



Waikato Botanical Society Inc.

Newsletter No. 19, February 2005

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2005!

Happy New Year everyone! We hope you all had a relaxing break with family and friends. The good weather may have arrived somewhat belatedly but there is still plenty of time to get out there and botanise. We have some great events planned for this year – some of them rescheduled trips from last year - so please come along and join in.

Later this month we have our *Dactylanthus* search on Mt Maungatautari – if you participated in the Pirongia trip (by all accounts a steep, hot climb!) or are already familiar with *Dactylanthus* please come along and help out. It will be very exciting if we are able to discover a new location for this species.

In March, we are very proud to present a Festival of the Environment event – a talk by renowned botanist David Given and a private viewing of the Nancy Adams botanical paintings exhibition.

In April we search for another rare species – *Olearia pachyphylla* on the Coromandel Peninsula. April also brings our AGM – have your say! The AGM will be followed by a talk from Cilla McCallum on sustainable harvest and cultural aspects of harakeke (flax).

MAUAO (MOUNT MAUNGANUI) 8TH AUGUST 2004

A hardy group of about 15 botanists from both the Rotorua and Waikato Botanical Societies met in windy, wet, and cold weather on 8 August at the Pilot Bay jetty for the combined Conservation Week field trip. Mauao (Mt Maunganui) is the prominent steep-sided rhyolitic

lava dome at the south-eastern entrance to Tauranga Harbour and is in the Tauranga Ecological District.

The first diversion as we set off around the base track was to look at stumps of tree of heaven (*Ailanthus altissima*) - a very persistent invasive suckering tree. There is one very small population on Mauao which has required several years of control work by Tauranga City Council which is still ongoing.

As we made our way up to the summit we stopped to look at *Peperomia urvilleana* and the robust clumps of *Astelia banksii*. *Rhabdothamnus solandri* was also seen in the understorey. We also stopped to look at three orchid species that had been "planted" on a fivefinger several years ago - *Drymoanthus adversus*, *Bulbophyllum pygmaea*, and *Winika cunninghamii*. We also saw *Tetraria capillaris* in this area. One of the features of the trip, *Psilotum nudum*, was very prominent on the bluffs, with its bright orange-yellow sporangia on full display.

Recent clearance of vegetation has been undertaken by the Tauranga City Council around the summit, in part to protect the archaeological features, and the views from the top were even more spectacular than previously. A conservation plan for Mauao has recently been prepared for Tauranga City Council (Wildland Consultants Ltd 2004).

After a brief cold and wet lunch break the few hardy stayers that remained set off back to the cars via the quickest way possible, and were rewarded with a very exciting find of a native daphne, *Pimelea tomentosa*. One plant was found growing very close to the track, near the summit. It is the only record of this threatened species from Mauao, and it has not been recorded from elsewhere in the Tauranga Ecological District. *P. tomentosa* is classed as serious decline in Hitchmough (2002).

A large number of weed species were seen, including a few seedlings of moth plant (not previously recorded from Mauao), willow-leaved hakea, prickly hakea, climbing asparagus, smilax, and Japanese honeysuckle, and the sight of a carefully pruned sapling Japanese buckthorn next to the fence at the start of the 4WD track to the summit was rather amusing. The adventive swan plant (*Gomphocarpus fruticosus*) was also present alongside the bluff track.

References

- Bibby C.J.; Shaw W.B.; Beadel S.M. and Hosking M.A. 1999: Vegetation and flora of Mauao Historic Reserve. Volumes 1 & 2. *Wildland Consultants Ltd Contract Report No. 266*. 57 pp plus maps.
- Bishop C. and Beadel S.M. 1997: Weed distribution on Mauao (Mount Maunganui) Historic Reserve. *Wildland Consultants Ltd Contract Report No. 197*. 17 pp plus maps.
- Hitchmough R. (comp.) 2002: New Zealand Threat Classification System lists - 2002. *Threatened Species Occasional Publication 23*. Department of Conservation, Wellington. 210 pp.
- Wilcox M.; Ecroyd C. 1984: Introduced Plants on Mt Maunganui. *Rotorua Botanical Society Newsletter 3*: 6-7.
- Wildland Consultants Ltd 2004: Conservation plan for Mauao Historic Reserve 2004 - Volumes 1 and 2. *Wildland Consultants Ltd Contract Report No. 730*. Prepared for Tauranga City Council. Volume 1 - 75 pp; Volume 2 - 62 pp.

