



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. 115. JUNE 2013

Deadline for next issue: Monday 15 July 2013

President's message

A big vote of thanks and congratulations to the organising team, led by a very dedicated John Sawyer, for the NZPCN 2013 conference "Are We There Yet?". The team put together an outstanding conference, with an excellent array of speakers who covered a wide range of subjects that were all topical and of interest to plant conservationists. It is wonderful to be able to host such a conference that is dedicated to plant conservation in New Zealand. The Network has had much positive feedback following the conference.

At the conference, we launched a new National Plant Conservation Endowment Fund, with an auction, well-supported by donations and bidders on the night. The Fund is now open and accepting donations. Professor Ian Spellerberg has generously offered \$500 to the Fund, provided nine more people do the same, so please take up this challenge (read below for more information).

I was truly botanically inspired by the papers and interactions at the conference. There are such fantastic opportunities for field botanising in Aotearoa/New Zealand. I hope that you are making the most of them and I look forward to hearing about your discoveries at our next conference, or reading about them over the next few months in our newsletter.

Happy botanising out there.

Sarah Beadel

President

NATIONAL PLANT CONSERVATION ENDOWMENT FUND CHALLENGE

The Plant Conservation Network launched an endowment fund for plant conservation at the Conference dinner on Saturday 25 May. In years to come, this fund is intended to sponsor plant conservation action including fencing, weeding, pest control, planting, monitoring and any other activity that helps protect indigenous plants.

Professor Ian Spellerberg, former Network President, has generously offered \$500 to this newly established fund provided nine more people do the same by the end of June 2013. This will raise \$5000 for the fund.

We already have two people matching Ian's donation so we are now seeking seven more people (or groups of people) to gift \$500 to the fund by the end of June.

Please contact the Network if you are willing to be a donor to this endowment fund or please ask (info@nzpcn.org.nz) if you have any queries.

PLANT OF THE MONTH – *NESTEGIS APETALA*



Nestegis apetala. Photo: Peter Anderson.

Plant of the month for June is the coastal maire, *Nestegis apetala*. Coastal maire is a stout spreading tree up to 10 m tall with a trunk that can reach up to 1 m diameter. In New Zealand, it occurs in the North Island, including northern offshore islands from the Three Kings Islands south to Hauturu, near Whangamata, and also on Norfolk Island.

It grows in coastal forest, often along exposed margins, rocky slopes, cliff faces, talus slopes and exposed ridgelines. It is dioecious, having male and female flowers on separate plants, and can be easily grown from fresh seed.

Although frost-sensitive, it can make an excellent specimen tree for a large garden or street avenue. Once established, coastal maire is extremely tolerant of drought, strong winds and salt burn. It can be confused occasionally with its cousin, white maire (*N. lanceolata*), which very occasionally grows with *N. apetala* in northern coastal forest. White maire differs by having much narrower (up to 30 mm wide) ovate-lanceolate to narrow-elliptic leaves with a midrib that is adaxially deeply impressed.

See the Network fact sheet for *Nestegis apetala* at: www.nzpcn.org.nz/flora_details.aspx?ID=1031

Missed the best Conference yet?

Thanks to sponsorship from the Department of Conservation, the Network recorded most of the talks at the recent NZPCN Conference held in Auckland 23–26 May 2013.

The presentations can be viewed here:

[NZPCN Conference “Are we there yet? 10 years of the NZPCN”](#)

To view the video material on the All about Auckland website you will need FLASH PLAYER 10.2 or newer. Flash doesn't play on Apple 3G, iPad, iPhone. You can download the latest Adobe Flash version for your system [here](#).



“Are we there yet?”. Geoff Davidson poses the question.



Keynote speaker Dame Anne Salmond addresses the conference. Photos: John Sawyer.



Dr Peter Heenan talks about recent developments in plant taxonomy.

Thanks to Network Conference sponsors

The Network would like to thank the principal sponsors of the NZPCN conference held in Auckland in May. They were: Auckland Council, the Department of Conservation, the Millennium Seed Bank (UK), Auckland Botanic Gardens, Landcare Research and the Auckland Botanical Society. Without their support, the Network would not have been able to convene such a successful event.

The Network would also like to acknowledge the many sponsors of the charity auction, as follows:

Richard Reeve, Xin Cheng, Lynne and Trev Huggins, Ian Spellerberg, Mike Wilcox, Karina Given, Audrey Eagle, Matt Ward, Mark Seabrook-Davison, Matt Ward, Arne Cleland (Pukerau Nursery), Craig Potton Publishing, Geoff Davidson (Oratia Native Plant Nursery), takana native trees, Puketi Forest Trust, Yealand's Winery and the Department of Conservation.

