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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 43. JUNE 2007 Deadline for next issue: Wednesday 10 July 2007

Message from the President

I had reason to access the Network website the other day to check on the spelling of some names of orchids. It is probably not well known that there are indigenous New Zealand orchids. I say that because few people mention orchids when I ask people about their favourite native plants. I often try to engage people during my talks on conservation and seek their views about their favourites. You will see below that New Zealand has 104 formally recognised indigenous orchids. This exciting information is noted in the equally exciting piece about the fact sheets for indigenous New Zealand orchids.

Thanks to the the hard work of a few people, information on the Network website continues to be extended. It is not surprising, therefore, that the number of hits per month now exceeds one million!

In this month's Newsletter there are two particulary important reports that are relevant to achieveing the sixteen targets for 2010 of the Global Plant Strategy. One report is about the latest developments of the MWH New Zealand sponsored seed bank for New Zealand's theatened plants. This is now ready for receiving seeds. If you are interested in supplying information please have a look at the protocols on the web site. This Seed Bank will help New Zealand to achieve target eight of the Global Plant Strategy.

The other report is about Important Plant Areas. The Network has the advantage of having members throughout the country and in doing so is in a very good position to contribute to the nominations of sites for consideration as Important Plant Areas. Do please consider providing information and onece again the Network will be making a valuable contribution to the Global Plant Strategy by way of target Five.

Ian Spellerberg, Lincoln University

Plant of the Month

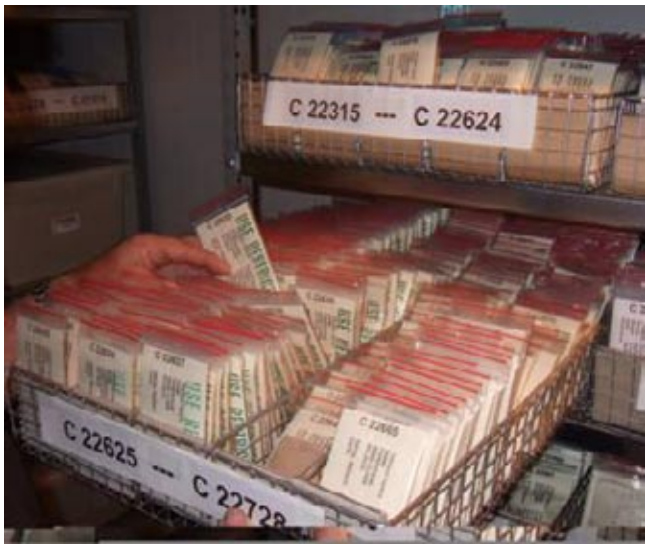
Plant of the Month for June is the endemic kahikatea or white pine (*Dacrycarpus dacrydioides*). This conifer is New Zealand's tallest indigenous plant growing up to 65m. It is found in lowland forest, formerly dominant on frequently flooded or poorly drained alluvial soils. It was once the dominant tree of a distinct swamp forest type all but extinct in the North Island—the best examples remain on the West Coast of the South Island. The white odourless timber was used extensively to make butter boxes, for much of the late 1800s and early 1900s. It was this practice which all but eliminated kahikatea-dominated swamp forest from the North Island and northern South Island. The Network fact sheet for this species may be found at: www.nzpcn.org.nz/vascular_plants/detail.asp?PlantID=2155

Kahikatea (*Dacrycarpus dacrydioides*). Photo: Jeremy Rolfe.

New Zealand's MWH Threatened plant seed bank ready to receive seed

*Phil Knightbridge, Department of Conservation (*pknightbridge@doc.govt.nz*)*

The MWH New Zealand sponsored seed bank for New Zealand's threatened plants is now ready to receive seed for long-term storage. A registration process for prospective seed collectors and seed collecting protocols have now been added to the NZPCN's website under the "Conservation info" section. If you are interested in collecting seed for storage in the seed bank you need to register as a collector following the instructions on the NZPCN website. Note that a collecting permit is required for any seed collections from public conservation land.



The priority for collection is acutely threatened species, including those that are taxonomically indeterminate. The seed bank will act as an insurance against the extinction of these species in the wild. The seed collecting guidelines on the NZPCN's website provide information on how to collect seed, information to collect on each collection and where to send seed to.

