## FERNGLEN NATIVE PLANT GARDENS NEWSLETTER

Autumn 2024

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## News from Fernglen

#### text and photos by Kelly Hayward

We, Fernglen committe and trust members, were so pleased with the interest and pleasure visitors took in the gardens in the recent Fernglen Open Day (part of Ecofest North). Their enjoyment of the day makes the effort and preparation of the event well worth it.

Anyone wanting 'botanical know-how-knowledge' was spoiled for choice as Nev Arbury and Steve Cook took guided tours, and they, and Malcolm Fisher answered any specialist questions.

Artist, Lesley Alexander, had a lot of interest in botanical journaling and is looking to increase her range of art classes. Watch this space for more news on that.

*Naultinus elegans*, elegant gecko (Auckland green gecko) stole the hearts of many. He was a show stopper, while his female companion, who'd recently shed her skin, was shy on the day. In addition, children were creatively entertained in conservation through art, bird trail and planting.



Naultinus elegans

Thanks to all Fernglen committee and trust members, volunteers and curator, who contributed to making the day a success.



Mandy taking a break between visitors, with art themed conservation with kids (photo by Nicola Dewar)

Track work to repair damage caused by flooding in January 2023 is underway. This will allow the lower track to soon be open again, a relief since it has been closed for 15 months.

Among Fernglen's charming seasonal changes is the cream coloured *Tecomanthe speciosa* in bloom and 4 kāka seen circling the gardens, returned for their winter sojourn.



Tecomanthe speciosa



Close-up of *Tecomanthe speciosa* flowers

## A Close look at the Three Matais Growing at Ben's Ridge

#### by Neville Arbury

Halfway up Ben's ridge there is a cluster of three mataī trees *Prumnopitys taxifolia*. Mataīs are found throughout the North and South Island and in small numbers on Stewart Island. They can grow up to 25 metres with a diameter of 1.3 metres at maturity. What is distinctive about mataīs is the long-lasting juvenile stage. For a considerable time, juvenile mataīs are a tangle of slender, tangled branches covered with brown or pale yellow leaves, giving the appearance of a dead or dying tree. After an inexact number of years, the adult tree emerges out of the juvenile shrub, the divaricating branches wither and fall off.

Three mataīs at Ben's Ridge were planted in the winter of 2003 by Malcom Fisher and myself. The plants were about a metre high, distinctively juvenile and appeared half dead. About two years ago, after nineteen years in the ground, the first mataī began to "break out" of its juvenile form. The leaves changed colour and form, now appearing similar to the leaves of a miro. A single sturdy trunk emerged from the mass of branches. What was most interesting, the other two remaining mataīs showed no signs of growing up. In March 2024 a second mataī began the process of emerging from its juvenile form. However, to this day, the third mataī is still clinging to its juvenile form. Is this a question of genetic diversity or does it relate to the soil type (even though the 3 mataīs are only 5 metres apart). Whatever the reason, it is now time to enjoy watching these specimens develop into majestic large trees.



The two maturing matais in foreground and the still juvenile matai can be seen in the background

## Book Review: Feijoa – A Story of Obsession and Belonging by Kate Evans

#### by Neville Arbury

By coincidence, as I write this article on March 25th, today I have eaten my first feijoa of the season, fruit of the gods! How I love the taste of this most unusual fruit. And yes, there is now an entire book devoted to this adopted New Zealand fruit, the feijoa.

The author Kate Evans, a self-confessed lover of feijoas is a New Zealand journalist and nature writer who has worked in the UK, Australia and New Zealand with work published in the National Geographic. This publication answers all the common questions surrounding this quite unique fruit.

Feijoas originated in Uruguay, southern Brazil and a small part or northern Argentina. They were first taken to the South of France where they became part of the Riviera Gardens of the European aristocracy. From here they spread to California and eventually to New Zealand. In the 1930s they were first recorded in Whanganui. New



feijoas are spread throughout many countries in both hemispheres from Azerbaijan to Egypt, Japan to Australia. The author, when researching this publication, spent considerable time in parts of South America where feijoas are to be found. Even attending a festival of the feijoa in Colombia. Of considerable interest is that no significant feijoa industry has developed outside of South America, California tried and failed.

When writing about feijoas in New Zealand, author Kate Evans captures the very essence of Feijoas when she writes,

*"Feijoa season is a time of prolific generosity. Kids sell them at roadside stalls, people take full bags to work to give away. Because of the gifting, they are sometimes called the people's fruit."* 

Further she writes,

"After a century in our gardens, it does belong here. It is unselfish, a good visitor and has not tried to dominate the ecosystems."

The book reads as a love story for feijoas, we are reminded that very few fruit fall to the ground when they are ripe, just waiting to be eaten.