Sponsors of the conference proceedings were Takana Native trees Ltd and O2 Landscapes and we also thank them for that support.

Charity auction raises thousands of dollars at Network conference dinner

The Network held a hugely successful charity auction at its conference dinner on Saturday 25 May raising close to \$3500 for the David Given Threatened Plant Research Trust and the newly founded National Plant Conservation Endowment Fund. VIP guests at the dinner were Karina Given, Geoff Davidson (of Oratia Native Plant Nursery) and Philippa Crisp (former Network President).

We thank the many people who generously donated items. In particular, we thank Don Turner (of takana native trees) who ran the auction and to Geoff Davidson and Philip Smith who assisted. The plants provided by takana native trees and Oratia Native Plant Nursery proved to be the biggest hit with many being sold on the night.

Items auctioned on the night included:

- Original poetry donated by Dunedin based poet, Richard Reeve
- Original pottery donated by Auckland based artist, Xin Cheng
- *Rare and endangered plants* by David Given, donated by Karina Given
- *Auckland's remarkable urban forest* by Mike Wilcox, published by Auckland Botanical Society in 2012 and donated by Mike Wilcox
- Ian Spellerberg's native plant book trilogy (*Going native*, *Living with natives* and *Native by design*) published by Canterbury University Press and donated by Ian Spellerberg
- A voucher for two nights' Bed and Breakfast in Invercargill donated by Lynne and Trev Huggins
- An original Lands and Survey Scenic Reserve sign (made of aluminium with real bullet dents!), donated by Mark Seabrook-Davison
- A copy of the two volume book *Eagle's complete trees and shrubs of New Zealand* signed and donated by Audrey Eagle
- *Threatened native plants* donated by Geoff Davidson, Oratia Native Plant Nursery
- \$100 plant voucher donated by Arne Cleland at Pukerau Nursery in Gore
- Plant books (*Field guide to New Zealand's Native trees*, *Above the treeline* and *New Zealand's native trees*) donated by Craig Potton Publishing
- Native trees in 45 litre bags donated by takana native trees
- A guided botanical tour of Puketi Forest, Northland donated by the Puketi Forest Trust
- A carton of wine donated by Yealand's Winery
- An original plant painting by Network Council member Matt Ward
- Hut passes and a Great Walk pass donated by the Department of Conservation

If you have more ideas about how to raise money for the Network's David Given Threatened Plant Research Trust or the Plant Conservation Endowment Fund please let us know (info@nzpcn.org.nz).

Huge demand for plant conservation training at Network's pre-conference training day

The Network's plant conservation training courses, held at the Auckland Botanic Gardens on Thursday 23 May, were so popular that they could have been filled twice over, such was the demand. Due to class size limits, only 70 people were able to attend. The three courses offered were:

- Plant identification course run by Jeremy Rolfe of the Department of Conservation with assistance from Janeen Collings from Auckland Council.
- Seed bank collection course run by Michael Way and Peter Giovannini from the Millennium Seed Bank (UK).
- Plant propagation course run by Billie Elliot of the Auckland Botanic Gardens and Rewi Elliot from Otari Wilton's Bush, Wellington.

The three courses proved to be a hit with many participants having emailed the Network to say how valuable the courses had been. All participants received a certificate for passing their courses, which were based on the Network marae-based plant conservation training modules (available for sale from the Network's on-line shop) and the Millennium Seed Bank's seed collection training course.



Steve Palmer participating in the plant identification course.



Michael Way, Royal Botanic Gardens, Kew, leading the seed collecting course.



Billie Elliot leading the plant propagation course.
Photos: John Sawyer.

Thanks go to Billie Elliot, Rewi Elliot, Michael Way, Peter Giovannini, Jeremy Rolfe, and Janeen Collings and to Jack Hobbs, Bec Stanley and the fantastic staff at Auckland Botanic Gardens who hosted and sponsored the courses and looked after us on the day.

Please let the Network know if you have a group of people that would like training and a venue that could be used so we can assess demand for running more courses nationwide (info@nzpcn.org.nz).

Urban Native Bush Reserves – a 2013 conference field trip

Jesse Bythell (jesse.bythell@orcon.net.nz)

On a warm autumn morning, a double-decker bus meandered along the streets of Auckland carrying an atypical group of sightseers. The passengers listened attentively to the tour guide and gazed through the windows at the sights, but their focus was on the arboreal rather than architectural structures the city has to offer. And so began a fantastic day of unrestrained 'silvaphilia' (love of forests) on one of the 2013 NZPCN conference field trips.

We began by visiting the coastal pohutakawa forest at Takapuna Beach Reserve, our group of botanical admirers contributing an unexpected element to the throng of people walking dogs along

the sands. It was great to see how the values of these coastal giants had been protected with careful management of adjacent apartment developments.

