



Fernglen Native Plant Gardens

Winter Newsletter 2015



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Curator's Report

My contract with Council does not include work around the house but with the big changes afoot, clearing the vegetation around the cottage (Tecomanthe, kawakawa, bush lawyer and parapara) was an obvious thing to do. The house looks much better in its final days as a result of this clearing. Kris McPherson, the project manager, arranged for a skip bin to accommodate the remaining material in the house and basement and Steve and Barry did a great job dealing with this. Steve also safeguarded the wiring around the irrigation control and a couple of days ago he restored the bollard lights that lead to the education building.

Two months ago Nev and I enjoyed showing 20 Probus members around Fernglen and Nev planted some more specimens at Ben's Ridge, collected on one of his journeys, and also the plants that Council supplied.

Last week Richard Reid, the landscape architect, arranged for Rewi Elliot, the curator of Otari Plant Museum, to visit Fernglen. Rewi and his workmate Finn Michalak enjoyed coming here again and his email message is below. He gave us three *Pittosporum obcordatum* and a carmine rata, propagated from the one which grows on the Cockayne memorial wall. The chairwoman of the Kaipatiki Board, Kay McIntyre and her deputy Ann Hartley were able to join committee members for this occasion.

Richard encouraged me to remove some colonising plants which have inhabited the garden for many years so that there will be better see-through. And on that theme he would also like the cluster of Wheki next to the kawaka and some nearby Three Kings Streblus to go. I'm not so keen on that idea and I do trim the dead Wheki fonds so that there is better through vision. Maybe the Streblus should be pruned/thinned out so that it is not such a barrier.

The Stephens Island kowhai, which was gifted by Verran School to commemorate Muriel, has been flowering well. Also, *Carmichaelia williamsii* and *Pittosporum pimelioides* have produce a good crop of flowers.

The Massey University botany group is coming in September and one of the lecturers has organised to collect fern samples in August.

Malcolm Fisher

From Rewi Elliot of Otari Plant museum Wellington

Many thanks for taking the time to meet with us on our visit to Fernglen yesterday. It is always a pleasure meeting with people that are passionate about native plants.
After visiting Oratia nursery, where Geoff is quite candid about the possibility of closure by the end of the year, it was heartening to learn more about the Trust and Auckland City Council investing in Fernglen.
Good on you folk for championing this important historical, educational and conservation resource!
I look forward to watching the future developments. As I wrote to Richard yesterday, I think an already important asset to the city is going to become even better.
If any of you are visiting Wellington I would like to extend an invitation to visit Otari-Wilton's Bush and the Wellington Botanic Garden. It would be our pleasure to show you around.
Malcolm – could you please pass on my thanks, or this email to those on the Fernglen Trust whose emails I don't have.



Pittosporum obcordatum John Smith Dodsworth



Metrosideros carminea- carmine Rata photograph DOC

Thanks to NZPCN

Check out the Otari/Wiltons Bush reserve on the link

<http://friendswbg.org.nz/newotari.htm>

2 A Botanical trip to Rangitoto Island

The 600 year old volcano, Rangitoto, is a 259 metre high island. The 2205 hectares of lava flow constitute 95% of the island. It is fascinating to observe the maturing vegetation of this unique part of Auckland evolving over the past 20 years. The main vegetation pattern is Pohutukawa with an understory of *Astelia banksii*. The flora of the crater area in particular,

