

FERNGLEN NATIVE PLANT GARDENS NEWSLETTER

Autumn 2022

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News from Fernglen

by Kelly Hayward



The Fernglen Native Plant Gardens Open Day attracted a large group of very engaged visitors to the park. This year there were two dedicated garden tours, one at 10am, the other at 1pm. Botanist, landscaper Nev Arbury was the guide, his plant knowledge and enthusiasm, enjoyed by those attending. The tours soon reached capacity and another garden tour at 1pm was guided by Fernglen's curator Steve Cook, his wide native plant knowledge and ecology generated a lot of interest. From both Nev and Steve, visitors were saturated with native-plant gardening know-how.



Nev taking a tour group on Fernglen Open Day



On the grassed area parents took a break, sitting on the new bench seat (thanks to The Lion Foundation) while Jill entertained their little ones, reading them conservation themed children's books and, Sharon guided children to spot bird imagery within the bush. 'Harder to find' native plants – supplied from Joy Plants in Pukekohe, were sold and hot-cross buns and cups of kawakawa tea were enjoyed by many. The Open Day can only be run with the ongoing commitment of Fernglen Committee and volunteers; their support is invaluable.

Fiona from Pest Free Kaipatiki and friends of Fernglen, local residents, Simon and Lisa offered information on pest trapping. If anyone is interested to carry out this valuable work in the vicinity of Fernglen, please be in touch. There does seem to be an increase of rats in the area, our cat Samba has caught four large rats in the past three weeks, and just to be sure they are dead, left their dismembered bodies scattered in the garage.



Kohuhu fall at Ben's Ridge

There is usually the occasional tree fall at Fernglen, but between Easter and ANZAC weekend the large kohuhu (large for a kohuhu) behind the titoki trees at Ben's Ridge fell onto the *Coprosma arborea* and various small Coprosmas, creating quite a mess. It is thought the tree fell as a result of reaching the end of its life span.

Steve was sure some bushes would be wrecked. He carefully dissected the kohuhu and managed to clear the branches away without any Coprosma being badly broken. The worst damage was that it sheared the back off the *Coprosma arborea* and squashed the pigeonwood. So it was a close call for the Coprosma collection, but thankfully it turned out OK.

AUT Plant & Animal Taxonomy Field Trip

by Lecturer of Terrestrial Ecology and Environmental Science, Dr Craig Bishop

ENVS624 Taxonomy Fernglen Field Trip 2022



On the weekend of 26 – 27 March 2022 around 30 students and four staff from AUT (Auckland University of Technology) used Fernglen as a 'field trip base' for a Plant & Animal Taxonomy field trip. The weather played its part to perfection, with two dry and sunny days that were perfect for the objective of the weekend: learning about indigenous plants and animals and how to identify them in the field.

The class was broken into groups and the students cycled through various activities within Fernglen and the surrounding local reserves. This gave them a chance to look at native plants in a range of different ecosystems – such as scrub, regenerating forest, mature forest, freshwater wetlands and saline wetlands. We collected freshwater invertebrates from local streams and brought them back to Fernglen to observe and count, before returning them to the 'wild'.



The plant collections at Fernglen were a fantastic resource. They allowed students see live examples of a wide range of indigenous plants that wouldn't normally be found in Auckland in a natural setting. Who would have thought we could see red, silver and black beech trees growing together in urban Auckland! The students and staff also really enjoyed the collections of rare and unusual plants from all around Zealandia (especially those northern islands). Although they weren't so keen on all the small-leaved Coprosmas!



Assessment of Native Plants Growing at Mangawhai Heads

by Neville Arbury

Every five years or so, I assess the success or otherwise of the many native plants growing at my holiday home overlooking the estuary of Mangawhai heads. Planting commenced in 1998 and continues to the present day! The past three summers have been exceptionally dry and there have been casualties. In this newsletter, I will outline the natives that have thrived and in the winter newsletter I will list the natives that have struggled and in some instances, died.