Our next stop at Sylvan Park revealed a broadleaf forest of kohekohe and karaka, with some puriri, rewarewa, kowhai (*Sophora chathamica*) and one large hinau. The effects of the intense recreational use of this forest were evident in the poor representation of understory species and the remains of a children's fort.

Continuing, we reached Smith's Reserve, where we admired grandmother kahikatea whose offspring have been slowly infiltrating the broadleaf forest. Those of us from the Deep South were pleased to see a few familiar species, such as milkwood (*Streblus heterophyllus*). We marvelled over the charcoal remains in puriri trees indicating where people had smoked out wild bees in the past to gather honey. It was easy to see why this reserve is so popular with its interesting history of human use and assemblage of large and beautiful trees.

At Eskdale Reserve, Glenfield, we romped in a more feral setting of forest types regenerating after a history of logging. A highlight for many of us was the healthy stand of mature swamp maire (*Syzygium maire*). Exiting the reserve, we were surprised to discover a vibrant and inspiring community nursery run by the Kaipatiki Project. Network council member Rewi Elliot was delighted by a gift of three swamp maire to plant at Otari Native Botanic Gardens, which he manages.



Admiring the diversity of plant life in a gully at Kauri Park.



Mingling with the dog walkers on Takapuna Beach.

Arriving at the Kauri Park, Birkenhead, we dutifully disinfected our footwear and headed in to gaze in admiration at these ancient Gondwana giants and to learn about current efforts to combat kauri dieback disease. Other highlights included seeing tanekaha and species that are associated with kauri such as *Astelia trinervia*.

Our final destination was the marvellous 'rock forest' at Withiel Thomas Reserve, Mt Eden. Here, gnarled titoki (*Alectryon excelsus*), mahoe (*Melicytus ramiflorus*) and mangaeo (*Litsea calicularis*) tenaciously clung to inhospitable-looking ancient lava flow.

This tour of some of the marvellous forests of Auckland was the perfect way to end a fantastic and inspiring conference and we enthusiastically thanked Mike Wilcox and his helpers for their efforts. Here are some of the highlight comments by the field trip participants:

'It was encouraging to see the scale of the Kaipatiki Project and the sheer number of volunteers who are involved.' – Luke

'Seeing what looked like an anastomosing kahikatea was interesting, especially as there is no record of this occurring in the literature.' – Rob

'The giant puriri in Smith's Reserve was my favourite part.' – Finn

‘Seeing swamp maire right in the middle of Auckland, I’ve never seen anything like it before!’ – Erin

‘The lava forest, particularly the mangaeo, was fantastic. It made geomorphology cool!’ – Alice S

‘It was fantastic to visit such a range of forests in one day with a group of nerds, and such a variety of nerds!’ – Angelina

‘It was nice to see the forests, I felt completely out of the city. North Shore is very lucky to have these reserves!’ – Alice B

‘Very novel, never been in a kauri forest before!’ – Kate

‘The entertaining sight of eager botanists nearly falling into the ‘terrain traps’ at Eskdale Reserve while they were busy looking at plants.’ – Jean



A splendid kahikatea at Kauri Park.

Network business cards published

The Network has published a series of eight business cards to promote the Network and its website (see image) to new audiences. These were designed by Jesse Bythell and Robin Sallis (www.cerulean.co.nz). Please contact the Network (info@nzpcn.org.nz) with your name and address if you would like us to post you a pack of these cards to distribute to your friends or colleagues. If you have other ideas about how to promote plant conservation or the Network then please let us know.



Detailed aquatic plant information provided by NIWA for Network website

The Network has been working with NIWA (National Institute of Water and Atmospheric Research) to deliver high quality information about aquatic plants in New Zealand especially the 100 or so highly invasive aquatic pest species that have naturalised in New Zealand and the group of specialised native algae, the charophytes, which were not previously covered by the Network. Paul Champion, Deborah Hofstra and Mary de Winton (NIWA scientists) have been preparing the new improved text over the past 18 months and it is now being loaded on the Network website by our web team. New and additional photographs for all aquatic plant species are also being loaded.

This work was funded by the government's Terrestrial and Freshwater Biodiversity Information System (TFBIS), which was set up to help support the conservation of New Zealand's indigenous biodiversity by increasing awareness of and access to fundamental data and information about terrestrial and freshwater biota and biodiversity. The programme was one of a number of initiatives introduced in 2000 to implement the government's commitment to achieving the goals of the New Zealand Biodiversity Strategy.

Please let the Network know if you have any feedback about this work or if you can complement the images with your own photographs (info@nzpcn.org.nz).

