



Waikato Botanical Society Inc. Newsletter No. 17, June 2004

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<p style="text-align: center;">SAND DUNE SYSTEMS OTAMA, MATARANGI AND WAITAIA VALLEY 6TH & 7TH MARCH 2004</p>

On the first day of this field trip, led by Marilyn Merrett and David Burnett, the dune system at Otama Beach RR and the Matarangi Beach dunes were visited.

There is a good sized population of golden sand tussock, *Austrofestuca littoralis* (Gradual Decline), scattered along the foredunes at Otama. It was interesting to note that, despite a recent storm, only one plant had been destroyed. All remaining plants looked in good health and the population appears to be fairly stable (>100 individuals, actual census not carried out). The presence of pingao and the lack of marram grass along the foredune has a major stabilising effect on the dunes and has protected the golden sand tussock and its habitat from the prevailing easterly winds and periodic storm events.

While weeds are present, such as the ubiquitous hares tail (*Lagarus ovatus*), and the more concerning salt-water paspalum (*Paspalum vaginatum*) on the edge of the estuary, the dunes are in relatively good condition, and with ongoing weed control, their condition will be improved.

On the roadside (heading back towards the main highway), with the beach still in sight, we were taken to a good sized patch of *Korthalsela salicornioides* growing on coprosma and manuka on both sides of the road. Monkey apple is growing in a hedge on the right-hand side of the road (heading away from the beach).

At the golf course end of Matarangi Beach, a population of sand daphne, *Pimelea arenaria*, occurs at the back of the dunes. Unfortunately, large numbers of wilding maritime pine, *Pinus pinaster*, are invading the sand daphne's habitat. The parent pines have been planted along

the edge of the golf course as a shelter belt. Extremely young looking plants (<1m tall) were found with cones. Marilyn considers this population of sand daphne to be the largest one in the Waikato Conservancy. The maritime pines are directly colonising into the sand daphne's habitat. Without pine control, the sand daphne is unlikely to survive at this site in the long term.

While marram grass is present at Matarangi, it is in small enough numbers that control could be possible at this stage.

Species lists

Otama

Apodasmia similes
Austrofestuca littoralis
Carex pumila
Carex testaceae
Coprosma acerosa
Desmoschoenus spiralis pingao
Isolepis nodosa
Lachnagrostis billardierei
Meuhlenbeckia axillaries
Myoporum laetum
Oxalis rubens
Ozothamnus leptophyllus
Phormium tenax
Pteridium esculentum
Spinifex sericeus
* *Ammophila arenaria* marram grass
* *Briza maxima* large quaking grass
* *Cakile edentula*
* *Carpobrotus edulis*
* *Conyza*
* *Lagarus ovatus*
* *Leontodon* sp
* *Lupinus* sp
* *Paspalum vaginatum*
* *Sporobolus africanus* – rats tail
Korthalsela salicornioides
* *Acmena smithii* monkey apple

*introduced species

Andrea Brandon.

Matarangi

Desmoschoenus spiralis pingao
Griselinia lucida
Isolepis nodosa
Lachnagrostis billardierei
Ozothamnus leptophyllus
Pimelea arenaria
Spinifex sericeus
* *Ammophila arenaria* marram grass
* *Banksia integrifolia*
* *Carpobrotus edulis*
* *Conyza*
* *Leontodon* sp
* *Paspalum vaginatum*
* *Pinus pinaster*

**COASTAL HERBFIELD ECOLOGY AND CONSERVATION,
TARANAKI
5TH APRIL 2004**

Douglas Bridge, PhD student at the University of Waikato, presented the findings of his work so far regarding the coastal turf communities in Taranaki, and especially the effect of weed invasion and grazing, and what restoration may be possible.

Doug gave a fascinating insight into these, for most of us, so little known plant communities, battled by wind, salt spray, cattle grazing and invasion by aggressive weeds. There are quite

a number of key endangered plants among them, especially in the genera *Ranunculus*, *Oreomyrrhis*, *Limosella*, *Crassula*, *Sagina*, *Myosotis*, *Colobanthus* and *Plantago*. Some of the plants are quite minute, and Doug's slides demonstrated amply how close to the ground he has to work to get his PhD!

Doug has studied 17 sites in Taranaki, from Stent Road in the North to Waverly in the South. The large majority of the sites are on private land, so permission and interaction with the landowners presented its own challenge. Most of the landowners were very helpful, but curious to what Doug was doing in the often dreadful weather.

