

FERNGLEN NATIVE PLANT GARDENS NEWSLETTER

Autumn 2023

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News from Fernglen

text and photos by Kelly Hayward

Welcome to the Autumn Fernglen Native Plant Gardens newsletter.

Held on the last day of EcoFest North (organised by Kaipātiki Project), the 16th of April 2023, was the Fernglen Native Plant Gardens Open Day. It mainly attracted people interested in learning more about native plant species by attending either of Nev Arbury's botanical garden tours.

Feedback from tour participants was they had not only learned a lot, but were impressed by Nev's passion of the gardens and entertained as well! Artist Jennifer Duval-Smith from the Botanical Illustrators group, painted art in the education room, whilst on the grassed area under a gazebo, children partook in conservation activities.

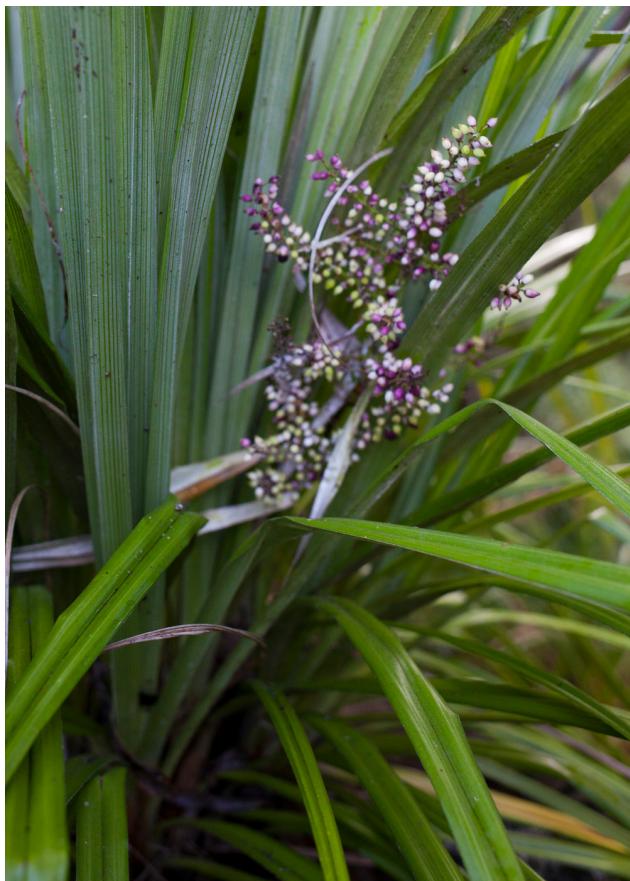
Plant sales were popular. Thank you to those who donated plants to Fernglen, and those who purchased them. These funds assist us to continue our work. Thanks to the Fernglen committee at trust members and other volunteers who made the day such a pleasure.

To attend a group garden tour of Fernglen Native Plant Gardens, Tuesday and Fridays are ideal days, just contact us on fernflen.nz@gmail.com.

Settling into the role is our new curator, Deborah Colson, who joined us in March. She is making her mark on the gardens and we look forward to you meeting her sometime. She works Tuesdays and Friday (usually 7am – 3.30pm), so do drop by and say hello.



One of Nev's botanical garden tours at Fernglen Open Day 2023



Astelia berries



Kumarahou pomaderris, kumeraho



Hebe *Veronica bishopiana*

An Introduction to New Fernglen Curator Deborah Colson

Deborah grew up in Auckland and spent her adult life living in London, returning to New Zealand in 2018. Upon her return, she switched from a successful career as a clinical nutritionist to developing a new focus: conservation, restoration and NZ native plants. She has planted several hundred native plants at her home in Army Bay, replacing the lawn, weeds and exotics with nascent native bush.

In 2018 Deborah got involved with lots of volunteering, starting with Shakespear Regional Park and Kaipātiki Project, as well as formal and informal learning about plants and conservation. She has worked as a Summer Ranger for the Northern Regional Parks, a 'field worker' for Wildlands, team leader for Conservation Volunteers, community activator for Pest Free Hibiscus Coast and is currently a Restoration Advisor and Communications and Community Engagement Facilitator for Restore Hibiscus and Bays.

