



TRILEPIDEA

NEWSLETTER OF THE NEW ZEALAND PLANT CONSERVATION NETWORK

Please send news items or events to events@nzpcn.org.nz

Postal address: P.O. Box 16-102, Wellington, New Zealand

E-NEWSLETTER: No 45 AUGUST 2007

Deadline for next issue: Friday 14 September 2007

Message from the President

Thursday 16 August was a very memorable day for me and for the many people who attended the launch of the National Native Seed Bank for endangered species. We were welcomed by Rangitaane and then received very supportive comments from the Minister of Conservation, Hon. Chris Carter.

It was a very moving experience as the first seed was delivered. This was seed of Holloway's crystalwort (*Atriplex hollowayi*). The seeds were brought by Ngati Kuri and then handed to children of the local Newbury School who in turn took the seed to the Seed Bank.

A proposal for the seed bank had been prepared for the Network by Phil Knightbridge. Following that proposal, and with support from the Department of Conservation and AgResearch, a solution was identified. This was an extension of the use of the existing Margot Forde Germplasm Centre at AgResearch Grasslands in Palmerston North.

The trouble with projects such as this, there is always a monetary cost. I am delighted to say that MWH New Zealand (an engineering and environmental consultancy) has funded this project.

So, on Thursday August 16, there was another milestone for conservation in New Zealand. This was also another achievement for the Network in that this project helps to fulfil yet another target in the Global Strategy for Plant Conservation. The event at Palmerston North will long be remembered. Thanks largely to John Sawyer who coordinated the event, everything went very smoothly.

From time to time I mention the need for all of us to promote the Network and try to attract new members, be they individuals or corporate. We are a Network and the strength of the Network is in the membership. It is with great pleasure to learn that the Queen Elizabeth II Trust has joined the Network as a corporate member. This will mean that members of the Trust will be able to access all the information on the Network Website. Such a corporate membership is an acknowledgement of the growing recognition of the importance of plant conservation in New Zealand.

Do you know of any other prospective corporate members? If so, please let me know.

Ian Spellerberg, Lincoln University

Plant of the Month

Plant of the Month for August is the Nationally Endangered endemic moss *Archidium elatum*. It is known from only three sites in North Island (Ahipara, Bay of Islands and Lake Rotomahana) and from one site on main Chatham (Rekohu) Island (at Otawuae Point). It is a dark brown-green or yellow-brown tufted moss with individual plants growing to 7–15 mm tall. Its stems are simple or weakly branched. It grows on a substrate of basalt rock (at three sites), rhyolitic rock and associated tephra at the fourth site. Kikuyu grass (*Pennisetum clandestinum*) has been identified as a threat and possible cause of extinction at one site. There is also a possibility that *A. elatum* has been overlooked over large parts of its range and therefore may, in time, prove to be less threatened. The Network fact sheet for this species may be found at:

www.nzpcn.org.nz/liverwort/detail.asp?CryptogamID=71



Archidium elatum.

Photo: Bill Malcolm

New Zealand Noah's Ark for plants is opened

A New Zealand Noah's Ark for native plants was officially opened on Thursday 16 August, 2007, in Palmerston North by Hon. Chris Carter, Minister of Conservation. It is in the form of the MWH Threatened Plant Seed Bank – New Zealand's first seed bank for native species.

The MWH Threatened Plant Seed Bank has been founded as New Zealand's conservation insurance policy to ensure endangered indigenous species are not lost for future generations. The seed bank is located within the rohe of Rangitaane at AgResearch's purpose-built Margot Forde Germplasm Centre.

In his speech, Ian Spellerberg (Network President) acknowledged the contribution of Phil Knightbridge. Phil is a Network member and the Department of Conservation botanist who prepared the plan in conjunction with a group of experts, including Steve Alton of the Millennium Seed Bank in the UK and other New Zealand botanists (the document is available on the Network website).

"Thursday 16 August 2007 will go down as a milestone in New Zealand plant conservation", said Spellerberg. "In many respects it is a sad day, acknowledging the fact that we have to rely on *ex-situ* measures to conserve our flora because of the ever growing pressures on our plants in their wild habitats. The vital work to conserve our flora in the wild must continue. However, the Network should be proud of its achievement in establishing this seed bank and in its work leading New Zealand's implementation of the Global Strategy for Plant Conservation", he said.