The key factor in the grouping of plants relates to the ratio of *Zoysia minima* to *Selliera radicans*. *Zoysia* forms dense mats, almost cushions, which are favoured by certain plants, but the diversity is quite low. *Selliera* is more moisture loving and forms mats that are looser, which benefits quite a number of species.

Grazing has obviously a major impact on these plant communities. However, unfortunately, fencing is not a real solution either. Without grazing, the weeds grow bigger, more lush and more aggressive, and threaten to overwhelm the native plants. The "bad guys" are many, but especially *Plantago*, *Cerastium*, and clover species.

When it comes to restoration, Doug has cut out 250 mm squares of turf and transplanted these to a bare spot outside New Plymouth. After some initial worry, the plants are now growing, which is indeed very good news. With regard to managing the plants in their original position, ongoing weed control unfortunately seems inevitable if they are going to survive, so cheap labour for this activity is very welcome!

Sven Johnsson

AGM 5TH APRIL 2004

Doug's talk was preceded by the 2004 Annual General Meeting. The election of the committee was as follows.

President:	Joanna McQueen.
Secretary:	No nomination received.
Treasurer:	Liz Grove.
Newsletter editor:	Shirley Nichols.
Committee:	Andrea Brandon Don McLean Paula Blackett David Burnett Bruce Clarkson Wade Tozer.

Andrea Brandon has since agreed to take on the role of Secretary.

PRESIDENTS REPORT

The beginning of 2003 seems a lifetime ago, as this time last year I was busy putting the finishing touches on my PhD thesis and working insane hours. So last years AGM seems like a good place to begin. We decided to dramatically change the format of the AGM and have a

stand alone AGM with no talk, just coffee and good cake. Needless to say, there was plenty of cake, and a corium was only just reached! So this year we have moved back to the traditional format of a talk and AGM in the hope that more of you will come.

We held a program of talks and field trips throughout the year. The field trips were always well attended, but the talks were not which was disappointing given the time they took to organise. As a result, this year's program is just field trips, with the AGM being the only talk.

Throughout the year, the committees focus has been on selling "The Botany of the Waikato" as we were all getting sick of the boxes of books cluttering up our houses. This problem was largely solved however when the herbarium and plant physiology labs were refurbished and enough storage space was found for the remaining boxes! We have also given selling the books our best effort and have had a steady stream of book orders throughout the year, including some larger orders to book shops. RD1 brought 50 books to use as a promotion, and it was hoped we could encourage other Waikato companies to do the same. Unfortunately, being a committee with many other commitments (4 PhD theses, 2 Masters theses) we haven't got very far in this.

We have been committed to promoting the society and the book and have made a brochure on the society for distribution. Judging by the membership returns using the brochure slip, this has been quite successful. Brochures are currently on display at the Environment Centre and at the University. We have also been including a brochure with every book order sent out.

In order to promote botany at high school level, we sent books to all the highschoools in the region (about 40), including a brochure and form for further book orders. In return we got 2 thank-you letters from schools and 1 further book ordered which we considered to be pretty pathetic for the time and cost involved. At least, there now should be a Botany of Waikato in every high school library.

Given the great financial state of the society, we have decided to offer scholarships to botany students at the University, Polytech and Wananga of \$250 per botany related course. Sorting out the legalities of this process is still underway, but it is hoped that these scholarships will encourage more students to study botany.

This coming year will see a program of field trips, which we have done our best not to clash with Forest and Bird or nearby botanical societies. We hope these will be well attended.

The society is now perhaps the most buoyant ever, with plenty of money and a good membership base. It is now up to our members to support the society and let the committee know what they want to see and how we can help them learn more about botany. Personally, I find the field trips a great way to learn new plants, and I hope that we will continue to get a mixture of novice and experienced botanists along so we can all learn something.

The upcoming committee need to ensure they have the time to give to the task ahead - the continued promotion of the society and the book. It's also probably time to be thinking about our next big project!

Joanna McQueen

FINANCIAL REPORT

The previous committee decided to engage an auditor for the society finances, due to the large amounts of money involved in selling the book, and also to clarify our tax status with regard to selling books to non-members. The fee for the audit accounted for a significant proportion of the years expenses, but thanks to this years (and previous years) book sales available funds are healthy. Money has been invested in term deposit and the interest from

this will assist with the scholarships that are to be established. The society's net worth is very good but most lies in the value of the unsold books.

Discussion around the subject of subscriptions lead to agreement that they should stay at the current level (\$15 Individual/Couple/Family, \$5 Students).

SUBSCRIPTIONS

Our membership currently stands at 47, with a number of unpaid members from last year. Please pay any outstanding subs asap, or send an e-mail/letter to the Secretary resigning your membership (abrandon@doc.govt.nz or mailing address as above).



