



Waikato Botanical Society

Newsletter

No. 41, November 2017

President's Report

Where has the year gone? The A.G.M seems like just yesterday.

It's been a busy couple of months.

We are now on Facebook! Thanks Rebecca for getting this set up. We have 43 likes.

Our website blog has some reports of trips recorded not long after they happened. Thanks Catherine for keeping this ticking over.

Our nomination of Paul Champion for the Allan Mere Award had been successful. It has been a case of third time lucky. The presentation will take place on 7 December and this will double as our Christmas do. Thanks to Kerry Bodmin for doing most of the organising of this. We would like some help with the setting etc. on the night please get in touch with Linda Watson if you can help watsonlinda092@gmail.com

The committee approved a \$1000 assistance grant for a Waikato University Student, Monique Hall, to study *Dactylanthus* on Mt Pirongia. We have worked with the University of Waikato and the Pirongia Restoration Society to make this happen. One of the conditions of the grant is that Monique will come and talk to the Botanical Society about her findings. Thanks to Wyne, Thomas and Catherine for working on this.

I went to the bank recently to enquire about becoming a signatory to the Bot. Soc. Bank account and found out that our account is not compliant with new anti-monetary laundering policies so we are in the middle of sorting that out. Thanks Monica and Liz for coming to our rescue on this (Monica and Liz probably didn't realise they were still signatories!)

Thanks to Linda for getting the newsletter off the ground again and hassling me for this report of mine.

I have been out on some neat trips in the last 6 months. The highlight for me was the recent Labour Weekend trip to Waitete Bay. Thanks Dell for putting up with us for the weekend and organising some interesting trips.

We are also starting to think about trips for next year so if you would like to lead a trip or have an idea where you would like to go then please get in contact with Antoinette.

By the time you read this newsletter I will be on another on my southern South island pilgrimages so I won't make it to the Allan Mere award evening or any of the remaining trips this year.

I will be back after Christmas. See you then
Kerry.



We wish you well, Kerry. Have a wonderful pilgrimage and we will look forward to hearing all about it in 2018.

Election of Officers 2017

President Kerry Jones km8j1s@gmail.com

Secretary Wyne Johns wajohns@gmail.com

Treasurer Mike Clearwater m.clearwater@waikato.ac.nz

Trip Coordinator Antoinette van der Weerden antoinette@ihug.co.nz

Webmaster Catherine Beard cbeard@doc.govt.nz

Committee members: Kerry Jones, Wyne Johns, Mike Clearwater, Antoinette van der Weerden, Catherine Beard, Thomas Emmitt, Linda Watson, Rebecca Yeates

Linda Watson (newsletter, blog reports) watsonlinda092@gmail.com

Rebecca Yeates Facebook page

Kiri Joy Wallace, Rachel Thomson (Threatened Plants Garden)
rethomson106@gmail.com

Events 2017

Whareorino Revisited

Combined with Rotorua Botanical Society

Jan 28-30

Leader: Thomas Emmitt



View of the landscape of Kelly Creek wetlands



Steuart Russell Reserve



Drymoanthus adversus



A further view of Kelly Creek

Short Report on Trip

The group visited the Awakino Scenic reserve on the Saturday. Awakino reserve is a hard beech forest with a coastal influence.

On Sunday the group took a look around the Steuart Russell Reserve, a Native Forest Restoration Trust Reserve. This reserve contains the most northern hard beech dominated forest type in New Zealand and as well a few coastal oddities.

The reserve has been impacted on majorly by deer, goats and possums, with species such as kohekohe and kamahi showing signs of being heavily browsed.

On Monday the group had a look around some recently protected wetlands on a local farm. The wetland had been recently fenced and was showing good signs of regeneration.

Thanks to Thomas Emmitt for a great weekend.