Sarah Beadel (Rotorua Botanical Society)

TE TOTO GORGE FIELD TRIP
31ST AUGUST 2004

On a very pleasant sunny Sunday, a group of eight arrived at the TeToto car park at about 9.45am.

The first part of the trip was a steep descent from the road, down into the TeToto gorge and into the TeToto natural amphitheatre.

This recently acquired reserve (DOC 1999) has started to show considerable understory recovery, principally with Kawakawa (*Macropiper excelsus*), and Karaka (*Cornocarpus laevigatus*), since the last of the cattle were removed a matter of a few years ago.

As we worked our way down into the valley the Korokio (*Corokia contoneaster*) was in flower, as were the large specimens of Whau (*Entelea arborescens*) but the numerous Kowhai (*Sophora microphylla*) shrubs were, unfortunately over. New spring growth gave an enhanced range of greens, with the bright green of Wharangi (*Melicope ternate*) contrasting with the deep greens of the Puriri (*Vitex lucens*).

On the valley floor we deviated up the river a short way to see some spectacular King Ferns (*Marattia salicina*) with fronds over two metres tall. While in the gorge we also saw abundant *Athropteris tenella*, *Rhabdothamnus solandri* and seedling Mangeao (*Litsea calicaris*). We then turned and headed down the valley towards the sea.

Once through the tall tree cover and out in the open, we came across a good display of Powhiwhi (*Calystegia tuguriorum*) white flowers and clumps of *Ozothamnus leptophyllus* near to bud burst.

Lunch saw us on the prominent pinnacle with its renga renga lilies (*Arthropodium cirrhatum*) and patches of native spinach (*Tetragonia trigyna*). We all had a good climb around and found *Dichondra repens* in flower, plenty of *Thelymitra* orchids in bud and the tiny succulent *Crassula sieberiana* growing on rocks.

After lunch we moved around the coastal bluff track, into the middle amphitheatre and through a Karaka grove in search of the rare *Myosotis spathulata*. After some impromptu weeding, the *Myosotis* was found and the site was cleared of encroaching grasses.

After leaving the grove we crossed what were possible early Moari garden sites, with stone lines and drains. We then headed up through chest high Manuka (*Leptospermum scoparium*) to get back onto the road.

Our last treat was a visit to the giant Puriri tree, a survivor, and one of the last original Puriri left. This is the biggest Puriri on the seaward side of Mt.Karioi and is festooned with epiphytes.

We arrived back at the carpark at around 3.15pm. A great day was had by all.

Doug Ashby.

GUDEX MEMORIAL RESERVE
5TH DECEMBER 2004

Our planned end of year outing with the Rotorua Botanical Society was almost foiled by inclement weather, but a band of 7 intrepid Waikato members turned out at Sanatorium Hill near Cambridge, despite the intermittent rain. Our mission was to search the bush for the

large leaved mistletoe *Trilepidea adamsii*, the last record of which was on Sanatorium Hill in 1954. The species is now presumed extinct. Alas we did not make a stunning botanical discovery! We did see many large, tall specimens of *Myrsine australis* (mapou/red matipo), the host to *Trilepidea*, and searched the canopies in vain.

Other interesting botanical features were evident, such as the presence of coastal elements like nikau, puriri, kohekohe and titoki (the latter showing signs of possum browsing). We saw pigeonwood in fruit, raukawa (adult leaves) epiphytic on a tree fern, and found *Litsea calicularis* (mangeao) fruit on the forest floor. Rewarewa flowers often littered the path. There were large numbers of fallen marble leaf (*Carpodaetus serratus*) flowers, which generated much interest when close examination revealed variation in the petal and stamen numbers, from 5-8 with 5 or 6 being most common.

Along the route we were given a quiz on Waikato botany, focussing on Sanatorium Hill and early botanists, with successful answers (guesses?!) rewarded with gardening vouchers. The quiz questions follow, with answers later in the newsletter.