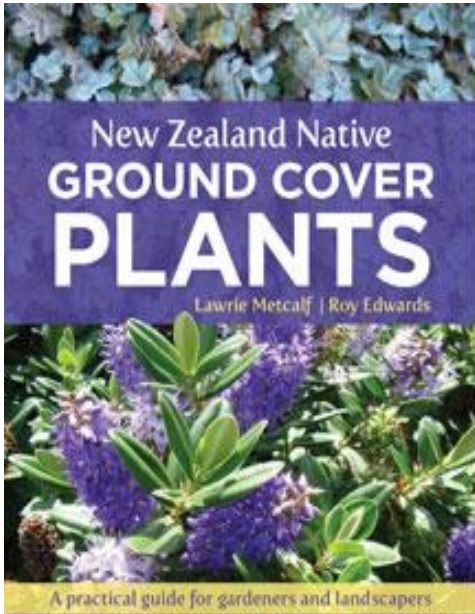


has proliferated with Northern rata, rewarewa, kanuka, tanekaha and lancewood. Of note, is the profusion of kidney fern, raurenga or *Cardiomanes reniforme*. The kidney fern glade extends in lush swathes for many metres on both sides of the track. It is surprising that such a difficult fern to cultivate thrives on an island with no running water, growing in scoria, and exposed to both heavy shade and bright light. Likewise, the range of other ferns flourishing in the arid conditions includes: *Pellaea rotundifolia*, *Pellaea falcata* *Asplenium oblongifolium* and , *Microsorium pustulatum* (kōwaowao) growing saxicolously (on rock) which is not uncommon for epiphytic species. In more sheltered sites can be found several species of filmy fern, *Hymenophyllum* , including *Hymenophyllum cupressiforme*. The expected presence of the hardy tree fern *Cyathea dealbata* is accompanied by tall mature *Cyathea medullaris* (mamaku). An attribute of the mamaku is to “die when it dries” over a long summer, making its presence on Rangitoto more remarkable.

The Rangitoto and Motutapu Islands Restoration Project need to be commended for the islands being declared pest-free on 27 August 2011. Post eradication birdlife has soared with introduced species such as kiwi and saddleback and self introduced birds such as tui and kakariki. The vegetation communities on Rangitoto are threatened by the expansion of invasive weeds such as Spanish heath, rhamnus, pines and gorse. Sadly there are over seventy species of exotic weeds on Rangitoto. The Department of Conservation is working to control this threat with help from conservation volunteers. With ever increasing weed controls, rare and endangered plant species are being planted from the Motutapu Nursery, including: *Euphorbia glauca* (currently only found on two island locations and thought to be extinct from the Auckland region) *Ficinia spiralis* (pingao), *Poa billardiarei* .The native carrot *Daucus glochidiatus* is benefitting from the animal pest eradication program.

Spending some time on this beautiful island is highly recommended - it is a completely different world - full of interesting species.

3. Book Review: New Zealand Ground Cover Plants by Lance Metcalf and Roy Edwards



Subtitled a practical guide for gardeners and landscapers this book provides an easy reference to select and care for native ground cover plants in order to create low-maintenance, good looking, and sustainable gardens. The most recent publication of over eleven excellent books by Laurie Metcalf was written with Lincoln University lecturer Roy Edwards, and published by the Canterbury University Press.

The book starts with a broader definition of the term ground cover than might be expected. The various habits are expanded upon such as carpets, mat formers, sprawlers, hummock formers, clump formers, and spreaders.

Having established the range of native groundcovers, the authors then consider designing a garden using a combination of varieties and calculating how many plants are required.

An excellent section describes the methods of propagating ground covers, how to prepare the ground before planting. How to control for weed infestation is important, as they point out “a totally weed free garden is an illusion”. The battle for a maintenance free garden, even with ground cover plants, requires an awareness of what is likely to occur and a strategy for managing it.

The final section of the book gives a detailed 40 page list and description of all of the native ground covers accompanied with superb photographs.

The clarity and easy access to information makes this an excellent reference book. It is not as accessible in book sellers as it is online through the Canterbury University Press.

4. Trounson Kauri Park, Northland .

A worthwhile side trip from the main highway to Cape Reinga is Trounson Kauri Park. This 450 hectare reserve is home to many significant kauri trees as well as a range of native shrubs, trees, and ferns. The history of the park reaches back to 1890, when kauri was being rapidly removed from Northland. The government of the day set aside a 300 hectare reserve in the Upper Kaihu Valley. A local settler James Trounson added an additional 22 hectares and following the establishment of a Scenic Preservation Club, a further 364 hectares of forest was preserved. In 1921 the Governor General officially opened what is now known as Trounson Kauri Park. The park was chosen as a “mainland island” by the Department of Conservation to “undo some of the damage and recreate a secure environment for native flora and fauna to flourish”. To this end 1,000 bait stations and a trap regime was implemented to control animal pests such as possums, rats, stoats, ferrets, weasels, and feral cats. Closely monitored populations of fauna including bats, snails, kiwi and other native birds were introduced along with monitoring flowering fruiting and the general health of the flora.

