FERNGLEN NATIVE PLANT GARDENS NEWSLETTER

Winter 2019



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Curator winter report

by Steve Cook

Ben Townsend's house

Ben's house is gone, demolished. One more little part of New Zealand's history erased. Each such loss is a sad thing, but only to the small number of people who remember why it ever meant anything. However, when added to thousands of such recent deletions from our region's history, the cumulative effect is monstrous. Ben's old bungalow stood on the southwest corner of Waipa Street and Balmain Road, Birkenhead for more than 100 years until it was demolished in May 2019, after it had been badly damaged by fire. This was once the residence of Ben Townsend. Long before Balmain Road was filled with houses, Ben kept cattle in paddocks along Balmain Road, backing onto Fernglen. Ben's Ridge, on the eastern side of Fernglen was part of those paddocks and was named after him.

A pretty little shrub: Pittosporum pimelioides



Pittosporum pimelioides

Fernglen has one example of this Pittosporum in the rock garden area, on the north side of the oddly-shaped Hauraki Gulf ngaio, *Myoporum laetum* tree. I photographed it toward the end of its flowering on 24 June. Soon after that, I was interested to see some comments from Maureen

Young in the July Newssheet of the Auckland Botanical Society. Maureen had reported being pleasantly surprised to see several fine examples of *Pittosporum pimelioides* growing nicely in a very unexpected place, as part of the very attractive landscaping of a garden in Auckland's CBD, on the northwest corner of Albert and Fanshawe Streets. Whoever planted that garden clearly has a good knowledge of NZ plants. To clarify, for those who are old enough to remember it, this is at the corner of the building which was once called the Downtown Shopping Centre, usually simply called 'Downtown.' Although I wouldn't normally suggest going into this concrete jungle, I can highly recommend taking a bus trip to Downtown and soaking in the surprising juxtaposition of this very nicely landscaped small garden in such an unlikely place. The garden has some interesting use of ground covers, such as Hydrocotyle and Microsorum.

Fernglen's Alpine House and the Tararua Tramping Club

Muriel Fisher loved alpine plants and although it was a struggle to grow them through Auckland's hot and humid summers, Muriel persisted and developed much knowledge of how to grow alpines at Fernglen. Muriel first developed her love of alpine plants while tramping in the Tararua Ranges, having joined the Tararua Tramping Club (to much disapproval from her parents). I recently heard an interview of one author of a new book: *Leading the Way: 100 Years of the Tararua Tramping Club*. The author spoke about the early days of the club, when some brave young single women ignored disapproval by families and general society, and went tramping through the ranges wearing shorts! and even worse, they slept in the same tramping huts as single men! So, driven by her intense interest in alpine botany, our Muriel was definitely one of those early pioneers who paved the way for young single women to be allowed to go tramping. Muriel, born in Wellington, was more fortunate than a young Aucklander by the name of Edmund Hillary. He applied to join the club but he was rejected because, being an Aucklander, he didn't live in the 'right' area to qualify for Tararua Tramping Club membership!

Fernglen's Alpine House appears to be well-sited, as there have been many times when a bitter southerly wind has been passing on through, and I have thought to myself: 'surely this has got to be the coldest place in all of Auckland.' Muriel regularly obtained, from her alpine contacts, new additions to the alpine collection, and the Alpine House is now at a stage where, although a difficult task, we need to once again obtain more alpines. We also need to reconsider the existing plants in the Alpine House, especially one over-sized wharawhara, *Astelia banksii*, a coastal and lowland specie, often found growing in the dry habitat beneath coastal pohutukawa trees. As shown in the photo, this particular wharawhara has become a good example of a plant doing far too well. Instead of being a part of the landscaping, it has now become the main landscape feature. We will have to move it out. Our Chair, Kelly Hayward has supplied a photo of the Alpine House soon after it was first planted. An interesting comparison!



Old photo of Alpine House by Kelly Hayward



New photo of Alpine House (dominated by Astelia)

Anyone for Wood Ear mushroom soup?

These Wood Ears *Auricularea cornea*, are only found on dead wood during wetter times of the year. At Fernglen there are currently a lot of Wood Ear growing, mainly on dead Lacebark *Hoheria populnea*. A Chinese settler from Guangdong, Chau Tseung (nicknamed Chew Chong) was well known for collecting Wood Ear and exporting it to China from Taranaki, mostly in the later 1800's. No doubt Chau Tseung would have dried the ears before export, as they reduce greatly in volume when dried. Later, when soaked in water the fungus returns to its full size. Many people collected Wood Ear as a source of income, and sold it to Chau Tseung. It became a very important part of the Taranaki economy. There were 5 separate years when Taranaki Wood Ear exports exceeded the value of export butter.