Kaipatiki Project

Jacqueline Knight, Kaipatiki Project (restoration@kaipatiki.org.nz)

From our origins as a community restoration project in 1998, Kaipatiki Project has become the largest urban restoration project being carried out by a single group in New Zealand. We have now evolved into a sustainability centre advocating for improvements to the environment across the board as well as through restoration of native habitats. To this end over the last 12 months, Kaipatiki Project has engaged with schools, kindergartens, colleges and adult learners, teaching around 4,000 people about waste minimisation, composting and worm-farming, and sustainability.

Our restoration team continues to care for and protect over 70 hectares of native bush in Glenfield on Auckland's North Shore and, with help from hundreds of volunteers from the community, each year Kaipatiki Project plants thousands of trees grown from locally sourced seeds in our own native plant nursery. We are currently producing around 24,000 new native plants annually. Each year over 7,000 volunteer hours are contributed to the organisation by over 600 volunteers including individuals, community groups and corporate team-building days.

Volunteers are engaged in plant propagation in our organic native nursery on our regular volunteer days at Kaipatiki Project and in our new Hobsonville Point nursery. Regular volunteer teams as well as corporate groups, community organizations and schools work in our local reserves removing weeds and replanting in appropriate native species.

As well as hands on work in the reserves and nursery, we also run a number of courses and programmes that help the community to understand and manage the natural environment better. One such programme is Nursery Bites, a plant propagation and identification course where we take a group out to visit a different habitat each week to identify the plants and collect seed before returning to the nursery to learn the propagation techniques associated with those species. This course is attended by a wide range of people including those working for organisations such as councils and Trees for Survival, other community restoration group members, individuals who own lifestyle blocks they are revegetating, city dwellers who have a stream or bush in their backyard and students who, having learnt the theory, are looking for hands-on experience.

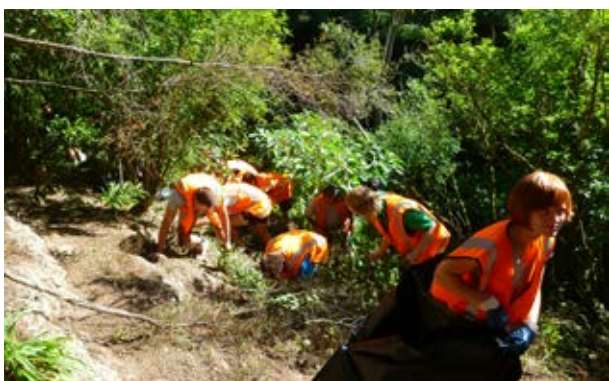
Kaipatiki Project also developed a programme called Nature for Neighbourhoods in response to a demand in the local area for advice on how to identify and manage both weeds and native plants in private properties. This involves a visit to assess the site and talk to the property owners about their concerns, weed bags are dropped off as well as 20–30 appropriate plants to replace the weeds and create a more natural habitat in their backyard. This programme was later funded by the North



Long-time volunteer, Steve, and Hobsonville manager Wayne discuss some seedlings.

Shore City Council Stormwater Department and became the Streamside Assistance Programme with the proviso the properties backed on to waterways. We have also had funding from Auckland Council to provide Nature for Neighbourhoods to properties in the central isthmus backing on to either reserves or waterways for which we have just been funded for the third year running.

A further development in the Nature for Neighbourhoods programme has occurred whereby the Stormwater Department on the North Shore now includes a variation of this programme as part of its mitigation process when doing major works through reserves. By offering the owners of properties that back on to the reserves the opportunity to have assistance with their weeds and further plantings, the department is stopping garden weed species from creeping back into the reserve. Another great thing to have come out of this programme is the development of an on-going volunteer group in the adjacent reserves. For example, when we were contracted to do the Nature for Neighbourhoods programme for properties around Kauri Glen Reserve we also collected the names of any people who were interested in helping out in the reserve. Since then, a group has been set up and is supervised by our local council volunteer groups coordinator, Paul Duffy.



AECOM staff clearing tradescantia in Witheford Reserve

the community and their local environment, is sited at Hobsonville Point. Last year, Hobsonville Land Company contracted Kaipatiki Project to restore the coastal strip around the Hobsonville Point housing development. We currently manage the weed removal and have developed a temporary volunteer-run native plant nursery where we grow plants from locally sourced seed that we then plant out into the coastal areas. Due to the success of the project (we have produced 8000 plants that are currently being planted out over a series of community days), we have recently been invited to set up the nursery permanently. A further relationship we are developing is with Open Polytechnic for whom we have been providing small sites for it to manage and restore under the guidance of the restoration tutors who volunteer for us in return.