Astelia banksii – Were part of the original plantings. As the soil is compact clay, the astelias were planted 'high' in a mixture of rocks and gravel. They are now over a metre high and flowering at present.

Muehlenbeckia astonii – Probably the 'standout' shrub, there are a number of specimens throughout the garden, all thriving.

Coprosma rhamnoides – Possibly the hardiest of all coprosmas, the oldest plant is now producing many seedlings that I will transplant in winter.

Pomaderris kumerahou – Planted in various parts of the garden. I distribute seeds from the 'biggest' plants throughout the garden.

Olearia solandri – Grows naturally in the Mangawhai area. The only olearia to succeed in my garden.

Hebe mokohinau – Two specimens, part of the original planting, are still growing (cut back after flowering). Very appropriate as on a clear day I can see the Mokohinau Islands.

Hebe parviflora – There are two specimens, both thriving as they continue to grow over two metres now!

Pseudopanax lessonii – Grows naturally around the coastline at Mangawhai heads. All the specimens I have planted throughout the property are thriving. In full seed at the moment.

Pittosporum crassifolium – Initially I collected seeds from Te Arai Point and grew some plants. This is a very compact form of karo and has made a superb windbreak.

Pittosporum cornifolium – The North Auckland form with large leaves, one of my favourite plants in the garden.

Coprosma propinqua – Three quite distinct forms. All thriving and respond well to some gentle pruning.

Mysrine australis – One of the hardiest natives. Seedlings are now appearing in the garden.

Pennantia baylisiana – Yes, our very rarest native, planted around ten years ago, in a sheltered part of the garden, is looking majestic with its large deep green leaves. Always of great interest to visitors!

Agathis australis – Amazingly my small kauri forest planted in 2000 has survived with the tallest specimen being around five metres. With the long, dry summers we are now experiencing, I think it would be near impossible to establish young kauris in the garden.

Book Review: *The Insect Crisis – The Fall of the Tiny Empires That Run The World*, by Oliver Millman

by Neville Arbury

If ever a book should be made a compulsory reading, this is the one! As the author writes

"By flattening and poisoning landscapes, altering the chemical composition of our atmosphere and creating deserts in pursuit of progress and aestheticism, we are conducting a high-stakes experiment with hideous risks."

We know for certain that insects predated us, and the odds are they will survive us in some form, too. It's an arrogant presumption that we will sail unscathed through the sixth mass extinction without the diversity of insect life we are laying to waste. We need them far more than they need us. The insect crisis is, from our own self-interested point of view, a human emergency.

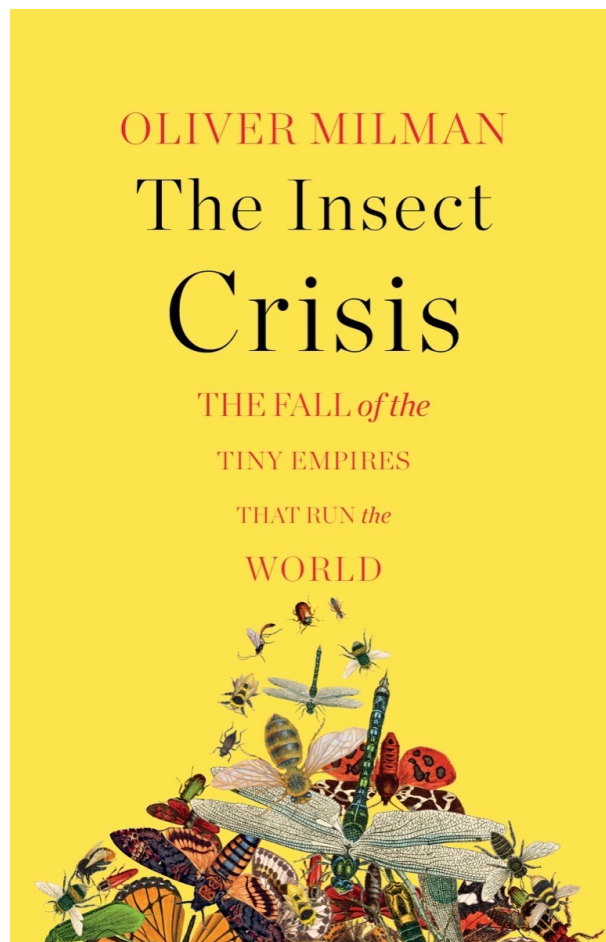
This publication, as the title states, is a detailed investigation of the insect crisis. A wake-up call for everyone. A celebration of the role an incredible variety of insects play and above all, a warning of the ramifications if insect numbers continue to plummet like they are presently doing.