Birdlife present included tui, grey warbler, harrier, kereru, kingfisher and fantail. As we returned to the carpark via the road, we noted that on the edges of the reserve there was a lot of invading Japanese honeysuckle, and also many young tanekaha, plus one pohutukawa (possibly planted?). Outside the bush area, we saw the Michael C. Gudex memorial and the grove of kauri planted in 1960.

In 1902 a tuberculosis sanatorium was established on the site of the mansion previously owned by the Thornton family – hence the name “Sanatorium Hill”. Later, the sanatorium was home to convalescent servicemen from World War I, before being closed in 1922. Remains of some of the sanatorium buildings can still be seen.

Afterwards we retired to the Essenza café near Cambridge for a well deserved hot drink (Christmas compliments of WBS) and lunch, over which the notes, thoughts and phrases of this report were constructed!

BOTANICAL QUIZ

1. When did possums first arrive at Sanatorium Hill?
2. Who were the first botanists to visit the Waikato region?
3. Who was the first botanist to botanise Mt Pirongia in 1880?
4. Who first described the flora of the Waikato River margins in 1880?
5. Who first described the flora of Jubilee Park (Claudelands Bush)?
6. What year was the mistletoe *Trilepidea* last recorded?
7. When did Gudex plant the grove of kauri on Sanatorium Hill?
8. How high is Kakepuku?
9. How many contributing authors are in the Botany of Waikato?
10. What type of volcanic cone is Sanatorium Hill?
11. Who wrote “Rambles in New Zealand” in 1841?

It was with sadness that we learnt that Judy Saunders passed away in December after a brief illness. Judy had been a member of the society for a number of years, and joined us as recently as October to explore Te Toto Gorge. Having recently left her job at Hortresearch, Judy was looking forward to spending more time botanising and tramping. Our sympathies are with Judy's family.

FREE! FREE! FREE!
WETLAND TYPES OF NEW ZEALAND

Members of all Botanical Societies (and the NZ Limnological Society) are able to get one free copy of this book, thanks to a grant from TFBIS, the Terrestrial and Freshwater Biodiversity Information System Programme (the Government's Biodiversity Funding Package. A great offer!

To order a copy contact:

science.publications@doc.govt.nz

or if not on e-mail

Christine Northover
Science Publishing Support Officer
Science & Technical Publishing
Research, Development & Improvement Division
Department of Conservation
PO Box 10-420, 65 Victoria Street
Wellington, New Zealand

Wetland types in New Zealand
P.N. Johnson; P.J. Gerbeaux, 2004.
DOC Science Publishing, Wellington. 184 pp.

“WETLANDS are diverse for many reasons, and New Zealand has many sorts. They include bogs and marshes, swamps and seepages, and the edges of lakes, rivers and estuaries. Wetlands are important for biodiversity, birds, fish, plants and people. This book, by New Zealand's top wetlands authors, describes a recently-devised system for classifying and naming New Zealand wetland types, and provides an understanding of how wetlands work. Designed as a field guide, its 184 pages are beautifully illustrated with full-colour photographs.”

PETER JOHNSON is a botanist and plant ecologist with Landcare Research in Dunedin. He has a particular interest in wetland ecology, and is the author, with Pat Brooke, of *Wetland Plants in New Zealand*.

PHILIPPE GERBEAUX is Technical Support Officer with the Department of Conservation based in Hokitika (West Coast Conservancy), and is an expert in freshwater and wetland ecology.

BOTANICAL QUIZ - ANSWERS

1. 1885
2. Daniel Solander and Joseph Banks (1769)
3. Cheeseman
4. Thomas Kirk
5. Gudex
6. 1954
7. 1960
8. 450m
9. 16
10. Andesitic-basaltic
11. Bidwill

The Waikato Botanical Society Event of the Year!

Festival of the Environment talk, presenting David Given and the Nancy Adams Exhibition

**Thursday March 10th
6:30pm**

Waikato Museum of Art and History, Victoria Street, Hamilton

Join us for an exciting talk by world renowned botanist and conservationist, David Given, followed by a private viewing of the Nancy Adams botanical paintings.