Funds for our work comes from a range of grants and contracts including the Auckland Council, ASB Bank, The Ministry for the Environment, Lions Foundation, the Sustainable Business Network, and the Hobsonville Land Company. We are also supported by Okahu Rakau, the Ngati Whatua restoration group at Bastion Point, which helps us on variety of projects as well as in an advisory capacity.

Our push to connect with, engage, educate and inspire the community into helping create a better environment takes all our small part time staff can give and is troubled by variations in funding, staff and policy changes at local and central government levels but we are proud of our growing successes and sure in our intentions. We are far from perfect and our current goals after a time of expansion is to consolidate where we are, improve and stabilise our systems and link in more strongly with experts and other groups in the field. So, when we lifted our heads from our work and attended the recent New Zealand Plant Conservation Network conference, we were delighted to find that, rather than battling alone against the establishment to continue our attempts to reconnect the land and the people and so heal both, many institutions, groups and individuals are now walking beside us and this made me surer still of success because, of course, together we can do so much more.

Explaining scientific names (4): Names of origin

Jesse Bythell (jesse.bythell@orcon.net.nz)

Plant names often reflect the location the species inhabits or the place it was first discovered. Botanical Latin has three different methods for indicating origin in a species epithet. The first method is to use the name of the place (e.g., a country or a mountain range) with a genitive suffix (ending) to indicate origin. A widely found example of this is *novae-zelandiae* meaning 'of New Zealand'. The second method is to transform the place name into an adjective using standard suffixes –ensis (-e), -anus (-a, -um) or –icus (-a, -um) depending on the gender of the generic name (nouns are grouped into declensions in many languages to indicate inflection patterns). The International Code of Nomenclature for algae, fungi, and plants (ICN) recommends that epithets using geographical names are derived according to these first two methods. It is interesting to note that the older epithet *novae-zelandiae* (or sometimes *novaezelandiae* or *novae-zeelandiae*) is more commonly used for New Zealand plants and the modern epithet *zeelandicum* is much less common. Nova Zeelandia is the Latin name given to New Zealand by Dutch cartographers in 1645 after the province Zeeland in the Netherlands. The third method for indicating place of origin is the use of the suffix –cola which means 'dweller' or 'inhabitant' and often refers to habitat type as well as specific locations, e.g., *nivicola* 'snow dweller'.

Here are some examples of New Zealand plants whose names indicate their area of origin or habitat:

- *Plantago aucklandica* – this plantain is named after the Auckland Islands where it is endemic. However, confusingly, several other species with the epithet *aucklandica* (-us) are not confined to the Auckland Islands.
- *Sophora chathamica* – named for the Chatham Islands where it was initially collected, but it is also found on the North and South Islands.
- *Chionohebe ciliolata* subsp. *fiordensis* – this beautiful compact forget-get-me-not is endemic to Fiordland.
- *Hebe canterburiensis* – the type locality for this species is Arthur's Pass but its distribution is much wider than Canterbury.
- *Hebe rakaiensis* – the type locality of this species is near the Rakaia River, Mid Canterbury, but its distribution is wider than this.
- *Myosotis lytteltonensis* – this nationally critical forget-me-not has been recorded in several places around New Zealand but is currently confined to cliffs about the town of Lyttelton on Banks Peninsula.
- *Xylaria wellingtonensis* – a nationally critical fungus known from a single collection made in July 1916 in Wellington.
- *Anisotome cauticola* – this naturally uncommon aniseed is restricted to Otago where it is usually found in steep rocky sites; its species epithet means 'cliff dweller'.
- *Gaultheria nubicola* – the name of this tiny snowberry is derived from the Latin *nubilis* 'cloud, shadow', meaning 'cloud dweller'.
- *Colobanthus monticola* – the name of this alpine species means 'mountain dweller'.

Support for Project Gold

Jess Clark, DOC's new Project Gold Co-ordinator (jclark@doc.govt.nz).

DOC has appointed a co-ordinator for Project Gold in Otago to support community restoration of kowhai woodland throughout Otago. Jess has a strong background in conservation and recreation and has worked for DOC for the past 2 years, mainly on remote island biodiversity work. Previously, she worked on Waitakere City Council's Twin Streams Project in Auckland, managing the restoration of Waikumete stream margins, and has also been an instructor with the New Zealand School of Outdoor Studies. Jess will be contacting people engaged in Project Gold to support site preparation

and planting, and is developing systems and processes for the project. She is also compiling a review and a report.

Project Gold in Queenstown received funding from Kiwi Discovery of \$10,000 a year for 3 years, so has about 40 sites under way and over 800 kōwhai have been planted. There are about 10 Project Gold sites in Wanaka, and several sites in Central and Coastal Otago. More planting is planned for autumn and spring.