The author outlines in detail some of the causes for the major decline in the abundance and diversity of insects; changes in weather, excessive use of pesticides, reduction in biodiversity, changes in land use, and the removal of flowering/weed borders. These problems are well researched and presented in chapters entitled *"Winners and Losers"*, *"The Peak of Pesticide"*, *"In the Teeth of the Climate Emergency"*, *"The Labour of Honeybees"*, *"A Monarch's journey"* and the final chapter *"A human emergency"*.

Apart from other long-term effects caused by the decline of insects, the major problem for humans is the disintegration of global food production. So much is dependent on pollination by bees, flies, moths, wasps and beetles. And of course, birds would disappear as insects are their main diet.

The author does provide some examples of where the decline has been halted and insect numbers are on the increase. But the overall picture is extraordinary worrying.

An absolute must-read!



Two Outstanding Groundcovers Thriving at Fernglen – *Leptostigma setulosum* and *Nertera balfouriana*

by Neville Arbury



Leptostigma setulosum

Leptostigma setulosum has been growing vigorously near the top of the 'old garden' for many years. A superb performance by a 'non-weedy' ground cover. While this 'mat' of ground cover is growing in full sun, the plant is equally vigorous growing in a south-facing or semi-shaded area. The only mandatory requirement is that it must not completely dry out over the hot summer months. As the plant spreads, new roots are produced making *Leptostigma setulosum* an excellent plant for stabilising parts of a garden. It appears very content to co-exist with other shrubs providing the perfect native understorey plant. Can be easily divided and transplanted to other parts of the garden.

As with *Leptostigma setulosum*, ***Nertera balfouriana*** has been thriving at Fernglen for many years. The plant is best observed on the side of the path near the entrance of Fernglen, now growing on the metal that is the path leading to our building. While flourishing in full sun, on the opposite side of the long and narrow 'bed', the plant is also growing vigorously under the shade created by the large *Streblus smithii*. It is naturally found growing in damp conditions, quickly forming a mat with distinctive very small leaves. Small flowers are followed by distinctive bright orange-red berries that appear in late autumn, early winter.



Nertera balfouriana

Covid-19 Causes a Delay in Pest Control on Auckland Island

by Neville Arbury

There are four main islands in the Auckland Island group, three are pest-free! Adam's Island somehow escaped the introduction of pests through the 1800s and remains pest-free. Enderby, to the north, was cleared of pests in 1993 and Disappointment to the west, also escaped the plague of pests. The islands have UNESCO World Heritage status. The remaining island, Auckland, at 46,000 hectares is New Zealand's fifth-largest island and has been scheduled for a major programme of pest removal costing 83 million dollars when Covid-19 arrived.

The legacy of a brief (three years) settlement at Hardwicke on the island was a population of pigs, cats and mice. The impact on more than 400 species of plants, 100 of which are endemic, has been devastating. Fortunately, DOC had managed to eradicate cattle, goats and sheep in the 1990s. In 2020 DOC completed a large scale feasibility study that entailed the removal of a large number of pigs from a peninsula. The study reinforces the belief that the total eradication of remaining pigs, cats and mice was feasible even in the environment of extreme weather, isolation and overwhelming logistical challenges. It is hoped that the project can proceed in the near future.

One of the advantages of the project is that because Auckland Island is hundreds of miles offshore and uninhabited, it is easy to 'defend'. Once it is totally pest-free, there should be no ongoing work required!

