FERNGLEN NATIVE PLANT GARDENS NEWSLETTER

Autumn 2018

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Curator's Report

The warm moist early autumn has seen a continuation of summer's fast plant growth. So foliage beside the narrow paths has required regular pruning, and weed growth has been constant. In the last couple of weeks, however, with shortening daylight and cooler temperatures, there has at last been a slow-down of unwanted growth.

Coprosma fruiting has been in full swing, much to the delight of our avian friends. Fantails have been very much in evidence, happily following visitors on their meanders. It could be that Fernglen's mosquito population, which thrives on human company, is the real reason for fantail's apparent friendliness. Plants currently in flower include puriri, Tecomanthe, climbing rata, Olearia, Parahebe and Astelia.

Fernglen escaped the worst effect of the damaging autumn storm that struck a few weeks ago. However we did loose a couple of old kanukas, a large whau which was growing behind the gazebo and, nearby, the main trunk of a thirty-year-old wharangi.

The west-facing wall of the fernhouse has been relined with the tree fern trunks council supplied earlier in the year. Further work needs to be done to improve the south wall. Remaining trunks will be used for bush path edging.

Decorative pebbles continue to attract children and their parents, the paths through the old rockery being used more than ever before as the pebble searching and subsequent replacement continues. In adjacent Kauri Park a similar activity is taking place, although there the objective is to find fairy doors.

Fernglen and Kauri Park streams flow down to Soldiers Bay, a very special estuarian area which features salt and fresh water swamp progressing to forest. It is pleasing to report that some local residents are establishing a group of volunteers to help look after this precious area by combating weeds and predators. This project will resume the work started 15 years ago by the now defunct Uruamo Ecological Society.

Saturday 7 April was a fine Saturday for Fernglen's Open Day. The event was well attended. Quite a few plants were sold and many visitors enjoyed refreshments.

Steve is organising another round of rat baiting in Fernglen and Jill is reactivating the "halo programme" which involves rat control on properties surrounding Fernglen.

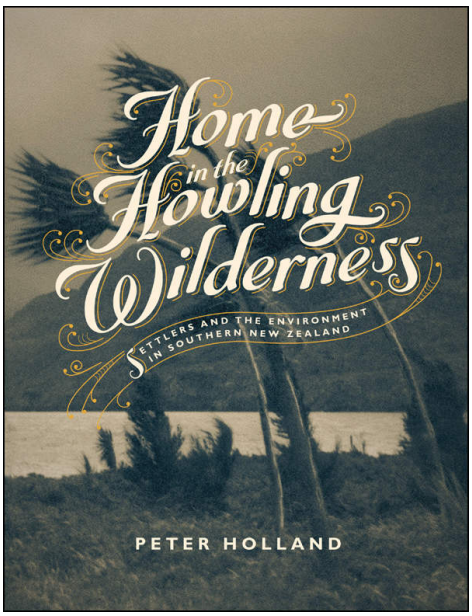
Malcolm Fisher

Planting a hundred million trees in New Zealand – what natives and where?

Hopefully the Government's optimistic plan for planting such a large number of trees does not entail covering New Zealand with plantations of pine trees and includes significant planting of New Zealand natives, especially some of our more endangered species. Below are listed some possibilities that I would like considered when planning the planting of native species:

1. Planting significant number of kauri trees in areas free of Phytophera, this is to ensure future generations of New Zealanders can enjoy our kauri trees and help in the survival of the kauri. We may need to plant them on offshore islands that are off limits to the public.
2. Riparian plantings throughout New Zealand, these alone could account for a fair percentage of the total trees planted. Not only rivers but lakes that are being seriously polluted could be planted.
3. Planting to stabilise areas of our country continually prone to large landslides. Far preferable to pine forests that often lead to subsidence when mature trees are felled as was illustrated too clearly in Golden Bay after recent storms.
4. Planting of red zoned areas of Christchurch, Canterbury is severely lacking in significant stands of mature forest, this is an excellent opportunity to recreate what once existed. Hugh Wilson with his many years of experience at Hinewai on the Banks Peninsula would be very useful with his knowledge and experience in helping to create new forest.
5. Coastal planting, in an endeavour to reduce coastal erosion both at present and especially in the future as sea levels rise.
6. Encourage the planting of urban forests. Many of our existing parks and green areas focus on exotic rather than native species for example Cornwall Park. Such plantings could involve significant stands of endangered species for example in northern parts of the North Island, Metrosideros bartletii, Pennantia baylisiana, Pittosporum obcordatum.
7. Motorway plantings, instead of the present plantings of a limited number of native shrubs, large scale plantings of rare and endangered species could become a feature of our motorways throughout New Zealand. It is worth noting that most endangered species are so classified not because they are difficult to grow but because of habitat destruction.

Book Review: *Home in the howling wilderness: settlers and the environment in southern New Zealand* by Peter Holland



Based on letters, diaries, books, and journals, author Peter Holland in this publication focuses on the nineteenth century European settlement of the South Island. To quote Holland:

> *'They diverted streams, drained marshes, burned native vegetation, planted hedges and grasses, stocked farms with sheep and cattle, and poured on fertiliser.'*

While the entire book is fascinating, for me chapter four entitled *'Away with the old: what place for native plants and animals'* and chapter five entitled *'Introduced plants and grazing animals'* were of most interest.

In southern New Zealand wilderness areas were initially viewed as waste lands awaiting transformation by settlers. Native species were regarded as compromising a rural property, standing in the path of progress. The author notes that almost from the start of organised settlement there were some concerns about the magnitude and consequences of forest clearance, but none for the burning of tussock and drainage of wetlands.

Hedges were an important part of early farm development because of exposure to very strong cold winds. While there were a number of native species suitable for shelter plantings very few were used. Native plants were regarded as slow growing and difficult to cultivate. Early settlers preferred to plant brambles, gorse, hakea, hawthorn, pine, and acacia. Almost every town had a merchant who sold seeds, cuttings, or rooted plants for shelter belts. Peter Holland relates in considerable detail the disastrous tale of rabbits to New Zealand in the late 1840s. As early as the 1860s they were recognised as a major problem resulting in the introduction of stoats and weasels, a measure that had a disastrous impact on our native fauna.

A well-documented publication that is exceptionally readable recording an important part of our history. The author concludes

> *'despite the strenuous advocacy of influential people like William Pember Reeves it took almost a century for the national psyche to come to terms with the fact that if given the opportunity many native species can hold their own, thrive, and improve the utility, value, and appearance of farms, stations, and settlements in the humanised landscapes of southern New Zealand'.*

Plants from the Three Kings Islands thriving at Fernglen

The Three Kings group of islands lie fifty kilometres north of New Zealand. They are volcanic in origin and have not been connected to the main land for many years. While some plants are unique to New Zealand others are closely related to main land species. There are approximately 180 species on the island of which fourteen are endemic to the Three Kings. The introduction of goats to the island in the late nineteenth had enormous impact on the flora before they were finally culled in 1946. Below are listed some of trees and shrubs from the Three Kings thriving at Fernglen.

Tecomanthe speciosa – A climber discovered in 1946 only a single plant was ever found. Now thriving in cultivation in northern parts of the country.

Elingamita johnsonii – Discovered on West Island in 1950, around twelve plants have been found. Thriving in cultivation in northern New Zealand.

Pennantia baylissiana – A solitary plant was discovered in 1948, still regarded as one of the rarest plants in the world. Fortunately, young specimens are now available at specialist nurseries.

Tecomanthe speciosa

Myrsine oliveri – Found on Great Island only twenty to thirty specimens widely distributed on the island. Specimen at Ben's Ridge is thriving!

Alectryon grandis
(Photo: L. Jensen, University of Auckland)

Alectryon grandis – A close relative of our native titoki, a more compact smaller tree with larger leaves. Three specimens at Ben's Ridge are quite magnificent.