Once received at the seed bank, which is located at the Margot Forde Germplasm Centre on AgResearch's Palmerston North campus, seed will be cleaned, dried and placed into low temperature storage.

Conserv-vision conference 2007

The forthcoming Conserv-Vision conference, to be held in Hamilton on 4–7 July, will celebrate 20 years of integrated conservation management by the New Zealand Department of Conservation and will chart options for the future.

Due to late sponsorship received, the vision conference now has an opportunity for a limited number of new registrations from representatives of NGOs at the discount rate of $150.00. To take advantage of this awesome deal visit: http://www.waikato.ac.nz/wfass/Conserv-Vision/ to register. Hope to see you there.

QEII Covenant inspections

A wide range of threatened plant populations have now been surveyed nationwide as part of a joint Biodiversity Advice fund project with the Queen Elizabeth II Open Space Trust. Wildland Consultants were contracted to undertake the surveys. Species inspected include *Pittosporum turneri*, *P. obcordatum*, *Mazus novaezeelandiae* subsp. *impolitus* f. *hirtus*, *Christella dentata* and *Pimelea arenaria* amongst others Reports will be made available to the landowner and the QEII Trust regional reps so that they can work together to protect and monitor these threatened populations and ensure their survival.

Pittosporum obcordatum. Photo: John Smith-Dodsworth.

Friends of Galapagos NZ

The links between New Zealand and Galapagos are strong with Kiwis being involved in a number of projects and programmes in Galapagos. Those links have just been strengthened and formalised by the establishing of Friends of Galapagos New Zealand whose launch took place at the Beehive on 27 March.

Friends of Galapagos New Zealand (FOGNZ) is the latest in a developing network of such organizations with existing support organizations in the USA, UK, Germany, Holland, Switzerland, Canada, Japan and the Nordic countries. The idea is to raise awareness of, and to focus attention on, the problems facing the survival of the Galapagos ecosystem and to raise funds and other forms of support for the conservation effort which is spearheaded by the Ecuadorian National Park Service (PNG) and the Charles Darwin Foundation (CDF)

Botanists have recently rediscovered a leafless plant that had not been recorded in Galapagos for more than 30 years! The parasitic *Ombrophytum subterraneum* takes nutrients from tree roots and only surfaces when it produces flowers and fruits.

While the birds, reptiles and marine mammals are the most obvious and spectacular representatives of the Galápagos ecosystem, the plant population is equally important and significant from a scientific and evolutionary point of view. Some 250 of the 600 native plant species are endemic and these are thought to have developed from just 110 species that made their way to the islands. Sadly there are now in excess of 700 introduced plant species, a problem that you are only too well aware of here in New Zealand. Only last month, FOGNZ founder member and renowned wildlife photographer, Tui De Roy found a new invasive plant species, as yet unidentified, on Isabela, interestingly it appears to have been kept in check by goats, but as they have recently been eradicated, there is a real danger of this invasive plant becoming well established.

FOGNZ is looking to work with a wide range of existing organizations in New Zealand, to assist in the conservation effort, in particular we will look to make use of New Zealand's wealth of expertise in the prevention, control and eradication of invasive species. We are looking to encourage individuals to volunteer their time and expertise, either in Galapagos, or in some cases here in New Zealand, a recent request was for a report writer who could be based here in New Zealand.

We recognize that while we are may not raise very large amounts of money, we can offer expertise and technical support as well as volunteer manpower. We are seeking to gear up our resources to have maximum impact. One of the first projects that we are planning, is to work with the Hamish Saunders Environmental Trust to send a Kiwi student to Galapagos and then bring an Ecuadorian student back to New Zealand, a win win situation for all involved.

We are also discussing ways in which the plant conservation expertise of NZPCN could be harnessed to help Galapagos. There is a real need for expertise in control and eradication of invasives as well and help in ecosystem restoration. The 100,000 or more goats recently removed by Project Isabela have left a ravaged plant community, and while many species are recovering strongly, the balance is likely to have been radically altered. Kiwi expertise could be invaluable in helping to ensure that the ecosystem returns a close as possible to its original state.

In Galapagos we will work with a number of organisations in addition to the PNG, these will include the Charles Darwin Foundation (CDF) the main scientific organization in the islands, Fundar Galapagos which concentrates on human related issues such as fishing and agriculture and other NGOs that have programmes in the islands.