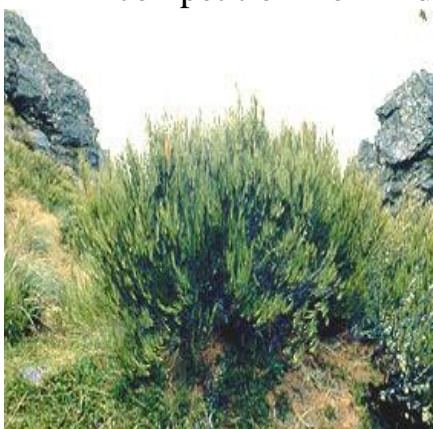
An easy and well maintained track allows for the forty minute walk around the forest to view some very old kauri, rimu, totara, rewarewa, dracophyllums, tree ferns and a personal favourite -the miniature tree fern *Blechnum fraseri*. The native pigeon (Kereru) are in abundance. Nearby a well equipped camping ground is a tempting spot for a Northland sojourn, with a close proximity to Waipoua Forest and the Manganui Bluff.



Loop track from DOC website

5. A Look at our Magnificent Dracophyllums

The distinctive native plants *Dracophyllum* or 'Grass Trees' are found throughout New Zealand. Of the around sixty species known worldwide around forty grow in New Zealand, eleven are small trees, and there are also hybrids. They are spread from coastal scrubland to around 1,000 metres on North and South Islands, as well as Stewart Island, the Auckland Islands, and the Chatham Islands. In addition, *Dracophyllums* are spread throughout New Caledonia, Lord Howe Island, Northern Queensland, Eastern New South Wales and Tasmania. Research suggests that the *Dracophyllums* arrived in New Zealand from Australia a few million years ago around the time the climate was heading toward the ice age. There was less competition from indigenous plants and their growth form and cold tolerance were suited to New Zealand conditions.



Dracophyllum aceroseum Photo: John Smith -Dodsworth Thanks NZPCN

Dracophyllums have some unusual adaptive characteristics: They are flammable because of the wax produced on the leaf surface. They contain high levels of alkaloids as a defence against browsing and fungal growth which makes leaf litter very slow to break down. The dense cover of non-rotting leaves prevents competing species from becoming established.

The care required in the first few years makes *Dracophyllums* difficult to establish in the home garden. Once established in an appropriate site they are comparatively free from problems. They can be grown successfully in containers and make an attractive statement

at the entrance to a native garden.

The *Dracophyllum* collection at Fernglen is just below the Fisher cottage and there are plans to establish a further collection at Ben's Ridge. Oratia Native nursery and Joy Plants at Pukekohe are usually a reliable source of stock. Young specimens are best planted in semi-shade or dappled light in free draining soil. They do not do well in areas that become boggy over winter nor do they tolerate drying out in their first few summers.



Dracophyllum elegantissimum

Photo Simon Walls Thanks NZPCN

6. The Unusual Botanical Trait of Cauliflory.

Cauliflory is a botanical term referring to plants which flower and fruit from their main stems or woody trunks rather than from new growth and shoots. It occurs in tropical and subtropical forests. *Theobroma cacao* is a well-known cauliflorous tree and the source of chocolate. New Zealand examples include the Kohekohe or *Dysoxylum spectabile*, the tree Fuchsia *Fuchsia excorticata* or Kotukutuku. Also, the rare climber *Tecomanthe speciosa*. Cauliflory can allow trees to be pollinated or have their seeds dispersed by animals which may not necessarily fly or climb. Bats, reptiles, and crawling insects find it easier to locate flowers beneath the tree canopy. The sight of clusters of flowers bursting from the trunk or branches of the kohekohe can be quite startling. *Tecomanthe speciosa* can commonly start to flower near the base of the plant, and then slowly move up the plant throughout June and early July. Noticeably, over past two years *T. speciosa* have flowered earlier and longer, blooming from early April and continuing until mid July.



Kohekohe photo by Wayne Bennett



Fuchsia excorticata by Jeremy Rolfe



Tecomanthe speciosa by Graeme Platt

thanks NZPCN