Wood ear colony on a dead kanuka tree

Strange weather

This month I have left my weather comments until last to give Ben Townsend's house top priority. Like Malcolm Fisher before me, I am drawn to commenting on the nature of recent weather. To some people this 'weather fascination' may seem a rather odd habit, but having mostly worked outdoors for 20 years, a person can't help being very much aware of the elements and tending to share that awareness with others. I will remember 2019 as the year we had no autumn. The summer simply carried on, with only gradually reducing temperatures and minimal rainfall all through March April and May. After six months of summer, colder winter weather finally arrived at the end of May to early June.

One result of this extended summer at Fernglen was the weeds didn't slow down, meaning more weeding work for our dedicated Fernglen volunteers. People carried on swimming in the sea at places like Takapuna Beach for 2 months longer than in the past, and when time came for a mid winter swim, the sea was still much warmer than expected. In May I saw sparrows resume nest building in roofs, only to desist early in June when the cooling weather dampened their nesting instinct. At Fernglen the kowhai trees, usually of semi-deciduous habit, are still in full leaf and kereru are already nibbling on the fresh young shoots. Many of the trees are putting out lush and early spring growth. If we do get a hard frost there is going to be a major 'reset' with a lot of browned off young shoots and sad-looking burned trees.

In March a stray tomato seed germinated beside a potted Kafir Lime on our deck. I expected this optimistic tomato to fail when cold weather came. But, as the photo shows, the strange winter tomato grew and grew and as at 19 July we have not even had our first frost and the out-of-sync tomato plant is still growing rapidly and has overwhelmed the poor Kafir Lime.

The lack of a normal autumn and the mild winter is a major problem for those who claim global warming is just 'fake news' and not a real thing.



Crazy winter tomato

Kotare: A kingfisher attacked by sticky parapara fruit

I found a kotare (kingfisher) wriggling among last year's sticky fruit of the parapara tree, Pisonia brunoniana, beside the old driveway to the bare space on which the ill-fated Fisher residence once stood. The feathers of this hapless kotare, native to NZ and Australia, were so well-glued by the strongly adhesive parapara fruit, to wriggle was all the terrified bird could manage. If I had not passed by and spotted it, I'm sure a domestic cat would soon have killed this unlucky bird. I grabbed my secateurs and after 10 minutes of cutting and prising glued feathers apart, I launched the much-trimmed kotare high into the air and it flew strongly and rapidly away from Fernglen.

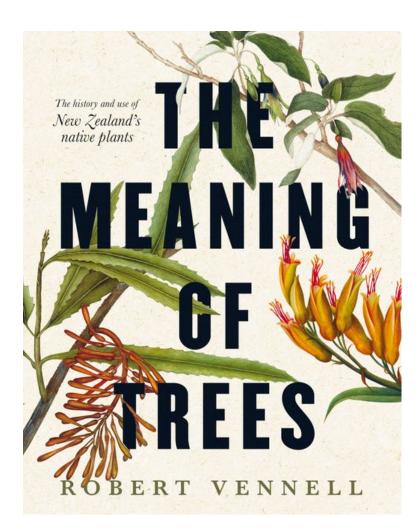
Many people say the parapara in their garden is fine, as it hardly ever catches any birds. A smaller number of people say their parapara did kill a lot of birds, until they removed the tree. A visitor from Auckland Botanic Gardens told me if the parapara tree is sited on a bird flyway, such as Muriel's old driveway, that increases the odds that many small bird victims will be caught. The Fernglen volunteers are putting a lot of work into enhancing bird habitat at Fernglen, baiting 21 bait stations four times per year to keep rat numbers very low. Fernglen committee member Jill Sye set up a pest control 'halo' area surrounding Fernglen, with residents baiting or trapping for rats plus trapping for possums. So, does it make sense to tolerate trees which have adapted to using birds to transport their seeds, but actually kill many of those birds in the process? Fernglen still has some parapara trees but I have removed most of them, especially any which appear to be growing on a bird flyway.



Glued kingfisher

Book review - The Meaning of Trees by Robert Venell

by Neville Arbury



To quote the 'blurb' on the outside cover of this publication

"a treasure trove of unique, bizarre and wonderful plants, the Meaning of Trees explores the myriad ways in which New Zealand's extraordinary flora has been used in cuisine, crafts, medicine and culture, providing everything from seafaring canoes and tasty treats to medicinal marvels and sacred objects. Once you learn the stories behind these fascinating plants the bush will never look the same again."

There can be no higher praise for a new publication on New Zealand native plants than to say I learnt so much from reading this book. It is simply loaded with fascinating information about what the author terms the interesting and unusual, focusing on plants that have the most diverse and exciting stories to tell.