"While conserving our native plants in the wild remains our top priority, this seed bank initiative provides a valuable insurance policy should destruction occur of wild habitats and of native plant populations. A national seed bank provides one of the first practical solutions to the effects of climate change as we will know our plants are secure whatever happens," said NZPCN President Ian Spellerberg.



The Hon. Chris Carter, Minister of Conservation, inspects the seed bank with Warren Williams, Curator of the Margot Forde Germplasm Centre.



Lillian Lazarus (Ngati Kuri) hands over seed to children from Newbury School.

Charlie Neho, Lillian Lazarus and Henry Gentry from Te Taumata Kaumatua Ahika o Ngati Kuri and Janeen Collings (the Department of Conservation's Far North Threatened Plant Ranger) travelled south from Northland and officially deposited the first seed in the bank. Seed of *Atriplex hollowayi*, a Nationally Critical coastal herb that grows on the coastal dunes of Northland, were delivered in a small kete.

The seed were handed over by Ngati Kuri to children of Newbury School (an Enviroschool that won the Network Schools award for plant conservation in 2006). The seed were then blessed by Rangitaane and taken away to be lodged in the seed bank.

The seeds are preserved by careful drying after which they are stored at minus 20°C. AgResearch has expertise and experience in preserving collections of seed, and the Curator of the Margot Forde Centre, Dr Warren Williams, is a recognised international expert in the field.

“The forage plant seed held in the Centre represent a wide range of species and genera. This collection will help ensure our unique plant based biodiversity survives into the future,” said Dr Williams.



A kaumatua of Rangitaane (in whose rohe the seed bank is situated) blesses the seed in front of the children from Newbury School.

The Millennium Seed Bank in the UK recently took receipt of its billionth seed so the opening of a New Zealand seed bank is seen as a very humble beginning.

“We live in a world of change” Hon. Chris Carter said. “That means a seed bank will be of immense value in protecting our threatened plants such as *Atriplex hollowayi*.”

None of this would have been possible were it not for the sponsorship of MWH New Zealand, a 750 person, employee-owned engineering and environmental consultancy. Money was provided for this project in lieu of giving clients gifts at Christmas. MWH New Zealand Country Manager, Andrew Caseley, said, “Each year we make a Christmas conservation donation in lieu of giving client gifts. By providing establishment funding for New Zealand’s first native seed bank we are helping leave a positive and lasting legacy for future generations.”

Please register as seed collectors

Network members are now encouraged to register as seed collectors for the MWH Threatened Plant Seed Bank. The registration form is on-line on the Network website (see www.nzpcn.org.nz under Conservation Info). Please fill in and submit the form. Your details will be checked by the Network before you are confirmed as a registered collector. Please note being registered with the Network as a collector does not mean you have permission to collect plants whenever and wherever you want. Collecting permits will still be required from the Department of Conservation for collection from reserves and parks. Landowner permission will be required when collecting from populations that occur on private property. For more information see the Network website.

In situ* conservation for *Atriplex hollowayi



Atriplex hollowayi.
Photo: Janeen Collings.

Janeen Collings, Far North Threatened Plants Ranger,
Department of Conservation. E-mail: jcollings@doc.govt.nz

The conservation status of *Atriplex hollowayi* is Acutely Threatened - Nationally Critical. It is New Zealand’s only endemic strand plant and, for the last 100 years, has been disappearing from its former range along the East Coast of the North Island. Since 1990, it was restricted to two remote beaches in the far North and, in 1992, no plants were found during surveys. Between 1998 and 2000, the greatest number of plants recorded was five. Extreme fluctuations in populations of *A. hollowayi* are normal but, with consistently low numbers, the risk of loss through storm events is more likely. Conservation effort for this plant therefore assumes greater importance.

In 2000, the Department of Conservation embarked on a recovery project with the primary focus of replenishing the natural seed bank. The bulk of effort has been focussed at extant sites with 6,700 cultivated plants planted out on eight beaches. The results of this have been heartening with a consistent increase in numbers across the years culminating in 4,123 for the 2006 season. Distributions are changing within extant sites and, since 2003, there has been a range extension to a beach further south.