“I’m also collecting information on what’s working well and what the challenges are, such as protection from rabbits,” Jess said. “Otago has endless kowhai woodland restoration potential, and Otago people have lots of enthusiasm for restoration planting. It’s the kind of thing that will build up and become a long-term project. My role is to ensure the project continues this season, by supporting and facilitating the community to continue and start new Project Gold sites.”

The project is also being used as an opportunity to plant rare plants such as *Olearia hectorii*, *Leonohebe cupressoides*, and plants such as lancewood (*Pseudopanax ferox*).

The Te Kakano community nursery in Wanaka, the Pukerau nursery in Gore and Otago Polytechnic have been growing kōwhai for the project. Several schools have also been propagating seeds.

Anyone interested in getting involved in Project Gold can contact Jess, ph: 03 442 7933 or email: jclark@doc.govt.nz.

(First published in Good as Gold Issue 12, the Otago Conservancy Newsletter May 2013)

Port Hills tree planting

Stan Darling, Bishopdale Tramping Club (stan.darling@gmail.com)

Its 12th year of Port Hills native planting was recently completed by the Bishopdale Tramping Club, Christchurch, as 300 more mixed-species trees were dug into a grassed west-facing slope near Kennedys Bush. The club has moved along the slope under Port Hills Rangers’ supervision over recent years. New trees are given a maintenance boost by another work party before the next area is planted. This project provides a little bit of variety from the weekly tramp.

Getting young plants to grow above the competitive cocksfoot grass is the aim, and the council is getting about a 90–95% survival in the first year after planting with the contractors plantings and 95-97% with the volunteers’ plantings. Green cages (see photo) keep the hungry hares from reaching the plants and gnawing at them.

The mix includes kanuka, podocarps (matai, totara and kahikatea) and hardwood species such as broadleaf, lemonwood, five finger, and kowhai as well as cabbage trees. The shrub margin includes *Teucrium*, *Coprosma* and *Hebe*, all hardy species for initial planting until frost-tender trees can be inter-planted in the next 10 years.

About 12 community groups help in the effort, with additional volunteer planting days organised for the general public. Bulk contract plantings of kanuka, flax and tussock are done every year. Council-hired contractors dig in between 28,000 and 35,000 plants a year, mainly kanuka and flax. Mixed species are planted mainly by volunteers. The volunteers play a part in increasing species diversity, which will aid natural regeneration over time.

Remnants of the native bush are enhanced by the projects. Corridors of vegetation are created. They contain food sources for birds, insects and lizards, which all support further seed dispersal and natural shrub regeneration.



Di Carter, the Christchurch City Council’s Port Hills ranger, with members of the Bishopdale Tramping Club. Photo: Stan Darling.

Over five years, 30,000 silver tussocks have been planted to repair damage at “sheep camps” and to displace weeds. Over six years, 30,000 kanuka have been planted above the Otahuna Valley. Kanuka planting has also been trialled in grazed areas to reduce erosion in steep-sided, loess-covered valleys. Once a kanuka is established, sheep will not eat it because of its strong scent.

About 16,000 flax plants were added to three catchments to reduce sediment and improve water quality when stock is excluded. The total number of new plants in the ground in the 12 years to 2012 is 250,000.

Flowering and fruiting around the country and the world

The Network’s plant distribution database is growing steadily as new observations are posted from around New Zealand and the world. Below are some of the recent observations including *Libocedrus plumosa* recorded by Jane Andrews in Titirangi to Clinton Hughes’ observations from Matukituki Bridge of *Olearia hectorii*, to Rowan Hindmarsh-Walls’ observations of *Hebe epacridea* from the St Bathans Range and John Barkla and Peter de Lange’s observations of many species from Tomahawk Beach in Dunedin and Sardegna, Costa Rei, respectively. Please keep recording your observations as they continue to build a more accurate national picture of plant distribution and phenology.