As this event is sponsored by the Botanical Society, we ask that members please RSVP to Jo McQueen by Monday March 7th to reserve a seat at the talk. This event will be open to the general public, and we would hate for our members to miss out.

Contact Jo on: 021 1755 269 or 849 5141

Refreshments provided
Gold coin donation entry

"Conserving plants - what we need to do to save the world" David Given

Conserving the global flora and reversing the effects of extinction is a major task for the 21st century. But in many respects it often seems akin to biodiversity replay of the loss of the Titanic. How do we move beyond at best commentating on the loss of species and habitats, or at worst being mere spectators? What are the gaps in both knowledge and action? Where do priorities lie? Are resources and technology sufficient? Is there a need for a radical change in the way we look at nature? Is the extinction crisis just myth and hype? Why should we save species anyway? New Zealand has a pivotal role to play as a technologically advanced, educated and informed country that is a major hotspot for plant diversity. Our actions must be within the context of the Global Strategy for Plant Conservation. There is hope and there are good stories - but there are also challenges and risks. Are we up to accepting them?

David Given - a third generation biologist who became fascinated with rare species early in his career when working both on *Celmisia* (NZ mountain daisies) and the post-glacial flora of the Canadian Great Lakes. Over thirty years later he has come up with more questions than answers in a career that has ranged throughout New Zealand and its outlying islands, to every continent including Antarctica, the rain forests of Borneo and the Amazon, the deserts of Saudi Arabia and many remote islands, volcanoes and high mountains. Currently Curator, Botanical Services with Christchurch City Council, David has worked as research scientist, consultant, policy and strategy developer, lecturer and writer. Over 250 publications include several definitive books on plant conservation and co-editing of the recently published book on New Zealand plants "Going Native". David is a winner of New Zealand's premier conservation award the Loder Cup and recently was a recipient of the Peter Scott Award for Conservation Merit, the highest award given by the Species Survival Commission of IUCN. We look forward to David sharing his photographic skills and extensive experience in plant conservation.

The Botanical Paintings & Drawings of Nancy Adams

Nancy M. Adams is one of New Zealand's foremost botanists and botanical artists. This exhibition features exquisite watercolours and drawings, created over a 50-year period, that have never been exhibited.

Nancy M. Adams retired in 1987 as Assistant Curator of Botany after 28 years at the National Museum, Wellington. Before that she was Botanical Artist at the Botany Division of the Department of Scientific and Industrial Research where she illustrated several major works of New Zealand botany, including ***New Zealand Alpine Plants***. She was awarded the Loder Cup (1964), QSO (1989), New Zealand 1990 Commemorative Medal and the Book Production Prize, 1995 New Zealand Book Awards for ***Seaweeds of New Zealand***.

EARLIER DAYS OF BOTANISING IN THE WAIKATO

In introducing myself, I am new to this group, having only just been introduced to it by Dr Joanna McQueen, your President, when I emailed her, congratulating your Society on the quality and value of the publication, "Botany of the Waikato", which I have just purchased.

I mentioned to her it brought back memories of my days when I lived in the District as a youth, before WWII, and then later, as a member of the Auckland Botanical Society and Auckland Natural History Club, in the 1950s. Oh how the years roll by! In those times when the Auckland groups visited the Waikato, there were only Dr Michael Gudex and a couple of interested ladies he used to bring out to our field trips, to join us. We were all only interested amateurs, with no true professionals at all. Later in the late 1950s we were fortunate enough to have Drs. Laurie Milner and Jack Rattenbury, both later Professors at Auckland, join us and on occasion, when we went to the shore, Prof. Val Chapman, to introduce us to the algae of the seashore.

Such were Botanical Societies of those days.

On one of those Waikato trips I well remember, while we did not have Dr Gudex with us on that occasion, we left Auckland well primed up for our day trip to the Moanatuatua Swamp. We had a complete list of all the twenty-one species listed as growing in the area. At that time Moanatuatua Swamp stretched over nearly all that area shown in the map shaded brown marked as Moanatuatua, on page 50 of the above book. A small portion had been developed for farmland at the north east corner and likewise on the southern end, near the road between Te Awamutu and Cambridge. The remainder was pristine. In season, looking from that road as far as one could see, there was a haze of blue when the *Thelymitra* orchids were in full bloom, as the restiad swamp did not extend so far down in parts. May be due to burning off at some time.