Raewyn and Geoff Foreman's QE11 Covenant

February 25 2017

Species List is completed and can be read on the Waikato Botanical Society Website

Goldfields Rd QEII (Foreman)

Author(s) G Donaghy Date:25-02-201 Map: BC35 1838640 5858800

Waingaro Reserve

May 21 2017 Led by Wayne Bennett

(Species list compiled by Kathryn Roe and Graeme Jane on Waikato Bot. Society web page)



Observing drupes of *Coprosma rhamnoides*

After a dismal Saturday weather wise, Sunday proved to be ideal for our trip to Waingaro reserve. Thirteen of us met at the B.P service station at Ngaruawahia and carpooled up the Waingaro Road stopping at a small church on the right hand side about 5 km. past the Waingaro Hot Springs.

After a little of the history about the regenerating bush we set off slowly up the loop track. The bush circuit started at the front of the church and we ambled up the river bed. The canopy was dense,

mostly regrowth of straight tall totora *Podocarpus totora* pushing upwards to reach the light. We made an estimation about how old they were 80-100 years ?

Tall matai trees were also seen. Under the canopy a variety of regenerating species dominated by *Coprosma rotundifolia*, *Melisythus micranthus*, *Libertia* species and parataniwaha covered the ground.

A short distance along the track we encountered a steep bank covered in a mass of *Rhabdothamnus solandri*.



Libertia ixoides seeds

We started climbing slowly and the vegetation changed. At the lunch spot we sat on dry, dead fronds under a stand of tree ferns then climbed to a superb stand of kohekohe.

Birds were a highlight. We spotted native wood pigeons, tui, bellbirds, grey warblers and fantails.

It was evident the birds were doing a brilliant job of bringing in new species and regenerating the bush. We came across a large glade of young nikau plants but very few mature species.

A few large rimu were now spotted

Of interest was the putaputaweta with a puriri moth still “at home” and many traditional empty holes on it’s trunk



- Habitat of puriri grub
- Distinctive bark of Matai
- Native wood pigeon in Kohekohe

Weeds were predominant along the circuit the main species being *Tradescantia fluminensis* and *Ligustrum*. We were continually asking ourselves the question “would they eventually eliminate themselves or did they need a helping hand from man?”

It certainly was a patch of native regenerating bush well worthy of another visit.

The sharing of ideas, range of expertise, and pooling of knowledge and experiences meant we all learnt such a lot and had an enjoyable day. **A big thankyou to Wayne Bennett for taking us.**

The Waikato Botanical Society

The society was formed in 1979, with the aim of encouraging the study of botany, particularly that of New Zealand and the Waikato region.

[Join the society](#) to:

- Share and expand your botanical knowledge with other like-minded enthusiasts
- Help conserve the indigenous flora of New Zealand
- [Enjoy field trips](#) throughout the Waikato region and beyond, exploring varied habitats from wetland to forest, coastal to montane
- [Attend regular meetings and talks](#), with guest speakers on a wide variety of fascinating topics
- Receive our [regular newsletter](#) and emailed announcements to stay up-to-date on botanical events and happenings across the region

Check out the website for more information. Check the Blog for more information on trips and species lists.

Hamilton Gardens

Mini Field trip

Sunday, May 28, 2017

Led by Kerry Jones and Antoinette van der Weerden

The field trips were held in conjunction with the botanical Gardens of Australia and New Zealand day happening at the Hamilton Gardens.

Kerry Jones and Antoinette van der Weerden teamed up and ran two mini field trips talking about the native plants at the entrance to the Hamilton Gardens.

We didn't have to walk far. There were many good examples of our native trees right by the entrance.

The participants seemed very keen to learn more about our native trees, ferns and fungi.



Discussing the weeping nature of the native broom, Carmichaelia australis

Some of the interesting discoveries were miro and matai growing almost next to each other so one could closely observe differences in leaf shape and habit.

kahikatea berries in close range (we even got to sample one), Chatham Island astelia, native broom, a huge ngaio, rewarewa and titoki with fruit, and a stand of mature lancewoods.