Galapagos is an iconic figurehead for the conservation of the world environment, and while its biodiversity is still very largely intact. It is under serious threat. FOGNZ expects to be able, in conjunction with its New Zealand Partners, to be able to make a significant contribution to the conservation of Darwin's islands.

For more information please contact: Julian Fitter, Friends of Galapagos NZ, PO Box 11-639, Wellington. E: julian@galapagos.org.nz and check out our wonderful website at: www.galapagos.org.nz

Call for Important Plant Area of Otago nominations

The New Zealand Plant Conservation Network is currently calling for nominations of sites for consideration as Important Plant Areas (IPA). The Botanical Society of Otago has decided that it will endeavour to collate a list of suitable candidate areas for consideration for IPA status and to provide information supporting the submissions. The following information is from the New Zealand Plant Conservation Network www.nzpcn.org.nz

Important Plant Areas

An IPA are natural or semi-natural sites exhibiting exceptional botanical richness and/or supporting an outstanding assemblage of rare, threatened and/or endemic plant species and/or vegetation of high botanical value.

The purpose of an IPA programme is to identify a network of sites within each biogeographic zone that are critical for the long-term viability of naturally occurring wild plant populations. These sites are defined such that they can be managed as contiguous areas. They are not intended to cover large tracts of a region or country. IPAs are not legal site designations, but are a framework for identifying and highlighting the very best sites for plants and fungi (Note: this also includes lichens and algae!), which can be used to support conservation actions and initiatives. The identification of IPAs in New Zealand and throughout Oceania is valuable so that conservation efforts for wild plant species and their habitats may be appropriately targeted to these sites. Target 5 of the Global Strategy for Plant Conservation is that "protection of 50% of the world's most important areas for plant diversity assured by 2010". So that New Zealand can achieve Target 5 of this strategy the Network is working to identify IPAs.

For more information about the Global Important Plant Area Programme see www.plantlife.org.uk/international/plantlife-ipas.html

Criteria

Five criteria have been developed by the New Zealand Plant Conservation Network for the identification of Important Plant Areas in New Zealand. Some sites may meet more than one criterion. All sites must be discrete management units and not large expanses or entire regions of the country.

A. The site holds significant populations of one or more species which are of global or Oceanic conservation concern. This includes populations of New Zealand's acutely threatened plant species (Critical, Endangered and Vulnerable) and 'At Risk' species (Range Restricted and Sparse) - based on de Lange et al 2004. Species of global conservation concern are those threatened species that are New Zealand endemics or whose distribution is largely (over 75%) within New Zealand. In

terms of significance IPAs should be selected only for populations which are viable or for which ameliorative measures can be taken to ensure a return to viability. Consideration should be given to the geographical spread of the species, so that both core and edge of range populations are included in the New Zealand IPA network.

B. The site has an exceptionally rich flora in an Oceanic context in relation to its biogeographical zone. The co-occurrence of a large number of species and the existence of a high diversity of habitats are both expressions of floristic richness. Assessments of floristic richness should be based on comparative data that can be related to the national resource, rather than on subjective judgements or local opinion. Areas that support more than a given percentage (e.g., 25%) of the plant species native to a country may be considered to be exceptionally rich.

C. The site is an outstanding example of a habitat or plant community type of global or Oceanic conservation and botanical importance. This will itself have to be measured by criteria to evaluate the size, quality and distinctiveness of the plant community. It will include New Zealand's naturally rare and nationally threatened plant communities (see following link for rare ecosystem classification www.landcareresearch.co.nz/research/research_details.asp?Research_Content_ID=10.)

D. The site supports species or vegetation that is regarded of national cultural importance. An example might be the sites where kopi trees (*Corynocarus laevigatus*) support dendroglyphs on the Chatham Islands.

E. The site holds significant populations of one or more species or habitats or plant communities of regional conservation concern within New Zealand. These plant species or communities may be common nationally but within a region maybe extremely scarce.

At the moment the Botanical Society of Otago is preparing a draft list of sites in Otago that are likely candidates for IPA status. These will be listed on the website www.botany.otago.ac.nz/bso. We ask that members forward any areas they consider candidates to mthorsen@doc.govt.nz. Supporting information is not required at this stage, but if you do have supporting information please indicate this. We will be asking members for information (species list, plant community information, published studies, etc) they have on candidate areas and will also be approaching the Department of Conservation to incorporate the information they hold on the candidate areas.

