

Fernglen Native Plant Gardens

Autumn Newsletter 2015



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2. Curators report May 2015

Our Spring working bee was held in very bad weather. Thanks to the hardy souls, including new friends of Fernglen Margaret from Forest and Bird and Birkenhead College students Alex and Ethan, a lot was achieved in 3 hours. The education building had a much needed clean, the rockery was weeded and some clearing around the overgrown area south -west of the house was accomplished

There are about 20 new plants from the Oratia Native Plant Nursery waiting to be planted. On Ben's Ridge more South Island specimens have been added to the *Coprosma* collection by Nev.

John O'Ferral is bringing a group of Probus members to Fernglen on May 11th.

Steve represented Fernglen at the regular Green network meeting

The burglar alarm has been renewed in the education centre.

Planning for the development project for the gardens with the Auckland council is progressing. The committee are excited by designs from project landscape architect Richard Reid who has researched the aims and history of the gardens in order to plan a course of staged development over the next few years.

2. Annual Assessment of Pohutukawa Flowering, Christmas 2014

December 2014 has proved to be an outstanding late extended season for the flowering of the magnificent pohutukawa -New Zealand's "Christmas tree". Limited flowering in late November was initially discouraging. Yet by mid-December, the trees reviewed every year on Tamaki Drive, the North Shore, Northland, and Coromandel, were in full bloom. Flowering generally declines prior to Christmas Day, and is over by the end of the year, but this year it remained intense into the New Year. There is still no consensus on what triggers such displays. Some studies have shown that masting is caused by higher than usual temperatures the summer before seed fall. Flower buds of pohutukawa are set before winter. It is thought the timing and intensity of masting may be sensitive to global climate change. More frequent hot seasons may trigger more frequent masting. It is possible that exceptional years for pohutukawa naturally occur periodically in the same manner the South Island Beech trees have a mast years every 5-7 years.

It is worth noting that cloned cultivars of pohutukawa (such as Maori Princess) that have been planted in public spaces around Auckland consistently flower magnificently every year. The New Zealand Plant Conservation Network (NZPCN) has a website to which anyone can contribute sightings of flowering and fruiting of plants to enhance longitudinal data. <http://www.nzpcn.org.nz/>



Pohutukawa flower

Photographer: DoC thanks to nzpcn.org.nz

Nev in Northern Westland with the Auckland Caving club



View of the Moria Gate Arch -photo DOC

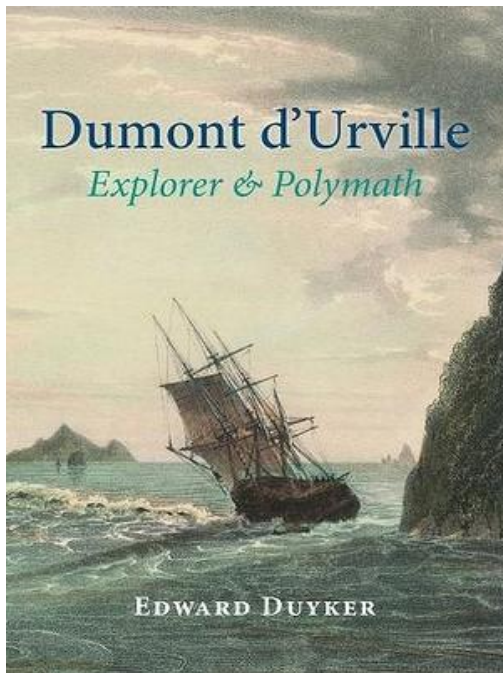
In early February I was fortunate to be invited to accompany the Auckland Caving Club for a week in Charleston, 20km south of Westport .We set up camp in the bush surrounded by regenerating wineberry, kanono, hutu, kamahi, putaputaweta pigeonwood ,and pate. At night we were serenaded first by frogs, then weka, and finally kiwi (much louder than I had imagined). Day trips were either through amazing limestone caves or tramping through river flats to higher altitudes. Every moment of every day was a

highlight. We tramped north of Karamea, through the Oparara Basin, to view the giant limestone Oparara Arch and Moira Gate Arch. These were carved out over centuries by the rivers. Lining the walk were giant beech kahikatea and rimu, as well as a thriving understory of Prince –of- Wales feather fern (*Todea superba*).On bluffs near the river tall *Dracophyllums* – probably *D. townsonii* -provided a spectacular display. South of Charlston heading toward Punakaiki, the river valleys provided superb botanical displays. Rising from sea level tracks wind up valleys and plants species appear and disappear with the changes in altitude. The number of ongaonga (native nettle) was surprising. Hugging the sides of the tracks it had to be avoided due to a vicious sting. Abundant ferns thrive on the West Coast, from the filmy ferns attached to tree trunks and banks, to ground ferns like *Blechnum fluviatile* and tree ferns like *Cyathea smithii*.Ground covers including *Pratia angulata*, *Nertera depressa* *Gunnera monoica*, along with mosses, liverwort, and lichen thrive in the moist environment. Punakaiki rocks are home to an unusual and intriguing collection of distinctive thick- trunked and tropical looking nikau palm. They must be particularly hardy given the prevailing south -westerly’s. Visiting Pelorus bridge and the Nelson lakes reminded me of the infinite opportunities to botanise in the South Island .I thoroughly recommend the experience to others. We were particularly lucky to have 11 days with no rain- missing the flash floods the following week.



The Oparara River surrounded by native moss and lichen covered bush DOC

Book Review: 'Dumont D'Urville Explorer and Polymath by Edward Duyker



The role of French botanists in naming New Zealand native plants, whilst often overshadowed by the British, can not be underestimated .

D'Urville was the most prominent of the group who include Pierre Adolpho Lesson, Achille Richard, and Etienne Raoul.