Cup Fungi under kahikatea trees



Kerry talking about Agathis australis



Kahikatea berries

Poland Q.E.11 Trip

July, 15, 2017

Led by Dell Hood

(Species list can be found on The Waikato Botanical Society website)

After some very cold weather, Saturday proved to be a sunny, dry day just perfect for a visit to the Poland Q.E.11 bush reserve on Limeworks Loop Road, Karamu. We were joined by some members of the 'weedbuster' group and Robbie Bennett, regional representative of the Waikato/Taupo Q.E. 11 Trust.

The Q.E.11 Trust helps private landowners in New Zealand permanently protect special natural and cultural features on their land with open space covenants. The Poland's pocket of bush came under the auspices of Q.E.11 Trust in 2003.

It is a small pocket of bush, 1.47 hectares, with a few weed issues but an impressive wide diversity of native species. It is level ground bordered by a river and certainly in the winter there were considerable areas of 'ponding.'



Starting our walk / species list started

The canopy consisted of tall specimens of kahikatea, miro, rimu, tawa, rewarewa and totora.

As we walked further into the reserve we were kept busy finding the many different species.

It was interesting to see *Podocarpus halii* (Hall's totora) growing with its characteristic thinner, papery bark, and *Podocarpus totora* with thick stringy bark, growing almost side by side.



Black or White Maire ?

There were lots of maire seedlings but the jury is still out, I think whether they were *Nestegis cunninghamii* or *Nestegis lanceolata*. Very hard to tell when the mature trees seemed to be unavailable.

Thread fern/ panako/ *Blechnum filiforme* was in abundance both as a

carpet on the forest floor and climbing up tree trunks. Apparently it is the only N.Z. fern that has three different kinds of fronds: small rounded leaflets on forest floor, larger pointed leaflets and fronds when climbing, and long, thin fertile fronds like pieces of thread. (Hunt, J. and Lucas, R. *From Weta to Kauri*, Random House, N.Z. 2014)



Blechnum filiforme / Thread fern

There were lots of attractive specimens of mangeao (*Litsea Calicaris*), coprosma species, orchids, kohekohe, pseudopanax, rata, astelia, tree ferns and many more species.

There was no pest control undertaken in this reserve. The regrowth and diversity of species was exciting to see. Holly and chinese privet were the main weeds evident. The weed buster group had had a working bee and cut and pasted a large area of privet and were returning to replant native species.



Privet In piles after the working bee



Discussing what planting might take place

The sheltered lunch spot was just what we all needed to warm up and 'pretend' spring had arrived.

A delightful reserve well worthy of another visit to see new plantings and observe the growth of native plants already established there.

Thanks to Robbie Bennett and the members of the Weed Busters group for joining us and widening out network.

Waikato Botanical Society now have a Facebook page !

<http://www.facebook.com/WaikatoBotSoc/>

Click on the link and like the page to get notification.

Thanks to Rebecca Yeates for setting it up.

Lake Mangakaware

Sunday June 25

Organised by Susan Emmitt Led by Murray Davies

It was rather a wet day but the hardy souls of the Bot.Soc. continued on their trip around Lake Mangakaware under the guidance on Murray Davies. Mangakaware is a peat lake managed by Waipa District Council.

Murray explained that the aim of the Mangakaware Care Group was to return the lake and margins to a natural state and provide public access to the site. Activities have included weed control, pest control, planting and silt traps. The parties involved in the restoration programme, started in 2014, are the Waipa District Council and the Hamilton Fish and Game.



It was easy to see the devastation of the lake over the years and the already turn around with knowledge, care and planting. There were lots of exotic peat tolerant woody trees and shrubs e.g. willows, cherry trees, swamp cypress, oaks and alders. Weeds abounded. Many species were listed: gorse, blackberry and the yellow flag iris were the most common.

The lake has declined in condition in recent years. One of the aims is to improve the water quality of the inflowing catchment area.

Sediment traps have been installed on the inflowing drains to remove suspended solids and nutrients from water entering the lake. It is hoped this will enhance the biodiversity and create a much healthier lake system. The silt traps consist of a series of alternating deep and shallow sections. The deep sections will be periodically de-sludged. This material will be utilised in elevating walkways through the reserve.



Murray Davies explain about silt traps



Sediment traps will have a combined volume of 12,404 cubic metres. Waipa District Council has also installed a weir on the lake outlet to maintain minimum lake levels.