1. [Carex maorica](#) was seen Fruiting at Kapiti Airport, Kapiti Coast District, by Matt Ward on 10/06/2013.
2. [Olearia hectorii](#) was seen, Casual Observations, at Matukituki Bridge, Queenstown-Lakes District, by Clinton Hughes on 10/06/2013.
3. [Prumnopitys taxifolia](#) was seen, Casual Observations, at Matukituki Bridge, Queenstown-Lakes District, by Clinton Hughes on 10/06/2013.
4. [Prumnopitys taxifolia](#) was seen, Casual Observations, at Matukituki Bridge, Queenstown-Lakes District, by Clinton Hughes on 10/06/2013.
5. [Vitex lucens](#) was seen Flowering at Takapuna, Auckland, by John Sawyer on 10/06/2013.
6. [Olearia hectorii](#) was seen, Casual Observations, at Matukituki Bridge, Queenstown-Lakes District, by Clinton Hughes on 10/06/2013.
7. [Vitex lucens](#) was seen Flowering at Glen Road, Devonport, Auckland, by John Sawyer on 8/06/2013.
8. [Olearia solandri](#) was seen Fruiting at Queens Park, Invercargill City, by Jesse Bythell on 7/06/2013.
9. [Elatostema rugosum](#) was seen, Casual Observations, at Mangamuka Gorge Scenic Reserve, Far North District, by John Sawyer on 5/06/2013.
10. [Metrosideros excelsa](#) was seen Flowering at Sardegna, Costa Rei, Salina, Le Beach, International, by Peter de Lange on 5/06/2013.
11. [Achyranthes aspera](#) was seen Fruiting at Sardegna, Costa Rei, Salina, Le Beach, International, by Peter de Lange on 5/06/2013.
12. [Myoporum aff. insulare](#) was seen First Flowering at Sardegna, Costa Rei, Monte Nai, International, by Peter de Lange on 4/06/2013.
13. [Leptospermum scoparium var. incanum](#) was seen Flowering at Te Kao, Far North District, by John Sawyer on 2/06/2013.
14. [Eriobotrya japonica](#) was seen Flowering at Te Kao, Far North District, by John Sawyer on 2/06/2013.
15. [Calystegia soldanella](#) was seen Flowering at Sardegna, Cala Sinzias, Cala del Sinizias, International, by Peter de Lange on 2/06/2013.
16. [Achyranthes aspera](#) was seen Fruiting at Sardegna, Cala Sinzias, Cala del Sinizias, International, by Peter de Lange on 2/06/2013.
17. [Tetragonia tetragonoides](#) was seen Flowering at Sardegna, Cagliari, Via Nicolo Canelles, International, by Peter de Lange on 2/06/2013.
18. [Lantana camara var. aculeata](#) was seen Flowering at Te Kao, Far North District, by John Sawyer on 2/06/2013.
19. [Ulex europaeus](#) was seen Flowering at Te Kao, Far North District, by John Sawyer on 2/06/2013.
20. [Solanum mauritianum](#) was seen Flowering at Te Kao, Far North District, by John Sawyer on 2/06/2013.
21. [Corokia cotoneaster](#) was seen Fruiting at Mt Watkin, North Otago, by John Barkla on 1/06/2013.

22. [Myoporum aff. insulare](#) was seen Flowering at Sardegna, Cagliari, Monte Urpinu, International, by Peter de Lange on 1/06/2013.
23. [Myoporum aff. insulare](#) was seen Flowering at Sardegna, Sinis Peninsula, near Putzu Idu, International, by Peter de Lange on 31/05/2013.
24. [Metrosideros excelsa](#) was seen Flowering at Sardegna, Alghero, Via Europa, International, by Peter de Lange on 31/05/2013.
25. [Coprosma rhamnoides](#) was seen Fruiting at Ross Creek, Dunedin City, by John Barkla on 26/05/2013.
26. [Hebe epacridea](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
27. [Kelleria villosa var. villosa](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
28. [Leptinella pectinata subsp. villosa](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
29. [Ranunculus crithmifolius](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
30. [Schizeilema hydrocotyloides](#) was seen Fruiting at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
31. [Hebejeebie densifolia](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
32. [Epilobium pycnostachyum](#) was seen Casual Observations at St Bathans Range, above Rocks creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
33. [Raoulia petriensis](#) was seen Fruiting at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
34. [Hebe buchananii](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
35. [Carmichaelia vexillata](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
36. [Carmichaelia crassicaulis subsp. crassicaulis](#) was seen, Casual Observations, at St Bathans Range, above Rocks Creek, Central Otago District, by Rowan Hindmarsh-Walls on 19/05/2013.
37. [Tetragonia tetragonoides](#) was seen First flowering at Sardegna, Golfo di Orosei, Cala Gonone, International, by Peter de Lange on 13/05/2013.
38. [Cordyline australis](#) was seen Flowering at Sardegna, Golfo di Orosei, Cala Gonone, International, by Peter de Lange on 13/05/2013.
39. [Apodasmia similis](#) was seen Fruiting at Whitireia Park, Porirua City, by Matt Ward on 12/05/2013.
40. [Tetragonia implexicoma](#) was seen Fruiting at Mapoutahi, Purakaunui Beach, Otago, Dunedin City, by John Barkla on 12/05/2013.
41. [Myoporum laetum](#) was seen Fruiting at Mapoutahi, Purakaunui Beach, Otago, Dunedin City, by John Barkla on 12/05/2013.
42. [Solanum laciniatum](#) was seen Fruiting at Mapoutahi, Purakaunui Beach, Otago, Dunedin City, by John Barkla on 12/05/2013.
43. [Melicytus ramiflorus](#) was seen Flowering at Auckland Botanic Gardens, Auckland, by Bec Stanley on 10/05/2013.
44. [Melicytus flexuosus](#) was seen Fruiting at Lill Burn, Lillburn Valley, Southland District, by Jesse Bythell on 10/05/2013.
45. [Libocedrus plumosa](#) was seen, Casual Observations, at Titirangi Primary School, Auckland, by Jane Andrews on 8/05/2013.
46. [Cordyline australis](#) was seen Flowering at Sardegna, Sassari, University of Sassari, Dipartimento di Botanica ed ecologica, International, by Peter de Lange on 6/05/2013.
47. [Coprosma repens](#) was seen Fruiting at Tomahawk Beach, Dunedin, by John Barkla on 4/05/2013.
48. [Plantago coronopus](#) was seen Fruiting at Tomahawk Beach, Dunedin, by John Barkla on 4/05/2013.
49. [Ficinia nodosa](#) was seen Fruiting at Tomahawk Beach, Dunedin, by John Barkla on 4/05/2013.
50. [Senecio elegans](#) was seen Flowering at Tomahawk Beach, Dunedin, by John Barkla on 4/05/2013.