Community engagement in managing *A. hollowayi* has been a key to success. This began with Iwi Ngati Kuri being involved with the Department of Conservation in developing a Recovery Plan. Hands on involvement from mustering feral animals through to sowing the seed have fostered a great sense of pride and community ownership. Much of the work has involved local schools with Te Hapua School receiving a Conservation Award for its efforts. The children will be our future Kaumatua who will advocate for the wild places and all the life therein.

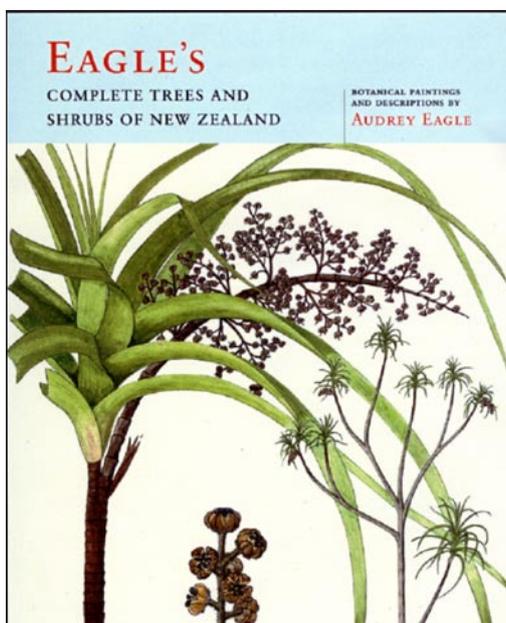
Iwi Ngati Kuri recently delivered their Taonga *A. hollowayi* into the MWH New Zealand Native Plant Seed Bank. This is seen as an insurance policy should disaster befall the wild populations. This was a momentous occasion in the conservation of *A. hollowayi*. However, *in-situ* conservation remains the highest priority for this and all other of our endangered plant life. The recovery programme is planned to continue with bulking up of the natural seed bank, threat management and increasing distribution into suitable historic sites.



Janeen Collings with children from Te Hapua School on a planting day.

Montana New Zealand Book Awards

This year, in New Zealand's most prestigious book awards, Audrey Eagle won the Montana Medal for Non-Fiction as well as being the illustrative category winner with her work *Eagle's Complete Trees and Shrubs of New Zealand*. The two-volume work containing 800 hand painted plates has



images of every single New Zealand tree and shrub, some of which are now extinct. It took Eagle more than 50 years to complete this book. Award judges Dr Paul Millar, David Larsen and Morrin Rout said the monumental work was a magnificent tribute to Eagle's vision, perseverance and consummate skill as a botanical artist. "Audrey Eagle has devoted her life to the painstaking work of classifying and illustrating New Zealand flora. The product...is a book that will be treasured and utilised for generations," said the judges.

As always, there was strong competition in the non fiction category (200 entries in the overall competition and 26 finalists) and Audrey Eagle can be justifiably feel proud of this achievement. The Network congratulates Audrey on her achievement.

Network Annual General Meeting for 2007

The Network AGM will take place on Friday 5 October at Turnbull House, Wellington from 5 p.m. till 8 p.m. The event will start with a meeting to elect the new Network council followed by a discussion on issues of interest to members. There will then be food and drink for members. There will then be a public lecture at 6.30 p.m. open to members of other NGOs, government agencies and the public followed by another chance to mingle.

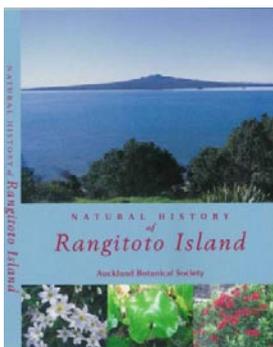
Our Guest speaker will be Dr Matt McGlone—leader of the Biodiversity & Conservation team at Landcare Research. His major research interests are palaeoecology of the New Zealand vegetation (with an emphasis on the last hundred thousand years), biogeography of the New Zealand flora, climate change and biodiversity and the impact of human settlement. His current work includes research into changing climates of the Sub-Antarctic islands, tree lines, the effect of fire on wetlands, and how and why Maori burnt so much forest in the early years of settlement. His recent involvement in conservation of biodiversity has made him ponder why it is very much left in the shadow of climate change while arguably being a much more important issue for New Zealand over the next few decades. His talk will explore this conundrum.