Most likely grand kahikateas stood beside this lake and it is easy to see remnants of past forests.

The community and other volunteers have been engaged in ongoing planting especially in the riparian margins.

Kahikatea, cordyline, manuka, flax interspersed with other native species, coprosma and plagianthus were all seen recently planted and growing well.



Healthy Manuka trees



Keen botanists botanising

The lake has significant Maori historical value. Three pre-historic sites of previous habitation have been discovered. In 1969 an archaeological dig found a pa site and the floor of a whare was uncovered exposing a natural fireplace.

It was another great outing and a realisation that we still have a way to go to preserve our native environment. At least there is more of an awareness now and progress in the right direction. It will be interesting to visit again in the future and to see the progress and the growth of our flora and fauna.

The Waikato Botanical Society Native Plant Garden

The garden is growing in more ways than one! Not only are the plants thriving, but the University of Waikato has also approved an expansion of the garden to include a similar sized patch opposite the current garden. Delays in pruning of the larger trees have prevented going ahead for this calendar year, but plans are being made to infill gaps in the current garden space and supplement the existing plants in the additional space next year. Planting plans have been drafted by Kiri Wallace to include a range of Waikato threatened plants, but if anyone has any suggestions of plants they would like to contribute or would like to see added to the plans please email Rachel at ret12@students.waikato.ac.nz

Thanks to Rachel and Kiri for the organising and planning of this special garden.

Mokaihaha

Sunday, 8 October

Led by Katherine Hay

On Sunday, October 18, undeterred by a somewhat unattractive departure time of 5am and rotten weather (rain), fifteen souls headed into the wet dawn at Mokaihaha Ecological Area, approximately 10 km east of Tokoroa.

Around 2137 hectares in size, the Ecological area is the largest surviving block of a once extensive mixed podocarp-tawa-kamahi forest which blanketed the crest and western fall on the Mamaku Plateau.

The Department of Conservation and the Mokaihaha Kokako Trust and volunteers are undertaking possum and rat control in the Ecological Area to help safeguard the resident native fauna. This forest is home to a range of threatened fauna including a significant population of kokako which occupy a core area of approximately 850 ha in the north-western corner of the reserve.

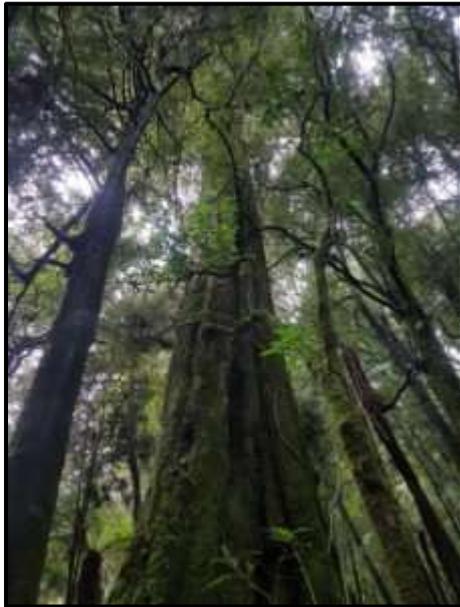


A damp but happy botanical group in Mokaihaha forest

The area of forest has never been logged, so the podocarps, rimu (*Dacrydium cupressinum*), matai (*Prumnopitys taxifolia*), miro (*Prumnopitys ferruginea*), and kahikatea (*Dacrycarpus dacrydioides*) still dominate as emergent giants from a mixed canopy of mainly kamahi (*Weinmannia racemosa*), tawa (*Beilschmiedia tawa*) and tawari (*Ixerba brexioides*). Hinau (*Elaeocarpus dentatus*) black maire (*Nestegis cunninghamii*), pigeon wood (*Hedycarya arborea*) also feature strongly. The forest understory also supports a healthy diversity of plant species including mahoe (*Melicactus ramiflorus*), putaputaweta (*Carpodetus serratus*), poataniwha (*Melicope simplex*), pate (*Schlefflera digitata*), five-finger (*Pseudopanax arboreus*), pepperwoods (*Pseudowintera colorata*) and *P. axillaris*, a range of Coprosma species and tree ferns (*Cyathea smithii*, *C. Dealbata*, *Dicksonia squarrosa*, *D. fibrosa*). Almost every trunk and fallen giant also abounds with a rich diversity of epiphytes and climbers (supplejack-*Ripogonum scandens*, bush lawyers-*Rubus* spp, native jasmine-*Parsonia* sp., rata vines-*metrosideros* spp, filmy ferns (*Hymenophyllum* spp. mosses, liverworts and lichens.