A comprehensive introduction covers the arrival of the first Polynesians and how the new, strange and unusual plants in Aotearoa held the key to their survival, the arrival of Pakeha is well documented with notes on early botanists through to the modern interest in New Zealand native plants and their conservation. The book is organised into a series of sections under the following headings:

- Rongoa Rakau, a plant that has been used for medicine and for healing
- Bush Kai, plants that have been important sources of food
- Jurrasic Giants, Kauri and the Podocarps
- Trees of the Gods, trees that serve as powerful symbols or that have ceremonial uses
- Travellers Beware, clinging, sticking and stinging plants
- Fringe Dwellers, plants found around the coast and seashore
- Botanical Oddballs, weird and unusual looking plants with bizarre flowers and weird growth forms

Under each of these headings, there is a detailed discussion of particular plants including their taxonomy, unusual features and medicinal and edible uses.

The entire publication is well illustrated with superb photography and hand-drawn images. This book is an outstanding addition to the ever-increasing amount of literature concerning our native plants. I highly recommend it indeed.

Some of our lesser-known native fuchsias

by Bruce Goodfellow

Fuchsia perscandens is a semi-trailing climbing shrub with a very spreading habit. This is not a very attractive plant and not so conspicuous in the bush as, when in its dormant state, it resembles a mound twigs. This plant is not native to the warmer North Island climate but is found in several lowland bush areas on the east coast of the South Island. The strong main stems can grow up to 5cm in diameter but have few branches with pale brown, flaking bark. The leaves are rather sparse and are pale green on the upper side and whitish-green underneath. The flowers resemble those of *Fuchsia exorticata* but are shorter and not so slender. The tube is green shading into a reddish-brown at the base. The corolla, which is small, is brownish-purple. The berries, which are about 6mm, ripen to a dark purple shade. This plant was first reported by the botanist Joseph Hooker in 1867.

Fuchsia colensoi is another interesting New Zealand species, discovered by Joseph Hooker, he names it after William Colenso, a missionary pioneer and a keen botanist. The flowers are similar to those of the *Fuchsia exorticana* in colour and of a similar habit but do not mature to the same deep colours and the berries are not prolific. The plant is much smaller than *Fuchsia exorticata* and grows as an erect branching shrub with long straggly branches. The leaves too are smaller, more rounded and less pointed. Colonsoi seems to prefer a cooler climate as it was mainly discovered growing on the eastern side of the South Island and no further north than the Waikato.

Fuchsia procumbens is one of our most interesting. This plant was first discovered by Gordon Cunningham in 1834, when he was in New Zealand searching for New Plants for Kew Gardens. At the time he found this plant, it was in flower, growing in sandy soil close to the seashore at Matauri Bay in Northland.

Fuchsia procumbens varies in many ways from all the other Fuchsias. As its name suggests, this plant is procumbent, a trailing creeper with slim vines extending many metres and it produces roots from the leaf nodes as it grows along the ground. It is found naturally in the North Island and grows in areas close to the coast above high tide mark and in low lying bush.

The leaves are unlike any other fuchsia as they are either roundish or heart-shaped, with slender stems. If these plants are growing in a shady area, the leaves are darkish green but if in a sunny position, they are much paler. The flowers are quite small but prolific and they grow directly upward but do not have a corolla. They have a greenish-yellow tube with sepals which are greenish on the outside and purple-red on the upper surface. The stamens have brilliant blue pollen unique to pacific region species. Procumbens flowers are pollinated by insects rather than bees. The flower is followed by a berry which is like a small oval plum and grows up to 18mm, is full of seeds and is edible.

A New Zealand rugby team plants mangroves in Fiji

by Neville Arbury

On a recent trip to Fiji to play rugby against another New Zealand team, the Chiefs, the Crusaders Rugby Team, along with some other visiting groups planted 10 thousand mangrove seedlings in coastal areas of Fiji that are threatened by future rising sea levels.

The mangroves are to provide a buffer for storm surges as well as creating a habitat for marine species. As a long term advocate of the importance of mangroves in many coastal areas, I applaud the actions of this rugby team. Unfortunately here in New Zealand, Regional Councils are still giving permission for the clearance of mangroves. Of course, the mangroves will return as clearing the existing plants does not address the question of why they are there in the first place ie sediment runoff from farms that are adjacent to rivers and/or estuaries.

The governments aim to plant 100 million trees is a perfect opportunity to cover out extensive riparian plantings throughout the country to help reduce the flow of sediment and nutrients into our waterways.