Deborah 'discovered' Fernglen Gardens whilst researching native plants for her own property, reading the Muriel Fisher Story and visiting the gardens in early 2019. She was also delighted to be able to spend time working in the bush at Fernglen whilst working for Wildlands in 2020. Deborah is absolutely passionate about NZ's unique and special flora and fauna, and feels absolutely privileged to have the role of looking after the special gardens at Fernglen.



Deborah Colson, Fernglen's new curator

Book Review: *Eating to Extinction - The World's Rarest Foods and Why We Need to Save Them* by Dan Saladino

by Neville Arbury

To quote the blurb on the back cover,

"Eating to Extinction is an astonishing journey through the past, present and future of food. A love letter to the diversity of global food cultures, and a work of great urgency and hope!"

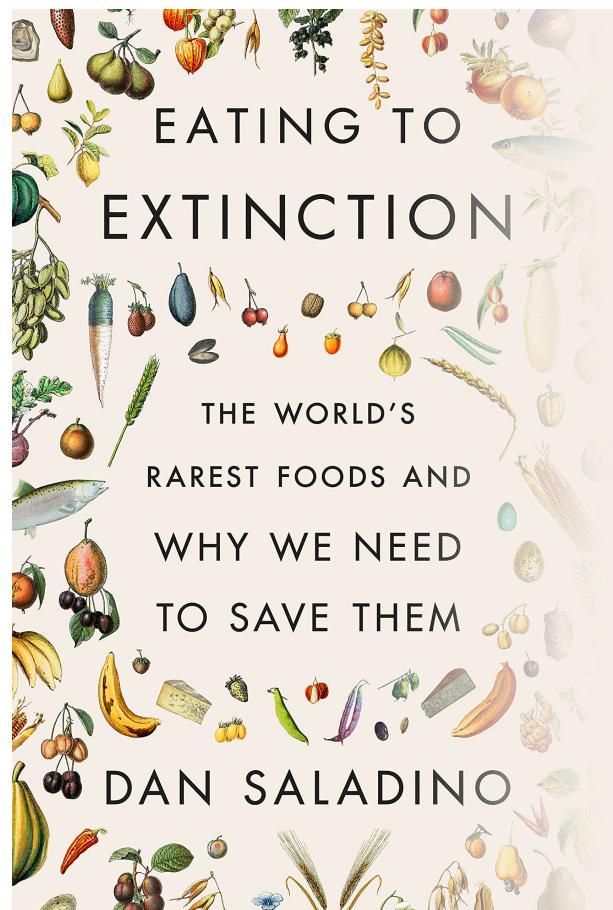
The author views endangered foods as part of the bigger crisis occurring across the planet, the loss of all kinds of biodiversity. Of the 6,000 plant species that have been eaten over time, the world now eats just a fraction of the original foods. Rice, wheat and maize now provide fifty per cent of the world's calories. This has not happened by accident, the drastic reduction in food crops is man-made and with the smaller number of crops being cultivated, the greater the risk of being adversely affected by diseases, pests, and climate extremes.

The ten chapters of this lengthy book cover in depth many food sources, cereals, vegetables, fruit as well as animals and fish. Possibly the most interesting section is on bananas. The story of bananas is well documented. However, the saga of the Cavendish banana (that we eat) is the canary in the coal mine. A warning against monocultures as every single Cavendish is a clone. While this banana is a highly prolific plant, it cannot reproduce itself by seed and therefore has no way of evolving its immune system to any new threats. Now, on several continents the Cavendish is dying, the result of being infected with Fusarium wilt, known as TR4. This is one of the many examples provided by the author outlining major problems with food crops as a direct result of declining biodiversity.

The book, one of the very best I have read for years, is a plea to consider what the past can teach us about how to inhabit the world now and in the future. As the author writes,

"Our current food system is contributing to the destruction of the planet, one million plant and animal species are now threatened with extinction. We clear forests to plant maize monocultures and then burn through millions of barrels of oil a day to make fertiliser to feed them. We are farming on borrowed time!"