If you have any questions, or want further details, please contact Mike Thorsen (03) 4746969, email mthorsen@doc.govt.nz

Fact sheets for indigenous New Zealand orchids completed

Petalochilus (*Caladenia*) *minor.*
Photo: Jeremy Rolfe.

At present New Zealand has 104 formally recognised indigenous orchids. At the request of NZPCN members fact sheets for all these are now fully populated. NZPCN recognises that the taxonomy of New Zealand orchids is in a state of flux and that some of the genera we have used are the subject of dispute, e.g., *Petalochilus* vs *Caladenia*. Thus, where possible, full synonymies are given. Also our decisions to use particular genera follows the advice given by those people most closely associated with the revision of the family in Australia and New Zealand. In most cases we have been able to source our descriptions to available literature and these sources are provided. In some cases we have had to significantly modify these descriptions, and in a few cases resort to using herbarium specimens either for clarification or as the sole source of information on which to base our

descriptions. NZPCN also provides a description for the nothotaxon *Thelymitra* ×*dentata* because that hybrid is treated as a species in the New Zealand Flora series Vol. II published in 1970 and which is still the only official Flora compendium of New Zealand orchid knowledge available. In preparing these fact sheets we accept that many of the species we have treated are species aggregates, e.g., *Nematoceras rivulare*, *Pterostylis montana*, and that the status of some others is doubtful, e.g, *Nematoceras panduratum*. It is not the responsibility of the NZPCN to make taxonomic adjustments, and we do not believe in providing fact sheets for unnamed entities. For information on these un-named taxa, and for opinions on the status of other New Zealand orchid species, we suggest members examine literature published by the New Zealand Native Orchid Group.

Thelymitra ×*dentata*. Photo: Ian St George.

For help with these fact sheets we thank Peter J. de Lange, Brian P. J. Molloy, Ian St George, David L. Jones, Mark A. Clements and Jeff Jeanes for their advice and access to their unpublished notes and images. NZPCN acknowledge the staff at the Auckland War Memorial Museum Herbarium (AK) for allowing access to specimens and assistance with finding key literature.

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):

Conserv-Vision 4–7 July 2007

It is less than a month now until we celebrate 20 years of work by the Department of Conservation in New Zealand, and come together to share experiences and plan for the future. It is an unparalleled opportunity to learn from leading speakers from within New Zealand and many other countries. Thanks to those who have already registered to ensure this will be a successful event. There is still time to join us if you haven't registered by visiting www.waikato.ac.nz/wfass/Conserv-Vision/.

Check out the guest speaker line up, the conference programme with presentations listed and great range of field trips. If you have already registered but haven't signed up for a field trip you can still do so right up until the first day of the conference.

If you are involved in conservation, you should not miss this conference.

For queries contact mairij@waikato.ac.nz

Auckland Botanical Society

Meeting: Wednesday 4 July Catherine Beard will be speaking on Antarctic vegetation

Field trip: Saturday 21 July Cascades Kauri Park/Ark in the Park: Leaders, Sandra Jones, John Staniland, Leslie Haines. Contact Maureen (email: youngmaureen@xtra.co.nz) for more details.

Rotorua Botanical Society

Meeting: Saturday 30 June at 10.30 a.m. Annual General Meeting at DOC BOP Conservancy Office, 99 Sala St, Rotorua. Enter by the Scion (Forest Research) north entrance and turn left before the locked gates. Bring food for a shared lunch. Hot soup will be provided. Following the AGM and lunch, there will be the field trip below.

Field trip: Saturday June 30 to Five Mile Gate Wetland, SH 5, south of Rotorua. Meet: 1.00 p.m. at DOC BOP Conservancy office as above. Visit a small and (until recently) unbotanised wetland where the only known population in the Rotorua Lakes Ecological District of swamp astelia (*Astelia grandis*) grows. **Leader:** John Hobbs 07 348 6620.

Wellington Botanical Society

Field trip: Sunday 1 July Matiu / Somes Island. NOTE NOT SATURDAY TRIP. Join Forest & Bird planting workbee as a volunteer in the morning and botanise island after lunch. Catch East by West ferry - departs Wellington 10 a.m., Petone 10 a.m., Days Bay 10.30 a.m. On arrival at Somes be prepared for baggage check for mice etc. Ferry fares will be FREE for volunteers. Please advise contact: Sunita Singh, phone 387 9955, by Friday 29 June. Sailings may be cancelled at short notice owing to weather. To check the day's sailing status, phone 494 3339 then press 4. Website www.eastbywest.co.nz.