The title of his talk and the abstract are given below. We look forward to seeing as many of you as possible at the AGM. Items you would like to have included on the agenda for the AGM should be sent to: info@nzpcn.org.nz.

The New Zealand Biodiversity Crisis: Symbolic Acts, Imaginary Friends and Real Loss

New Zealand has been losing biodiversity since settlement in the 12th century. As a society, we still fail to grasp the magnitude of the issue and therefore to organize effectively to stem the loss. The public apparently believes the situation is improving. Government agencies – fully aware of how bad the situation is – are constrained in the amount of resource they can assign. Private initiatives are increasing in number and ambition but are by their very nature uncoordinated at a national scale and of uncertain duration. The situation is therefore bleak. Nevertheless, there are things that can be done. Ironically, the most important of these is to offer some hope, some certainty of success for effort, resources and emotion invested. Here I believe there are lessons to be taken from the success of the climate change lobby in gaining attention and securing action. There are also hitherto barely tapped resources available, but to fully utilize these will take a coordinated effort that the biodiversity community has only fitfully achieved in the past.

Matt McGlone, Landcare Research



Natural History of Rangitoto Island

This 192 page book is fully illustrated in colour and provides a comprehensive account of Rangitoto Island, covering flowering plants, conifers, ferns and fern allies, mosses, liverworts, lichens, fungi and algae – including species lists, along with accounts of the geology, history, vegetation ecology, and animal life. The book has been published by the Auckland Botanical Society and is the result of intensive field work and research by our team of contributors, and embodies the findings of past researchers on the origins, biodiversity and ecology of the island.

Name: _____

Address: _____

Email or ph number (in case of queries):

Price for NZPCN members:

\$35 including postage

Number of books: _____

Please send your order and cheque to:

Rangitoto Book sales
Auckland Botanical Society
P.O. Box 26391
Auckland 1344

Upcoming Events

If you have important events or news that you would like publicised via this newsletter please email the Network (events@nzpcn.org.nz):

Auckland Botanical Society

Meeting: Wednesday evening, 5 September, in the Unitec School of Natural Sciences, a talk on Seaweeds by Mike Wilcox.

Field Trip: Saturday 15 September, to Tiritiri Matangi Island. Leaders: Ewen Cameron and Neil Davies.

Field trip: Saturday 29 September, a seaweed excursion to Leigh Marine Lab, Cape Rodney-Okakuri Point Marine Reserve & Goat Island Walkway. Leader: Mike Wilcox.

Waikato Botanical Society

Working Bee: Sunday 26 August, at the Botanical Society Threatened Plant Collection. Please bring gloves, old clothes and boots for weeding, planting and propagating activities. Meet: 9.45 a.m. at Waikato University Gate 9, Hillcrest Rd. Contact: Liz Grove eg3@waikato.ac.nz ph 07 846 0965 (hm).

Field Trip: Sunday 2 September to Dickies Flat, Karangahake. We will continue up the river heading more into the northern Kaimais to compare previous notes and plant lists to see if there is a shift from Coromandel to Kaimai in the vegetation type. **Meet:** At the L&P bottle by the Ohinemuri River, Paeroa, by 9.30 a.m. **Contacts:** Doug Ashby (dj.ashby@xtra.co.nz ph 07 862 4706), to carpool from Hamilton Liz Grove (eg3@waikato.ac.nz ph 07 846 0965 (hm)).

Rotorua Botanical Society

Field trip: Saturday 8 September (Sunday 9 September optional), East Coast *Olearia pachyphylla* and environs. **Leader:** Jenny Lux (021 436 805 (cell), 07 3481539 (hm), jenny@wildlands.co.nz) assisted by Tim Senior, Environment Bay of Plenty. **Meet:** The carpark at 7.30 a.m. or Opotiki DOC Area Office (Cnr Elliot & St John Street) at 9.00-9.15 a.m. **Grade:** medium. Visit the only known Bay of Plenty population of the 'Nationally Endangered' thick-leaved daisy *Olearia pachyphylla*. In addition, look through Oroi Scenic Reserve. Keen people may spend the whole weekend doing service to the botanically neglected East Coast. A bach is available for the first six takers but plenty of room for camping. The botanical highlight in this area is *Carmichaelia williamsii* (also Nationally Endangered).