Unfortunately I am presently unable to find the copy of the list but it was most interesting as it included among the more common plants, the plants even then, that were known as rare, such as the Restionaceae, then *Sprordanthus traversii* now *S. ferrugineus*. Also the orchid, *Corybas carsei*. (*C. carsei* collected by E.W.E. Butcher, shortly after our visit, and studied by him, was later noted as being possibly associated with the type of peat bogs, namely restiad bogs, which created more dwarf species than the norm found elsewhere. Now, in modern times maybe much more is recorded about the subject). The other that remains in my memory was *Lycopodium septinum*, which was very low growing but intruded itself among the clumps of *S. traversii*.

In all, it was a most rewarding day's trip for us in those days. So much so, that it has stayed with me all of these years as one in which I was privileged to see rare and endangered species in situ, before they were lost to posterity in such assemblage. I understand there is a small spot of the wetland still remains. I wonder whether development has left it intact, or whether drainage, runoff of fertilizers, micro-climate, and all the other things that can affect it, including its size, have so modified it that if I saw it today, my concept would be damaged forever like much is by modern development.

Dell Purdie

**WAIKATO BOTANICAL SOCIETY
PROGRAM 2005**



In the event of bad weather, please contact the trip leader on the morning of field trips if you are unsure they will go ahead and don't want a wasted trip to the meeting point. Please be prepared on all trips with your own lunch, drink, sturdy footwear, and clothes for all seasons.

Saturday 19th /Sunday 20th February

***Dactylanthus* search on Mt Maungatautari**

A chance to help out the Maungatautari Ecological Island Trust in their goal to create a pest free sanctuary in the Waikato. This will be an intensive search effort for *Dactylanthus* on Maungatautari following on from our training workshop in January. Two days have been allowed for, but only one day may be needed if it is found easily. Possums will have been trapped beforehand, and their guts examined for *Dactylanthus* flowers. Positive results will mean the search area can be clearly defined. If nothing is found, we may survey again towards the end of March.

Grade: Hard (steep country)

Contact: Jo McQueen 021 1755269 (day) 849 5141 (evening).

Meet: 8:30am at the carpark at end of Hicks Rd

Please contact Jo McQueen if you wish to carpool.

Saturday 5 - Sunday 6 March

Whirinaki Forest Park -Dactylanthus/Frost Flats/Arahaki Lagoon - (Combined with Forest and Bird/Rotorua Botanical Society)

Saturday: Visit and search for the threatened parasitic plant *Dactylanthus taylorii*. Also a look at the frost flat ecosystems which Craig has recently studied.

Sunday: A walk through huge podocarps into this beautiful lagoon. A range of other interesting wetland plants are present around the lagoon margins. Hopefully if water levels are low we can walk out onto the lagoon and botanise these wetland species. (NOTE: This trip can be done as day trips if people desire –please indicate to trip leader when booking if this is the case)

Leaders: Chris Ecroyd 07 347 9067 and Craig Bishop. Please book with Chris by **28 February**.

Meet: Saturday: The carpark 9 am or 9.45 am DoC visitor centre SH 38, Murupara

Sunday: Whirinaki Recreation Camp, Old Te Whaiti Rd, Minginui 9 am

Grade: Easy-Medium

Cost: \$10 per person for accommodation

Limit: Max 34 people – first in first served.

Accommodation: Whirinaki Recreation Camp, Old Te Whaiti Rd, Minginui. Bring bedding (mattresses provided), warm clothing, self catering (cooking facilities provided are outdoor BBQ style only therefore gas cooker could be useful) NOTE: THERE IS NO POWER OR SHOWERS)

Thursday 10th March

Festival of the Environment evening talk, presenting David Given and the Nancy Adams Botanical Drawings Exhibition

Join us for an exciting talk by world renowned botanist and conservationist, David Given, followed by a private viewing of the Nancy Adams botanical paintings at the Waikato Museum of Art and History.