Highly recommended reading, in fact, an absolute must-read!



Native Plants That Were Adversely Affected by the Storms in Early 2023

by Neville Arbury

There appears to be an upper limit or length of time that some natives can be waterlogged before serious adverse effects occur, i.e. they die! Symptoms are leaves yellowing, drooping and then falling as the plant slowly succumbs to wet feet! This is caused by a lack of oxygen to the plant roots and longer-term problems with plants obtaining nutrients.

To avoid this happening is not easy when dealing with one in one hundred year floods. More often in Auckland, home gardeners are faced with long, dry summers. The possibility of flooding backyard gardens can be quite a remote proposition. Raising plantings to be safe from flooding can increase the risk of plants drying out over hot summer months. This can be alleviated by mulching gardens over the summer months with crushed bark and/or compost. Plants adversely affected in my garden were:

- *Cyathea dealbata*, 'Silver Fern' – Very surprising a ten-year-old specimen lost all but two fronds.
- *Corokias* – Several species died very quickly.
- *Pseudopanax lessonii* – Being a coastal species, they hated wet feet and died quickly.
- *Pittosporum umbellatum* – One of my favourite pittosporum species. Leaves were drooping very quickly.
- *Pseudowintera colorata*, 'Horopito' – A superb specimen in my garden for over ten years sadly died quickly.

I should note that my backyard was a lake for a number of days. The water table was so high, the soil could no longer absorb excess water quickly causing the death of the plants listed above. Fortunately, numerous other natives survived the flooding. As the water receded, I added fresh compost around the roots of the trees to replace soil that has been washed away.

A Rare Native Plant for Sale at the Greytown Market

by Neville Arbury

On a recent visit to the Wairarapa, while perusing an excellent Saturday market in Greytown, I discovered a large stand of young *Metrosideros bartlettii* plants. This was probably the last place in New Zealand I would have expected to find specimens of this rare plant. What was even more intriguing, they appeared to be grown from seed because of the multi-branched habit. I enquired about the origin of the plants. I was informed that the plants had been purchased as very small tube lines and grown to a saleable size. The woman selling them was well aware of the rare nature of the plant but was astonished when I informed her of the dimensions of our *Metrosideros bartlettii* at Fernglen. This was an excellent reminder that you never know what you will find at a local market!



Metrosideros bartlettii at Fernglen

Some Further Gems in the Old Garden at Fernglen

by Neville Arbury

- *Hibiscus trionum*: One of the two native species, every summer there is a proliferation of seedlings germinating in the paths and beds throughout the lower part of the old garden. The small black seeds that are quite hard remain in the soil and germinate every year in late spring/ early summer. While the species is not on the endangered list, you very seldom see it growing naturally. The plant has been variously described as an annual or a short-lived perennial.
- *Hebe obtusata*: Behind the alpine house, underneath a female *Elingamita johnsonii* is a specimen of the rare *Hebe obtusata*, one of Auckland's few endemic hebes. Only found in a limited area on Auckland's west coast, from the Manukau Heads to Muriwai. This particular hebe has a prostrate habit and glossy green leaves. Sadly, *Hebe obtusata* is rarely seen in cultivation nor is its close relative *Hebe bishopii*, another endemic Auckland hebe. Like most hebes, comparatively easy to propagate from cutting, therefore they should be available for native plant lovers.



Hibiscus trionum



Hebe obtusata at Fernglen

- *Leptinella rotundata*: As you enter Fernglen, at the base of a cluster of *Astelia chathamica*, a population of *Leptinella rotundata* is spreading rapidly in all directions. Sadly, the native ground cover is on the endangered list as only small populations can be found on the west coast of the North Island, from Bethell's Beach to Cape Reinga. Most of the locations are very small two metres or less. The continuing decline in natural occurrence is the result of possums browsing, coastal erosion, crowding and shading by other plants and removal by plant collectors!