Congratulations to Hugh Wilson on receiving an honourary PhD

Congratulations to Hugh Wilson who on May the third was awarded an honorary PhD from Lincoln University. The citation referred to Hughs international reputation as a botanist, his works on the plants of Rakiura and Aoraki National Parks and his most recent works on the botany of Banks Peninsula. It was my pleasure to show Hugh around Fernglen a few years ago. His publication *'Small Leaved Shrubs of New Zealand'* has been a constant reference point for me over the years, especially when identifying some of the lesser know coprosmas. On behalf of the Fernglen committee, well done Hugh!

Hebe barkeri - thriving at Ben's Ridge

Described as the most tree-like of Hebes it is found growing naturally in most forest on the Chatham Islands. Growing up to thirteen metres the 'trees' status is nationally critical, the result of habitat destruction and grazing of young plants. Fortunately, there is a reasonable population growing in a reserve on Pitt Island, part of the Chatham group. The specimen at Fernglen has now been growing for over 5 years, is multitrunked and over 2.5 metres high. Like many Chatham Island plants, it requires considerable amounts of water over dry summer months. The plant flowers profusely over summer months, pale mauve to white, and the flower is similar to that found on the common *Hebe stricta*. We have planted a specimen of *Hebe parviflora* in the same area as the Chatham Island Hebe as this is also a tree-like Hebe growing up to seven metres! View them both at the top part of Ben's Ridge.

A quick look at our native termites

Yes, we have native termites, in fact, three endemic termite species, including *Stolotermes ruficeps* that inhabits damp wood and *Kalitermes brouni* that is a dry wood termite. All native termites can be found in native and exotic dead and decaying trees, logs and stumps throughout New Zealand. Fortunately, native termites are not invasive and rarely attack timber in use.

Termites have an essential role in the forest ecosystem as they enhance the decomposition of wood thereby returning the nutrients to the soil. In late summer, early autumn mature termites grow wings, swarm, mate and disperse over quite short distances. When they have discovered a satisfactory new site they bite off their wings and settle. In a similar fashion to other insects, eggs hatch into nymphs, some will look after the queen, others become worker termites extending tunnels while others become soldiers termites with enlarged heads and jaws, perfect for defending the colonies.

Termites, strange as it seems, have a problem with nutrition. With wood being the only thing on the menu, it lacks the essential nutrient nitrogen and a carbohydrate source, cellulose is hard to digest. However, bacteria and protozoa that live in the termite stomach have the ability to fix nitrogen for the termites. As well other microorganisms break the cellulose and wood into simple sugars and ferment them, this is then available to the termite for energy. Ingenious!!

The bamboos of Vietnam and how they are used

by Neville Arbury

On a recent trip to Vietnam, I was fascinated by the dramatic stands of bamboo and the multitude of uses of bamboo by the Vietnamese people. While there are many stunning tropical trees growing throughout Vietnam, bamboo stands out with its distinctive upright growth, some growing up to 30 metres! To ride your motorbike through a bamboo forest is an experience of a lifetime! More commonly the bamboo plants are found growing amongst other tropical plants as part of the undisturbed native vegetation. In towns and cities bamboo is extensively utilised in ornamental plantings, usually the smaller growing forms.

Vietnam has many species of bamboo including *Bambusa spinosa*, *Bambusa vulgaris*, *Bambusa tuldoides*, *Dendrocalamus patellaris* and *Dendrocalamus giganteus*. Taken together the various species of bamboo cover about 1.3million hectares!

The uses of bamboo are almost endless, the leaves are used as fodder for cows and buffalo, the branches are used as fences, the old trunks are used as poles and rafters for houses, young plants are used to make ropes, the shoots are eaten (yummy) and the roots make excellent brushes.

Vietnamese women clean rice before cooking in a bamboo basket and they stir the cooking rice with large bamboo chopsticks. At mealtime dishes are often set out on a large tray of woven bamboo, the food is eaten with bamboo chopsticks and after the meal teeth can be cleaned with bamboo toothpicks.

Bamboo is a simple but excellent material for construction in Vietnam. Bamboo houses are cool and have excellent ventilation. In rural areas, houses were traditionally constructed entirely of bamboo.

Farmers rely on bamboo to make many of their traditional farming tools. They made their own furniture, tables, chairs, beds from bamboo. Household utensils including fans, brooms and drying racks were all made from bamboo. People fish with bamboo rods and build fish traps with bamboo. Villages still use bamboo medicine for numerous ailments. There is surely no more versatile plant in the world.

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

Pest Free Kaipatiki

Did you know Pest Free Kaipatiki Restoration Society are located in the Fernglen education room office? Check out news about pest plants, kauri dieback prevention, pest animals and events at <u>www.pestfreekaipatiki.org.nz</u>

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

Botanical Art at Fernglen

Interested?

contact Lesley Alexander 021 161 7070 or

email lesley.alexander.smith@gmail.com