As the contour of the area is relatively flat we had to be careful not to become too botanically distracted in the dull

light and falling rain; relying on marked bait lines to eventually guide us back to our starting point on the western boundary of the reserve.



One of the many giant podocarps in the Mokaihaha Ecological Area (this one is a kahikatea)

The trip was not only enjoyable from a plant perspective; much to our delight it was the rare treasure of kokako song that accompanied us early into our walk. Over the course of the day kaka, whitehead, grey warbler, morepork and even a black-backed gull) made themselves known.

Thanks to Katherine Hay (Project Coordinator Mokaihaha Kokako Recovery Project) for organising the trip and keeping an eye on wandering botanists!

An Exciting Summer Scholarship Project .

The Waikato Botanical Society in conjunction with the Pirongia Restoration Society is funding a student, Monique Hall to undertake research into *Dactylanthus* on Mt Pirongia this summer.

Outcomes to be achieved will include identification of the flowering period, identifying the pollinators and reviewing previous observation and work carried out so far on Pirongia Plants.

We will be looking forward to hearing about the findings next year.

Dactylanthus taylorii is a highly unusual plant and holds a special place in New Zealand's indigenous flora as the only fully parasitic flowering plant. This fascinating plant grows as a root-like stem attached to the root of a host tree. The host root moulds into the shape of a fluted wooden rose. For this placenta-type attachment the *dactylanthus* draws all its nutrients. It is currently reared as being in serious decline. A D.O.C. recovery plan is in action

Maori name: pua o te reinga.

www.doc.govt.nz

Labour Weekend Botanical Retreat

Waitete Bay, Coromandel

Led by Dell Hood

A second amazing Labour weekend exploring a small part of the Coromandel Peninsula.

Dell would like to thank everyone who made the long trip for Labour weekend to the northern Coromandel. Once again Dell and Ron were the best of hosts, providing accommodation and organising interesting walks into new forest areas with locals to guide us.

There were nine people that stayed at the base at Waitete Bay, including two who even made the longer trip from Rotorua, while another four stayed elsewhere. Three locals guided us over the two day trips, entirely on private property (with permission)

On Saturday, day 1, we followed tracks from Waitete Bay over the ridge into mature forest in the Colville catchment where our guide took us to an abandoned kiwi nest site with a reasonably intact eggshell remaining. Returning to base we traversed through an extensive grove of regenerating kauri, crossed a stream and headed steeply uphill intending to reach the road but, oh dear, we were further S.E. than intended and it required a reasonable bush bash to get on to the track which led us back to base.

Thanks to Kerry and his trusty GPS, and to the neighbours for having previously marked a route from the stream to their cottage.

On Day 2 we travelled through Colville and then took the road to Waikawau Bay on the eastern side of the peninsula. Two local environmentalists met us and guided us into the hills behind the bay.

We followed a small river and then climbed up to the lunch spot...a rather prominent rock with a beautiful view of Waikawau Bay and surrounding forest below.



The welcome rock which was our lunch spot

We encountered a range of vegetation types and, of course, we were always on the look-out for those special plants.

A large healthy ground plant of *Rubus australis* (bush lawyer/tataramoa) was noted. Probably usually seen climbing this specimen was a large, sprawling 'mound.'



Viewing *Rubus australis*

A strong and pleasant perfume announced the presence of *Alseuosmia macrophylla* (toropapa). We were lucky to be able to see some flowers in situ.