Field trip: Saturday 14 July – Te Marua workbee. In partnership with Greater Wellington, BotSoc has been committed since 1989 to do weed control and revegetation in this important matai / totara / maire remnant in Kaitoke Regional Park. Our biennial workbees must continue with planting and weeding, particularly around the plantings, so please come to help with this important work. Bring: gloves, kneeler, weed bag, and your favourite planting and weeding tools e.g. trowel, hand fork, loppers, pruning saw, pinch bar. Maps: R26 Paraparaumu and Upper Hutt street map. Upper Hutt Station carpark at 9 a.m., or Te Marua Bush at 9.30 a.m. 8.05 a.m. train on Hutt line from Wellington Station. Contact: Glennis Sheppard 526 7450, Sue Millar 526 7440.

Meeting: Monday 16 July *Hebe* or *Veronica* – why change back? In 1786 Forster gave koromiko the name of *Veronica salicifolia*. Cheesman's Manual (1925) retains *Veronica* for the group we currently call *Hebe*, although before that some authorities were differentiating NZ hebes from the largely northern hemisphere genus *Veronica*. From 1926 Hebe increasingly became the accepted name for the genus. Phil Garnock-Jones, Professor of Plant Science at Victoria University, will explain why it is now proposed to revert to the name *Veronica* for this common group of plants. He has an extensive knowledge of the genus and has published widely on the group. He was closely involved in the recently published "*An Illustrated Guide to New Zealand Hebes*" by Michael Bayly and Alison Kellow. 7.30 p.m. at Victoria University, Wellington, Lecturer Theatre M101, ground floor Murphy Building, west side of Kelburn Parade. Enter building off Kelburn Parade about 20m below pedestrian overbridge.

Meeting: Monday 20 August 1. Annual General Meeting 2. AP Druce Memorial Lecture: Vascular flora and some fauna of small northern NZ islands. Ewen Cameron, Curator of Botany, Auckland Museum. From the Three Kings to the Bay of Plenty, exploring and documenting the flora of small northern islands and islets has been an enjoyable pastime. Unusual natives or new weeds all help to indicate the wider picture: the status of both the native and naturalised flora. Islands with large seabird populations and no rats make interesting comparisons to those without seabirds and with rats. A range of different islands and their biota will be presented, including a range of "island species". 7.30 p.m. at Victoria University, Wellington, Lecturer Theatre M101, ground floor Murphy Building, west side of Kelburn Parade. Enter building off Kelburn Parade about 20m below pedestrian overbridge.

Canterbury Botanical Society

Meeting: Friday 6 July at 7:30 p.m. room A5 University of Canterbury; Dieter Steinegg "Christchurch`s Ageing tree Population".

Field trip: Saturday 7 July Field trip to The Christchurch Botanic Gardens with Sue Molloy.

Botanical Society of Otago

Meeting: Wednesday 20 June, 2007 Protection of native biodiversity and botanical values on privately owned land in Otago. Start time: 5.20 p.m. A talk by Aalbert Rebergen, Biodiversity Officer with the Otago Regional Council. The voluntary protection of native biodiversity in general and botanical values in particular, on farms and other privately owned land in Otago. At 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. **Contact:** Kevin Gould, phone: (03) 479 9061.

Meeting: Wednesday 10 October, 2007. The Hellaby Indigenous Grasslands Trust - 6th Annual Geoff Baylis Lecture. Start time: 5.10 p.m. Professor Alan Mark will present the 6th Annual Geoff Baylis Lecture with a talk entilted The Hellaby Indigenous Grasslands Trust: Its contribution to the understanding of, and changing attitudes towards, our indigenous grasslands. Geoff Baylis was a Board member since the inception of the Hellaby Trust in 1959 and was Chairman for many years. Professor Mark has also been involved in many different ways since the Trust's inception. The Trust has supported approximately 360 projects over the years. **NOTE SPECIAL VENUE:** Auditorium, University of Otago, College of Education, Union Street East. **Contact**: Kevin Gould, phone: (03) 479 9061.