Focus on *Coprosma rhamnoides*

by Neville Arbury



Possibly our most hardy, versatile and variable coprosma!

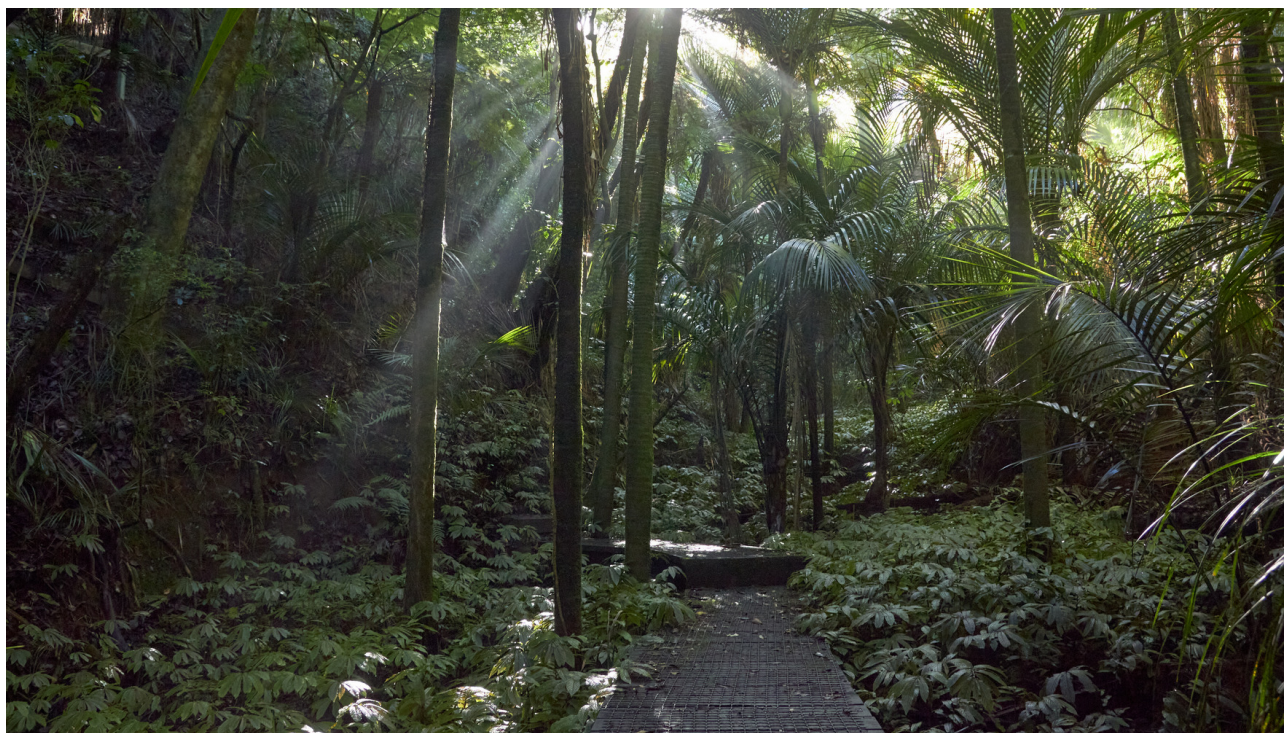
This plant naturally occurs from North Cape to Bluff including most of the offshore islands. Often found growing in extremely inhospitable conditions. E.g. under manukas, it is quite common to find a proliferation of *Coprosma rhamnoides* seedlings in bush margins.

Young plants invariably display a variety of forms. However, they all have a divaricating form, some incredibly so. Resembling a compact hedgehog! They can grow up to two metres, but it is more usual for plants to be around one metre in height. Fruit is produced on female plants, which are dark red to black colour when ripe.

Coprosma rhamnoides is an excellent colonising plant where natives are re-establishing in a formerly bare area. At Fernglen, on the walk to and at Ben's Ridge, there are numerous *Coprosma rhamnoides* specimens often growing near their close relative *Coprosma spathulata*. Plants can be easily propagated from seed, or if a particular form is required, by cuttings.