Cordyline obtecta – Previously known as cordyline kaspar, growing in close proximity to the large pennantia.

Pittosporum fairchildii – Similar to our main land pittosporum crassifolium but with a more compact form. An excellent coastal sadly unavailable in nurseries. An excellent specimen at Ben's Ridge.

Davallia tasmanii – A very slow growing fern, a number of specimens in the older part of the garden. Similar to the non-native rabbit's foot fern.

Streblus smithii – A mature specimen that is now thriving in the older part of the garden having taken many years to reach its garden form.

Hibuscus trionum – A takeover bid at Fernglen!

This summer has seen a proliferation of *Hibiscus trionum* seedlings throughout the lower part of the garden in the vicinity of the alpine house. Although not considered endangered, it is classified as rare (except at Fernglen!). Naturally, the plant is found growing in only a small number of localities in Northland and on Mayor Island in the Bay of Plenty.

Hibuscus trionum is an annual to biennial growing to sixty centimetres before producing pale yellow flowers with a black centre. It is very easily grown from seed and as we have found out at Fernglen this summer it seeds itself very freely. Best cultivated in an open site with gravelly sandy free-draining soil in which the seed germinates readily.

There is also a shrub hibiscus, *Hibiscus diversifolius*, one of our many endangered species being only found in northern parts of Northland. Naturally occurring in coastal sites bordering on sandy beaches. Sadly, there only twelve wild populations surviving.

Summer of 2018, a bumper season of praying mantises

In my own garden and many other gardens I have visited over summer the number of praying mantises observed has been exceptional, possibly a result of the very warm humid weather we have experienced. Sadly, our native praying mantis, *Orthodera novaezealandiae* is in decline being overtaken by our South African invader, *Miomantis caffra*, that only arrived in New Zealand in 1978. In just a relatively short period, the Southern African mantis has spread throughout the North Island and into the cooler South Island.

Female New Zealand Mantis (Photo: Bryce McQuillan, Wikimedia Commons)

The New Zealand praying mantis can be identified as it is always bright green, has a wide flat thorax and the adult has a distinctive purple dot on its grasping foreleg. The South African mantis can vary in colour from brown to bright green. They have a very skinny appearance with a classic 'hammer head'.

How are the South African interlopers affecting our native species? Through niche takeover as they both compete for similar resources and the South African mantis breeds quicker. Scientists have that the New Zealand male mantis cannot discern between the female South African and the native female and that they may well prefer the South African female, all based on smell. He gets eaten for his mistaken while the New Zealand female does not cannibalise her suitor! Very quickly South African praying mantises have assumed ascendency over our native species, unbelievable!

The mystery of *Pomaderris apetala* growing at Musick Point, Howick

A cluster of *Pomaderris apetala*, tainui, have been happily growing at Musick Point for at least twenty-five years. Somehow this population appears to be expanding while the previously well-maintained gardens surrounding the now disused radio station are in very poor condition. The number of 'tainuis' is considerable although no young plant could be observed on my recent visit. It is possible that the plants are reproducing by seed or strangely by layering as there were many branches on the older plants lying on the ground. This is possibly the second most significant population of *Pomaderris apetala* in New Zealand.

The species is classified as vulnerable and likely to move into the endangered category in the near future. There are only two wild colonies in northern Taranaki, the largest being in a scenic reserve at Mokau. There is a Maori legend that *Pomaderris apetala* was brought to New Zealand from Polynesia in the canoe, tainui, which landed at Mokau. Plants in the area supposedly originated from the flooring timbers of the canoe. This, however, is unlikely as 'tainui' has never been found in the Pacific Islands.

In a nursery situation 'tainui' is relatively easy to propagate from cuttings or from seed. Plants thrive in an open sunny position with well-drained soil. Given the optimum conditions plants grow very quickly and should be cut back in early years to encourage a bushy habit.