out to 'Friends of Oakley Creek', can be sent to: 4/65 Woodward Road, Mt Albert, Auckland 1025.



Chairperson: Wendy John Treasurer: Jane Shand Secretary: Richard Nightingale Committee: Heather Docherty, Ross Ihaka, Dorothy Maddock, Helen Mellsop, Alicia Warren.

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