The Survival of Our Parataniwhas at Fernglen

by Neville Arbury



The Parataniwhas in 2017

On the walk to Ben's Ridge, down the steps to cross the creek, is an ever-expanding population of *Elatostema rugosum* or parataniwha, our native begonia. Over the past three summers, there has been very little rain, reducing the flow of the creek to a mere trickle. As the parataniwha only grow in moist conditions, these dry summers are a real challenge for this quite unique native plant. When conditions are exceptionally dry the plant lies flat on the ground appearing to be on its last legs! Amazingly, with the arrival of rain, they quickly stand upright.

It was a pleasant surprise when guiding some visitors around Fernglen on our Autumn Open Day, to see the parataniwhas all upright. While obviously not flourishing, at least they were all alive. They continue to spread away from the bridge further down the creek. This movement of parataniwhas is nature's work alone as there have been no additional plantings since the original planting many years ago. Very simply, parts of the plant are washed further down the creek in downpours and they take root on the banks of the creek.

This part of the gardens is always of considerable interest when showing visitors around Fernglen. Many have never seen parataniwha before and because it is so different in form and colour when compared to other native plants.

Elatostema rugosum occurs throughout the North Island, only growing in shady, moist sides, often on the sides of streams, or in deep, moist, shady gulleys. The plant can be variable in colour, bronze, pink, purple and green. It is easily propagated by cuttings.

Farewell to Two of Our ‘Juveniles’ at Ben’s Ridge

by Neville Arbury

Both the matai, *Prumnopitys taxifolia* and pokaka, *Elaeocarpus hookerianus* that have very distinctive and lengthy juvenile forms, are now showing signs of reaching adulthood.

The matai, one of the two planted in 2003 has long resembled a twiggy, tangled mass of branches, looking more dead than alive. This juvenile form can last for many years, but just recently the leaves at the top of the tree, around 2.5 metres high, have assumed the appearance of a mature matai. Very soon one of the many branches will become dominant and the large ‘bush’ will take on the appearance of a tree. Meanwhile its ‘first cousin’, another matai planted the same day in reasonable proximity, continues to enjoy its juvenile days, still a tangled mass of branches and looking decidedly unhealthy!

The pokaka, further up the ridge, past its two cousins hinau that are thriving, is just beginning to show what can best be described as semi-juvenile leaves. These are distinctively toothed as opposed to the very small leaves on the juvenile form and the large ‘whole’ leaves of mature pokaka. As with the matais, two specimens were planted in 2003. While the smaller tree remains in its juvenile form, the tree slightly higher up the ridge is beginning its change in form. As with the matai, the juvenile form can last for many years and the leaf form and colour can be quite variable.

It will be very interesting to observe these trees over the next few years, reinforcing my belief in my favourite Chinese proverb:

“The best time to plant a tree was twenty years ago. The second best time is now.”



Juvenile *Elaeocarpus hookerianus* back in 2016

What's Happening at Fernglen?

Working bees

Regardless of the weather, working bees occur at Fernglen **on the second Saturday of every month from 9am onwards, until about 12 noon.**

The working bee is a great way to meet others, learn more about native plants, weeds and pest control. There is always a job to be done in the garden or in the education room.

No gardening experience is necessary and all ages and abilities are welcome. Gloves and gardening tools can be supplied.

Looking forward to seeing you there.

Educational tours

Are you involved with a school or an education group and would like to learn about New Zealand native plants? A unique collection of plants from all over New Zealand grows at Fernglen. To see what is on offer please contact us

on email: fernglen.nz@gmail.com

or phone: 021 236 5800

Room hire

The Fernglen Education Room is available for hire at very competitive rates. Please contact us

on email: fernglen.nz@gmail.com

or phone: 021 236 5800

Naylor Love

Naylor Love are committed to seeking sustainable construction practices. Their history in New Zealand makes an interesting read on their website:

<https://www.naylorlove.co.nz/about-us/our-history/>



**Naylor
Love**



Botanical Art at Fernglen

Interested?

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