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www.mwpress.co.nz

KINLEITH FOREST WETLANDS 2ND MAY 2004

With the threat of rain for the afternoon and a misty wet morning, it all suggested a day of discomfort lay ahead. However after meeting south of the Putaruru Timber Museum, the weather started to improve soon after we moved into the pine forest.

Cars with permits were driven into the Carter Holt Harvey forest to see what work was being done on preserving wetlands within the forest boundaries. Paul Cashmere of the Rotorua Botanical Society was the principle organiser but the leader for the day was Carter Holt Harvey's environmental planner, Robin Black. Robin's role is to oversee the management of significant natural areas within the forest, where the economics of utilizing the pine forest was balanced against the protection of these remnants. This involved educating gangs of forestry workers on what was there and why careful extraction techniques were important. He also has to convince the Board (and shareholders) the value of keeping these remnants in tact.

The Forest Accord does not protect areas less than 5 ha. However Robin has been working on promoting all areas of native flora, as most of the areas he sees are smaller than this. He also wanted the public to be more aware of what was happening, in regard to protecting these areas, and how better use could be made of them by different interest groups.

Our first stop was at one of the few remaining manuka wetlands in the area, this was also part of the upper Waihou River. Even though we were looking at a narrow strip of wetland, there was a remarkable variety of plants, and a healthy grove of mature cabbage trees (*Cordyline*

australis) was a major feature. On the northern edge, were some good stands of regenerating tanekaha (*Phyllocladus trichomanoides*) and kahikatea (*Dacrycarpus dacrydioides*). Some of the more unexpected finds for the day were the *Dracophyllum strictum* clinging to the cut over banks above the wetland but in the last area we visited, the Butler Road Lake, the rare *Ranunculus macropus* was found.

The day not only allowed us to botanise but we were also able to see how native birds used these areas. Bush robins, fern birds, and dabchicks were some of the more interesting sightings. This made the day all the more worthwhile, plus the weather held to about 4pm when we said our thankyou's and left for home.

A good day was had by all however it was marred for some unfortunate enough to be stung by wasps, after we disturbed a nest while rummaging through the manuka wetland.

Doug & Jane Ashby and Jane Hart.

FIELD TRIPS

Please direct any enquiries about fieldtrips to the **trip leader** in the first instance. They will know best about directions, conditions, times, weather etc.

To avoid unnecessary travel: if the weather isn't promising on the day, please check for cancellations, particularly if you're meeting the group on site rather than the Landcare carpark or you are travelling from a distance.

But most importantly, please come along and support our events!

KAKEPUKE 22ND MAY 2004

Unfortunately, this trip had to be cancelled due to bad weather. We hope to run it next year when the kohekohe are flowering, or have a trip for general interest at some other time.

BOTANY OF THE WAIKATO



Still plenty of copies available!
\$20 each (includes postage)
\$15 each for 10 or more (plus freight)

DON'T FORGET THESE UPCOMING EVENTS!

WAINGARO FOREST REMNANT RESTORATION
FIELDTRIP

Sunday July 4th

MAUAO (MT MAUNGANUI)
FIELDTRIP
(JOINT ROTORUA BOTANICAL SOCIETY)

Sunday 8 August

We'll be calling for an indication of numbers closer to the time of this trip so that we know how many people to wait for at Pilot Bay.

KARANGAHAKE GORGE
FIELDTRIP

Sunday September 26th

WAIKATO BOTANICAL SOCIETY PROGRAM 2004

Field trips to meet at Waikato University Gate 10 (Silverdale Road) in the carpark in front of Landcare Research, unless stated otherwise or arranged with trip leader. If you do not intend on travelling by your own vehicle from this point it is advisable to check with the trip leader that you can be accommodated in another vehicle. Please be prepared with your own lunch, drink, sturdy footwear, and clothes for all seasons.

Sunday 4 July

Waingaro forest remnant restoration

This will be a visit focussing on privately owned river flat mixed conifer forest (kahikatea, matai and totara) near Waingaro. A good range of lowland species is present including some uncommon in the Waikato. The forests have been recently fenced off and are showing a good recovery of groundcover and shrub species but you may be tempted to pull out some of thousands of invading Chinese privet seedlings.

Bring your swimming togs and entry money for pools at Waingaro Hot Springs afterwards if interested.

Contact: Bruce Clarkson b.clarkson@waikato.ac.nz or ph 07 855 9534 (hm), 07 838 4327 (wk) **Meet:** at 8.30am the Landcare carpark, Hamilton.