This is a magnificent publication, I simply could not put it down. Very, very highly recommended.

## The Case of the Disappearing Euphorbia Glauca

#### by Neville Arbury

Near the entrance to our gardens where *Hibiscus trionum* appears every summer and where there are a number of Marlborough daisies, for many years there has been a specimen of *Euphorbia glauca*. With its distinctive red stems and blue-green leaves, this plant never remained in the same position for any time, sending up shoots adjacent to where the original specimen was planted. Some winters the plant would disappear completely, only to reappear again in spring. Sadly this spring no new plants have appeared and a new specimen will need to be planted.

While there are numerous colonies of *Euphorbia glauca* in coastal areas of both islands, most are very small and often do not extend for more than a few metres. The plant is classified as a vulnerable, suffers from trampling by animals and being overcome by weed species, especially lupins. Coastal forestry and farming also have an impact on this species.

Fortunately *Euphorbia glauca* can be quite easily propagated by seed or by divisions of offsets. Specimens can sometimes be purchased from garden centres, but be careful not to confuse the plant with other similar euphorbias.

If planting in the home garden, prepare a site that is in full sun with rocky, gravelly, sandy soil. Drainage is essential if this plant is going to thrive.



Euphorbia glauca, photo by Michael Berardozzi

# The Plight of Our Native Kaka Beak Plants, Clianthus puniceus and Clianthus maximus

#### by Neville Arbury

Yes, there are two species. The flower of *Clainthus puniceus* is slightly smaller than *Clianthus maximus* where the flower is larger and a deeper red. Both species are classified as endangered. Threats include primary forest clearance, invasive weeds, grazing from pigs, deer, possums and goats, attacks on the foliage by caterpillars, slugs and snails. Estimates of surviving plants in the wild are around 150 plants, meaning there is a very small gene pool.

In cultivation plants tend to be short-lived, two to four years. Specimens are regularly ravaged by caterpillars, slugs and snails. Plants are very popular in England where they are known as "The Lobster Claw Plant", prices start at £29.99. They are also popular in Australia where they sell for around \$55.00 Australian dollars. Fortunately for long-term health and survival of the plant, kaka beak can be easily propagated from seed, semi-hardwood cuttings and by layering. Sadly, in areas where the kaka beak naturally grow, eastern North Island, there appears to be a low capacity for reproduction. Researchers have found that he kaka beak seed is capable of sustained periods of dormancy without losing viability.

The future of this beautiful native shrub is in balance at present, despite efforts to reintroduce new plants into its natural habitat. Similar to the plight of our now extinct *Myoporum debile*, kaka beak's future will lie in the successful cultivation of the plant in gardens.

## A Quick Look at the Three Kings Islands, Manawatāwhi

#### by Neville Arbury

The Three Kings Islands are a group of thirteen uninhabited islands, fifty five kilometres north-west of Cape Reinga. The total area of the islands is 6.85 square kilometres. The islands are what is termed a submarine plateau, separated from the New Zealand mainland by an eight kilometre wide, 200-300m deep submarine trough. Most of the islands in earlier years were inhabited. Great Island was cleared of vegetation in order to grow crops like kūmara. No one has lived permanently on the islands since the 1840s.

In the early twentieth century the islands were overrun with goats. It was not until 1946 that the last of the goats were removed.

Thomas Cheeseman, one of our most eminent early botanists visited the islands in 1887 and again in 1889. Sadly fifty species that he had described following his visits have not been seen again. In 1956 the islands were declared a reserve for the preservation of the flora and fauna.

Here at Fernglen we have mature specimens of some of the rarest plants from the Three Kings, including *Pennantia baylisiana, Tecomanthe speciosa, Elingamita johnsonii, Pittosporum fairchildii, Streblus smithii* and *Alectryon grandis*. All these plants grow exceptionally well on the mainland. It is worth noting that both *Pennantia baylisiana* and *Tecomanthe speciosa* were reduced to one solitary specimen when discovered and that *Pennantia baylisiana* is often listed as the rarest tree in the world.



Tecomanthe speciosa covering walkway at top entrance



Pennantia baylisiana



Elingamita johnsonii female tree



Elingamita johnsonii male tree



Elingamita johnsonii berries

## Pittosporum Crassifolium – The Unsung Hero of Our Coastal Native Plants

#### by Neville Arbury

As prolonged very dry summers become the norm, the search for draught tolerant plants increases, especially in coastal areas. Here, *Pittosporum crassifolium* has proved to be the "stand-out" plant. This large shrub, small tree can be cultivated as a specimen plant, as part of shrubbery or quite often as a hedge plant. Karo responds to regular pruning developing a very dense growth form and can be easily maintained at the height that is required. Plants are extremely hardy in most soils from almost pure sand through to heavy clays. The only exception being soils that are are wet throughout the year.