Field trip: Saturday 15 September for the Okareka Mistletoe Restoration Project Host Planting / Weed Control Day. **Leader:** Paul Cashmore (07 348 4421 (hm), 349 7432 (wk)) **Meet:** ex Okareka store 8:45 a.m. **Grade:** medium-hard activities will focus mainly on planting mistletoe host trees on the existing planting site if more plants are required.

Wellington Botanical Society

Field trip: Saturday 1 September, to Mount Victoria, Town Belt. Self-guided 'treasure' trail. Help us update a species list for the area. Meet: 9 a.m. at Mt Victoria summit car park. Leaders: Lara Shepherd (wk ph 463 5026), Leon Perrie (wk 381 7261, hm 386 2618).

Meeting: Monday Evening 17 September, Victoria University of Wellington. Lecture Theatre 101, Murphy Building, Kelburn Parade, a meeting focussed on Otari-Wilton's Bush. David Sole, Acting Manager, Natural and Botanic Areas, will provide an insight into the management plan, its intentions and implications and Rewi Elliot, Curator/Manager, will discuss the collections review.

Victoria University of Wellington

Symposium: Saturday 25 August 2007, 9am – 5pm, Hunter Lecture Theatre HU 323. This symposium hosted by the Adam Art Gallery with support from the Stout Research Centre, is entitled 'Seeing the Wood for the Trees: Forestry's Past, Present and Future'. Registration fees: \$10, \$5 students and unwaged.

Canterbury Botanical Society

Meeting: Friday 7 September, at 7:30 p.m. in Room A5 University of Canterbury, a talk by Phil Knightbridge of the Department of Conservation's West Coast Conservancy: 'Of *Coprosma wallii* and other threatened plant work in the wet West'. A number of case studies including *Coprosma wallii*, the Charleston gentian and scarlet mistletoe will be used to show what we have learnt over the past 10 years and how this is being applied.

Field Trip: Saturday 8 September to Church Bay Scenic Reserve.

Botanical Society of Otago

Symposium: Thursday 30 August, "Nature named & ordered". Start: 9.30 a.m., finish: 6.00 p.m., in the Hutton Theatre, Otago Museum. A discussion of the life and works of Linnaeus and Solander, the Linnaean system of classification, and the influence of new technologies on the classification, origins and distribution of New Zealand's biodiversity. The Symposium concludes with the Cockayne Lecture 2007 by Dr Bill Lee, Landcare Research "Birds in Paradise: the role of birds in shaping New Zealand's terrestrial biodiversity". See the [Royal Society](#) for more information about this and other related events. **Contact:** [Carolyn Burns](#), phone: (03) 479 7971.

Field trip: Saturday 15 September, a weekend field trip to the Catlins. Leave from Botany car park at 9.00 a.m. Explore several coastal botanical locations over two days. Day trippers welcome. To reserve accommodation or find out more, contact: John Barkla (ph. 476 3686, evenings) by Wednesday 12 September.

Meeting: Wednesday 26 September, in the Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel. Use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Rm. 215, 2nd floor. Please be prompt as we have to hold the door open. A talk by Mascha Bischoff on "The private life of NZ alpine plants". **Contact:** [Kevin Gould](#), phone: (03) 479 9061.

The Hellaby Indigenous Grasslands Trust – 6th Annual Geoff Baylis Lecture

Wednesday 10 October, 2007: Start time: 5.10 p.m. Professor Alan Mark will present the 6th Annual Geoff Baylis Lecture with a talk entitled 'The Hellaby Indigenous Grasslands Trust: Its contribution to the understanding of, and changing attitudes towards, our indigenous grasslands.' The Trust has supported approximately 360 projects over the years. **NOTE VENUE:** Auditorium, University of Otago, College of Education, Union Street East. **Contact:** [Kevin Gould](#), (phone: (03) 479 9061).