Leptinella rotundata at Fernglen

Possibly our Strangest Native Plant, *Dactylanthus taylorii*, Woodrose or Flower of Hades

by Neville Arbury

Woodrose is a parasitic plant found in various sites throughout the North Island. Being parasitic the plant has no green leaves or roots of its own and therefore cannot produce its own food. It attaches itself to the roots of about thirty tree and shrub species and acquires nutrients from them. Woodrose is the only parasitic flowering plant in New Zealand.

While the plant exists underground, when it is flowering, small clusters of pink-brown flowers emerge among leaf litter producing a distinctive musky fruit-scented nectar. This scent attracts short-tailed bats which drink the nectar and at the same time pollinate the flowers. The only ground-flowering plant pollinated by a bat.

Māori traditionally knew the plant as te pua o te Rēinga, the flower of the underworld. The plant is currently considered a nationally vulnerable species as rats and possums damage the flowers preventing pollination. Initially, plant collectors contributed to the decline of woodrose as plants were dug up, boiled, varnished and sold as a curiosity. Woodrose was discovered in March 1845 by reverend Richard Taylor who has been described as a missionary, naturalist and writer.



Dactylanthus taylorii with peka-peka / short-tailed bat (credit: David Mudge, Nga Manu Trust)

One of Our Matais at Ben's Ridge Finally Growing Up!

by Neville Arbury

In 2003 when the main plantings were carried out at Ben's Ridge, two very small juvenile matai plants were part of the collection. *Prumnopitys taxifolia*, matai or black pine is found throughout both islands of New Zealand with a very distinctive juvenile form. Young trees often appear half-dead, with the branches intertwined.

Over the years the matais have continued to grow (rather slowly) and until recently there has been no sign of adult foliage. However, starting late last year, one of the two specimens has shed its juvenile foliage and the leaves are now a deep green colour, somewhat similar to the leaves of miro. Strangely, the other matai planted at the same time and of a similar age has shown no sign of adult foliage. From our experience at Fernglen, we can safely determine that juvenility in matais lasts twenty or more years.

The Role of Te Papa in Plant Identification

by Neville Arbury

Te Papa holds a treasure trove of more than 1.5 million natural history specimens gathered over more than 150 years since the museum came into existence (The Colonial Museum in 1865). Before the museum was established all species of significance were sent to Kew and other great museums of Europe, where scientists would describe the new species in books and journals.

One of the most significant parts of Te Papa's natural history collection, **is** the approximately 5,000 type specimens of plants. This is by far the largest plant collection in New Zealand. Type specimens are those specimens on which a scientific name is based.

The Te Papa herbarium staff collect native and adventive (non-native) plant species from each district in which they grow. These specimens provide a record of what grows where in New Zealand and show how the physical characteristics of the plants vary in time and place. Sadly New Zealand now has more adventive species than native plant species.

Possibly the most interesting part of the plant collection at Te Papa is the Banks Solander exhibition. Here there are 541 sheets of plants collected between 1769 and 1770 by Joseph Banks and Daniel Solander, the senior naturalists on board the Endeavor. This marks the beginning of taxonomy in New Zealand. The collection represents about 316 of the approximately 350 vascular plant species collected. Importantly, they show us what plants were growing in lowland habitats when Europeans first arrived in New Zealand.

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: fernnglen.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: fernnglen.nz@gmail.com

or phone: 021 236 5800



Botanical Art at Fernglen

Interested?

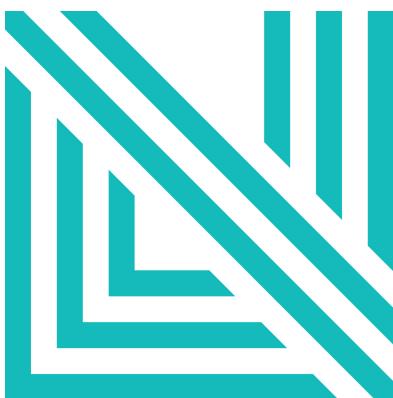


contact
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Naylor Love

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

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