Sunday 8 August

Mauao (Mt Maunganui) joint Rotorua Botanical Society trip.

Explore the flora of Mauao, over a hundred indigenous species present including *Psilotum nudum*- a primitive fern ally, *Lepidosperma laterale* at its southern limit, *Astelia banksii*, *Rhabdothamnus solandri*, *Tetraria capillaris* and *Schoenus apogon*. Regeneration following the January 2003 fire will be of interest. Excellent views from the top of the mountain. A conservation plan has recently been prepared for Mauao, and weed control and restoration planting is in progress.

Contact: Sarah Beadel (Rotorua Bot. Soc.), sarah@wildland.co.nz or ph 07 343 9017 (wk), 07 362 4315 (hm)

Meet at 7:30am the Landcare carpark, Hamilton or at the jetty on the Pilot Bay side of Mauao at 9am.

Sunday 26 September

Karangahake Gorge

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 Jane Hart ph. 07 867 5580 or jane.hart@xtra.co.nz

Meet at the carpark, Hamilton 8.30am or at the L&P bottle by the Ohinemuri River at Paeroa by 9.30am.

Sunday 31 October

Te Toto Scenic Reserve

This trip will explore the coastline just south of Raglan in Te Toto Scenic Reserve. We will follow the Te Toto stream gorge down through coastal bush from the foot of Mt Karioi to the sea and then take a coastal path around some rocky bluffs (not as scary as it sounds!) and return to the road through recently fenced regenerating bush. Interesting plants to keep an eye out for are *Myosotis spathulata*, *Olearia angulata* and *Sophora fulvida*, there is also an old maori garden site and plenty of interesting geology.

Contact: Liz Grove ph 07 846 0965 (hm), 07 838 4466 x7824 (wk) or eg3@waikato.ac.nz and Andrea Brandon abrandon@doc.govt.nz

Meet at the carpark, Hamilton 8.30am or at the Te Toto carpark 9.30am.

Sunday 21 November

Whangamarino wetland joint Auckland Botanical Society trip.

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 Shirley Nichols. Bring gumboots!

Contact Shirley Nichols shirley.nichols@agresearch.co.nz ph 07 855 5061 (hm) or 07 838 5215 (wk) and Shannon Fergie sfergie@doc.govt.nz or ph 07 850 8348 (wk)

Meet at the Landcare carpark, Hamilton 8.30am or turn off SH1 just north of Meremere onto Island Block Road, we will meet 50m along Island Block Rd at the junction with Te Puia Ave at 9.30 am.

Sunday 5 December

End of year picnic with Rotorua Botanical Society.

The grand event will take place in the Gudex Memorial Reserve on Sanatorium Hill (Pukemako). Our mission will include a search for the elusive mistletoe *Trilepidia adamsii* and you may be tested on your knowledge of early botanists of the region...(prizes offered of course!). This will be a potluck picnic so bring something yummy to share, a picnic rug and the family if you wish.

Contact: Jo McQueen ph 07 838 4466 x 7857 (wk) or jmcqueen@waikato.ac.nz

Meet at the Landcare carpark, Hamilton at 10.30am or at the Gudex Memorial obelisk at the reserve at 11am.

Saturday 11 and Sunday 12 December

Iwitahi Native Orchid Heritage Protection Area, Kaingaroa Forest, joint Rotorua Botanical Society trip.

This weekend is the annual camp for the Friends of Iwitahi group and the Waikato Botanical Society is invited on a guided tour around the Protection Area on Saturday. There will be many native orchids in flower including rare species found naturally at the site and those that have been relocated to the Protection Area. Those who are interested may also like to join in with other activities over the weekend including orchid surveys, slide shows and discussions with other native orchid enthusiasts. Please contact trip leader for further details on accommodation and transport arrangements.

Contact: Liz Grove ph 07 846 0965 (hm), 07 838 4466 x7824 (wk) or eg3@waikato.ac.nz

Meet at the Iwitahi Protection Area on the Napier-Taupo Highway by 11am.

Subscriptions

Don't forget the 2004-05 membership year begins in March. Please complete and return the form below, any subs now received will be allotted to next year.

WAIKATO BOTANICAL SOCIETY
Membership form

Please return with your subscription to: Membership
Waikato Botanical Society
c/o Department of Biological Sciences
Waikato University
Private Bag 3105
Hamilton

Please print clearly

Name(s):

Address:

E-mail:.....

Phone:(day)(evening)

Subscription enclosed:	Individual/Couple/ Family	\$15.00 (per year)
	Student	\$5.00 (per year)

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WAIKATO BOTANICAL SOCIETY

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