Born in 1792 D'Urville joined the navy at the age of 9 and slowly moved through the ranks during his excellent education at the Lycee in Brest. As an ensign in 1820 he was decorated for his role in bringing the Venus de Milo to France from Greece. D 'Urville made three long scientific voyages to the Pacific. In 1824 he joined the ship La Coqville as a first lieutenant and naturalist on a French Pacific colonial expedition. In preparation for this journey

D'Urville had read Fosters account of the flora- from his travels with Captain Cook. D'Urville spent a fortnight botanising in the Bay of Islands before his ship returned to France. In 1827 as commander of the ship Astrolabe he spent considerable time with his scientists in Tasman Bay. Achille Richard named three new plants in D'Urville's honour : *Pimilea urvilleana*, *Dracophyllum urvilleanum* and *Peperomia urvilleana*. The Astrolabe sailed up the East Coast of New Zealand calling in at Tolaga Bay , the Waitemata Harbour, and the Bay of Islands collecting botanical specimens to return to France. On his third voyage, 1837-1840, he proved that Antarctica was a continent. In 1840, on D'Urville's final visit to New Zealand he explored the rainy Auckland Islands, Otago, Akaroa and the Bay of Islands.

Ironically, after the trials of circumnavigating the globe three times on treacherous seas, D'Urville and his family were killed in the first French rail disaster, just outside Paris in 1842. D'Urville the erudite polymath, a maritime explorer, fascinated by botany, entomology, ethnography and the diverse languages of the world, left behind much primary documentation. This has been carefully researched by the author to provide a hugely readable and superbly written 600 page book . It provides insight into scientific discovery, as well as the socio- political situation in early 19th century France and is a thoroughly recommended read.

5. Some small leaved shrubs suitable for the home garden



Pittosporum pimeleoides John Smith -Dodsworth NZPCN

A distinctive part of the New Zealand flora can be grown with reference to “**Small leaved shrubs of New Zealand**” by Hugh Wilson and Tim Galloway.

Pittosporum pimeleoides provides a subtle scent. It grows happily in dry shade and once established tolerates exceptionally dry conditions. If pruned after flowering it maintains a compact form.

Coprosma rhamnoides is one of the toughest natives It grows naturally under manuka in dry dusty soil.

Distinctive red berries cover the bush for many months

Melicope simplex is an upright shrub that grows up to 4metres and is a useful screening plant. It grows particularly well in volcanic areas and in particular Auckland clay soils.



Melicope simplex NZPCN Wayne Bennet

Carpodetus serratus (putaputaweta). This open large shrub grows up to 3metres and has distinctive zigzag branches. It provides an attractive light screen. While hardy it prefers full sun or semi shade and is not tolerant of very dry conditions.



Coprosma rhamnoides Jeremy Rolfe NZPCN



Carpodetus serratus Gillian Crowcroft NZPCN



Pomaderris rugosa. Jeremy Rolfe NZPCN

Pomaderris rugosa. Upright and branched it grows up to 2 metres at maturity. It thrives in heavy clay soils. Its dark green leaves contrast with prolific small cream flowers in spring and early summer.

Olearia solandri The only *Olearia* to survive moist heavy clay soils it thrives in coastal areas. This fine leaved shrub reaches 2metres and has distinctive yellow green young foliage with creamy flowers in early summer.



Olearia solandri John Smith - Dodsworth NZPCN

An amateur botanist's visit to the Denniston Plateau



Inspired by interest in the debate over coal mining in the Denniston Plateau and after reading Jenny Patrick's historical novels about the area, I was excited to visit the area personally. There are few remains of the settlement except for the railway tracks as

they head toward the engineering feat of the incline. Information boards across the site are well presented and historically interesting.

Visiting the plateau is like a new world because of its unique geology, geography, altitude and aspect . At first glance the massive rock slabs joined by undulating rock surface appear stark and barren . Close inspection reveals a bewildering assortment of small unfamiliar plants. The tallest plants are barely a metre high. An endearing “bonzai” Southern rata was sighted.

Some of the botanical specimens seen included: *Leptospermum scoparium* (prostrate manuka), *Lophozonia menziesii*, *Dracophyllum* species including *D. rosmarinifolium*, *Hebe salicifolia*, *Hebe stricta*, *Halocarpus bidwilli* and *Phormium cookianum*. Two species of the club moss *Lycopodium* were spotted. In some of the barely sheltered areas two fern species were identified *Blechnum fluviatile*, *Gleichenia alpina*. The beautiful red tussock *chionochloa rubra* was abundant whereas the South Island toetoe *Austroderia richardii* was found in isolated pockets. One thriving sub-type of *Uncinia* remained unidentified. *Raoulia glabra*, *Gunnera monoica*, various *Celmisia*, *Gentianella montana*, *Ourisia macrocarpa* were among the ground cover sharing a low growing site . Suggesting a plentiful food supply for the amazing insectivorous *Drosera* (sundew) were three subspecies including *Drosera spatulata*.

For those keen on identifying plants the Denniston plateau is a must. I thoroughly enjoyed eleven days with hardly any rain yet a week later they experienced flash floods. Good Luck!!

Surviving a Long Dry Summer

Now that the third dry summer in a row is over it may be a timely reminder to prepare for next year.

1. New plantings should be carried out in late autumn early winter
Copious amounts of compost ensure a healthy growing medium for young plant roots.
2. Spread mulch in spring when the soil warms yet still retains winter moisture. Mulch can be readied during summer
3. The cost of water in the summer should be offset against the cost of replacement plants. Watering deeply twice a week is superior to light watering every night.
4. Coastal plants survive and thrive in hot dry areas. Consider this when visiting a native plant nursery.
5. Learn from your failures. New Zealand plants generally resilient but thrive if consideration is shown for their preferred sites