As this event is sponsored by the Botanical Society, we ask that members please RSVP to reserve a seat at the talk. This event will be open to the general public, and we would hate for our members to miss out. *RSVP to Jo McQueen by Monday 7th March for this event to ensure your seats are reserved.*

Refreshments will be provided. Gold coin donation entry.

Meet: 6:30pm at the Waikato Museum of Art and History, Victoria Street, Hamilton

Contact: Jo McQueen 021 1755 269 or 849 5141

Saturday 2nd April

***Olearia pachyphylla* survey**

Lonely Bay/Shakespeare Cliff.

On this trip we will retrace Peter de Lange's steps in an attempt to find the population of *Olearia pachyphylla* (classified as Nationally Endangered) which he found here and collected from in 1992. Other rare coastal species that might be here include *Senecio scaberulus*, *Carmichaelia williamsii* and *Sicyos australis*.

Contact: Andrea Brandon abrandon@doc.govt.nz or ph. 8581018.

Meet: at Cooks Beach (meeting point tba) at 10.30 am.

Wednesday 27th April

Waikato Botanical Society AGM

Join us to have your say on the running of the society (or at least make up the numbers so that we can have an AGM!). The society accounts are very healthy, so please do come and have your say on what the money should be spent on. Please forward nominations for 2005 committee members (or nominate yourself) to Andrea Brandon or Shirley Nichols.

The short AGM will be followed by a talk by Cilla McCallum. Cilla is finishing a PhD on the sustainable harvest and cultural aspects of harakeke (flax). Cilla won the student prize for the best talk at the 2004 Ecological Society Conference, so this will be a good one!

Venue: McMeekan Centre, AgResearch, Ruakura.

Contact: Shirley Nichols ph 07 855 5061 (hm) shirley.nichols@agresearch.co.nz

Time: 7:00pm

Saturday 2 July

Herbarium Workshop – Sedges and Rushes – with Rotorua Botanical Society

Following on from the very successful grass workshop in 2004 this workshop will cover the basics of identifying sedges and rushes, followed by a practical session on keying out specimens. **Start by collecting specimens over summer to ensure that seed heads and are available.** Remember that roots can be important for identification of rushes. We hope to demonstrate the use of a "Proscope".

Bring: specimens, pen & paper, books, hand lens, microscopes.

Leader: Chris Ecroyd (assisted by Graeme Jane)

Meet: 10am at Forest Research main reception, 49 Sala St. Rotorua. [After 10.10 pm phone 07 343-5609 to get the gate re-opened!].
Bring your lunch. Workshop will finish ca. 4 pm.

Sunday 25th September

Karangahake Gorge, Coromandel

A re-run due to cancellation last year.

This trip will follow the Dubbo track in the Karangahake Gorge and explore old mineshaft entrances, a long rock railway tunnel and other restored mining relics. We will follow a loop track back along the Waitawheta river to the starting point, about 4 hours at an easy pace, plus botanising time. Bring torches for tunnel and mine entrances.

Contact: Doug Ashby 07 862 4706 or dj.ashby@xtra.co.nz

Meet: At the L&P bottle by the Ohinemuri River at Paeroa by 9.30am.

Contact: Jo McQueen if you wish to carpool.

Sunday 20th November

Whangamarino (Shannon Fergie).

A re-run due to cancellation last year.

Visit the peatbogs of Whangamarino wetland and learn about conservation issues at the site including water level regulation, pest fish, native fish, invasive weeds, and threatened plant management.

Numbers are limited on this trip to minimise damage at the site, please register your intention to attend with Andrea Brandon abrandon@doc.govt.nz or ph 858 1018. Bring gumboots!

Contact: Shannon Fergie sfergie@doc.govt.nz or ph 07 850 8348 (wk) and Andrea Brandon abrandon@doc.govt.nz or ph 858 1018.

Meet: to be advised

Sunday 4th December

End of year picnic and games

Joint event with Rotorua Botanical Society. Seeing as we didn't find any mistletoe in 2004, we'll head back to the Gudex Memorial Reserve for a spot of botanising and a picnic in the sun.

Details to be advised.