Alseuosmia macrophylla flowers

We walked noting many species, in fact, considering this was a stand of regenerating forest, approx. 50 years old, there were a surprising number of different species.

Beilschmiedia tarairi (taraire), *Beilschmiedia tawa* (tawa), *Agathis australis* (kauri), *Phylloclades trichomanoides* (tanekaha), *Dacrycarpus dacrydoides* (kahikatea), *Dysoxylum spectabile* (kohekohe) and even a small stand of *Nothofagus truncate* (hard beech, tawhairaunui) were all observed.

A considerable portion of the trip was on routes rather than on tracks, making this trip a little more challenging than anticipated, but we all thoroughly enjoyed the experience of feeling like being lost but always finding a track of sorts.

We found the stream bed again and crossed it numerous times. The vegetation changed again and we discovered varieties of ferns, glades of *Rhopalostylis sapida* (nikau) orchids, *Carmichaelia australis* (native broom) and lycopods.



Our guide showing us *Carmichaelia australis*



Phlegmariurus varius/ Hanging Club moss

Usually found as an epiphyte hanging on a tree but in this case found as a clump on the forest floor

There has been extensive trapping done in both locations we visited and the benefit to the environment is obvious.

It was a pleasure to see such well-preserved forest so close to this popular beach with its huge D.O.C. campsite.

We were back to our leader's home by 1600 where Wayne produced very welcome hot drinks for all.

Day 3 was very wet, which made the prospect of another walk less appealing and the visitors opted for less stressful trips home and plans for various diversions en- route.

Our thanks to Nicole on Day 1 and Wayne Todd and Kathi Parr on Day 2.

Spectacular Site

This year *Olearia rani* was in full flower and made a spectacular display scattered through the forest en- route from Coromandel to Whangapaoua. Highway 25



Olearia rani in full bloom/ L.Watson

Allan Mere Award

The Allan Mere Award is awarded by the New Zealand Botanical Society to outstanding botanists to acknowledge their contribution and work.

It was originally presented to the former DSIR Botany Division by the late Dr Lucy Moore in 1982 to commemorate the 100th anniversary of the birthday of Harry Howard Allan - the first director of the former DSIR Botany Division, and author of the first volume of the DSIT N.Z. flora series.

With the demise of the DSIR Botany Division the award was passed over to the N.Z. Botanical Society. It is awarded to botanists nominated by various botanical societies.

The recipient of the 2017 Allan Mere Award is Mr Paul Champion, a principal scientist based at NIWA, Hamilton. Paul has written three books on the identification of common weeds, grasses, sedges, rushes and weed seeds in New Zealand, and has experience in wetland ecology and conservation needs.

On 7 December in Hamilton there will be a ceremony to present Paul the award.

Moss Trip

26 August 2017

Led by Kerry Jones

About a dozen people turned up at our inaugural bryophyte trip.

We started off in the car park where we remained for the first 30 minutes.

I quickly pointed out the only moss that I know *Dawsonia superba*.



Dawsonia superba.

Monica turned up 75 minutes late to find us about 40 metres from the start of the track.

Most of the group couldn't handle the slow pace that Thomas, Bettina and I were maintaining and we didn't see them for the rest of the trip. 3 and $\frac{3}{4}$ hours later we arrived back in the car park from a walk that can be very easily done in 30 minutes.



Pipe Cleaner moss (might be Ptychomnium) or not.

still got a lot to learn ! Kerry



Umbrella mosses (either Hypnodendron or Hypoterigium)

To all the enthusiastic, wonderful Bot. Soc. members of 2017.....

We hope you enjoyed reading this newsletter and celebrated some of the wonderful trips that have been organised this year.

We are hoping to make the newsletter a more frequent event, maybe even twice a year!

It would be great to have a write up and record each trip with documented species lists.

Contributions are more than welcome.

Please send whatever you have about each trip..your thoughts, quotes, photos comments etc.

We now have a special place on the blog for species lists and trip recounts.

Many thanks to all who have contributed to the newsletter this year.

Linda Watson

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