*Pittosporum crassifolium* appears to be reasonably long lived. Specimens planted at my bach at Mangawhai over twenty five years ago, continue to thrive and help provide shelter from very strong south westerly winds.

Plants naturally occur from North Cape to Poverty Bay, though the plants is cultivated in many parts of New Zealand. Attractive deep crimson flowers appear in spring/early summer.

A similar plant only found in the Three Kings Islands is *Pittosporum fairchildii*. Closely resembling karo, but with a more compact form, unfortunately rarely seen for sale, this species is also an excellent drought tolerant plant.

It is worth noting that *Pittosporum crassifolium* can be quite variable in its form. Possibly reflecting the soil type, exposure and drainage. Some specimens can be quite upright in habit, while others can be far more compact. If cultivating karo, remember they respond well to considerable pruning, and can be formed into a dense habit by continual clipping, best carried out just prior to new growth occurring in spring.

### Book Review: New Zealand Lichens by Nancy and Bill Malcom

#### by Neville Arbury

Hidden in the shelves of my local Mt Albert library, this slim book is an absolute gem crammed full of facts and over seven hundred photographs. New Zealand, as I discovered, is very rich in lichens with over 2000 species. Not only are they found in natural areas, coastlines, forests and mountains, but also in cities where they inhabit plastics, roof tiles, steel, sealed roads, almost every possible surface! Many years ago lichen happily grew on the bonnet of my Volkswagen Beetle. Lichens I learned are very long-lived and that in harsh environments they grow exceptionally slowly, only a few millimetres a year, 3-25 millimetres per century. One large lichen in Greenland has been dated 4500 years!

The authors define a lichen in an interesting way,

*"Fungi can't make their own food. They survive only because they have evolved ways of getting food from other creatures. Some of them have* 



opted for the imaginative solution of taking on algal and bacterial partners that can make food by trading sunlight. That lifestyle is called a lichen".

In simple terms, the partners of lichen vastly improve each others chances of survival, what in biojargon is termed mutualism. The fungus protects the alga from harsh elements and from predators as well as supplying it with water and mineral nutrients. Additionally, an embedded yeast makes substances that waterproof the lichen and protect the alga from excessive sunlight. The alga feeds both the fungus and yeast with carbohydrates that it makes from photosynthesis.

There is an excellent section on the potential uses of lichen. Some have shown promise as sources of dyestuffs and antibiotics. Archaeologists have used lichens to date some stone sculptures. Lichens have also proved useful as a pollution canary providing warning of environmental problems. While lichens are highly tolerant of toxic metals, most are damaged or killed by even low concentrations of sulphur dioxide. As a result, lichens are now used to measure air pollution and acid rain in large industrial cities throughout the USA and Europe.

With over 700 photographs, drawings and microscopic views, this publication is a comprehensive documentation of New Zealand lichens. Highly recommended!

## Ackama Rosifolia – A Lesser Known Small Native Tree Growing Near the Top of Ben's Ridge

#### by Neville Arbury

Planted over 10 years ago, this distinctive native tree has survived the vagaries of Auckland's weather and continues to thrive!

*Ackama rosifolia*, Māori name makamaka has a quite small natural distribution in the Far North from Whangārei to Kaitaia, Manganui and across to the Hokianga harbour. It is found naturally growing among other forest trees. Specimens can grow up to 10 metres in height. Young trees are normally growing in quite sheltered positions as they can be damaged by strong winds. In cultivation they can be grown in full sun or dappled light.

A distinctive feature of makamaka is the rosy colour of the undersurface of the leaves. From September through October many small cream-coloured flowers are produced on branched panicles. As the flowers mature they slowly change colour to a soft red.

Ackama rosifolia is a very suitable tree for the home garden. From time to time specimens are available in Auckland garden centres. With its very distinctive pinnate leaves, the tree manages to look rather different from other forest trees.



Ackama rosifolia can be seen in the right half of this photo

## 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: <u>fernglen.nz@gmail.com</u> or phone: 021 236 5800

#### Room hire

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

on email: <u>fernglen.nz@gmail.com</u> or phone: 021 236 5800

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# Botanical Art at Fernglen

## Interested?

contact Lesley Alexander 021 161 7070 or

email lesley.alexander.smith@gmail.com

#### Naylor Love

Naylor Love are committed to seeking sustainable construction practices. Their history in New Zealand makes an interesting read on their website: <u>https://www.naylorlove.co.nz/about-us/our-history/</u>



Naturally Neem

https://www.naturallyneem.co.nz/

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