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):

Conservation Incorporated – What’s ahead for community-based conservation in New Zealand?

Yellow-eyed Penguin Trust 25th anniversary: a national conference for citizen-based conservation organisations like the Network. The conference is entitled *Conservation Incorporated*. Its aim is to strengthen and diversify the community base for biodiversity conservation in New Zealand. We will convene *Conservation Incorporated* in Dunedin on 17–18 October 2013. The conference will be preceded on 16 October by applied workshops on fundraising, leadership and predator management. *Conservation Incorporated* will be a strongly applied conference, from which participants will leave better prepared for the future and more aware of their place in the broader conservation landscape. Venue: the newly refurbished Dunedin Centre, which is conveniently located in the Octagon in the central CBD.

See our website: conference@yeptrust.org.nz for details about conference themes, workshops, events. Earlybird registrations opened on 1 June.

5th Global Botanic Gardens Congress

Dunedin: Sunday 20 to Friday 25 October, 2013.

Symposia, papers and posters: submit proposals online at www.5GBGC.com.

Auckland Botanical Society

Meeting: Wednesday 3 Jul 7 at 7.30 p.m. for a talk titled ‘Prehistoric fires and effects on vegetation and landscape’ by George Perry. **Venue:** Unitec School of Health Sciences, Gate 4, Building 115, Room 2005.

Contact: Shona Myers (shona.myers@vodafone.co.nz).

Field trip: Saturday 20 July to Dingle Dell Reserve.

Leader/Contact: Mike Wilcox (mike.wilcox@xtra.co.nz)

Kaipatiki Project

Bush walk & talk: Climbing rata in flower series: Saturdays 8, 22 and 29 June. **Venue:** Torbay, Northcote and Birkenhead. **Time:** 9.30 – 11.30 a.m. **Cost:** \$15 for all three guided walks.

Information and bookings: www.kaipatiki.org.nz/courses

Community Planting Days: from May to August. **Venue:** Eskdale Reserve Network, Glenfield, Auckland. **Time:** 9.30 a.m. – 12.30 p.m. **Cost:** free, including a BBQ for all planters - please bring a spade if you have one.

Information: www.kaipatiki.org.nz/volunteer

Waikato Botanical Society

Meeting: Monday 8 July at 5.30 p.m. for a talk titled 'Can we turn back the clock? Managing mangrove expansion in northern New Zealand' by Dr Carolyn Lundquist (NIWA). **Venue:** Waikato Environment Centre, 25 Ward Street, Hamilton.

Contact: Cynthia Roberts e-mail: croberts@doc.govt.nz,
ph: 07 8581034.

Field trip: Saturday 6 July to Moeatoa S.R. for restoration planting. **Meet:** 9.00 a.m. Department of Conservation, 78 Taupiri Street, Te Kuiti. **Grade:** easy.

Leader: Thomas Emmitt, e-mail: temmitt@doc.govt.nz, ph: 07 878 1055 (work) or 021 152 3030.

Field trip: Saturday 20 July to Lake Okataina. Meet: 8:30 a.m. at 1 London Street car park, CBD. **Grade:** easy/medium.

Leader: Chris Lusk,
ph: 0278763450,
e-mail: clusk@waikato.ac.nz.

Rotorua Botanical Society

Field trip: Sunday 7 July to Waiotahi Spit/Huntress Creek. **Meet:** the car park, Rotorua at 8.00 a.m. or corner of Ohiwa Beach Road and SH2 beside Waiotahi River at 9:30 a.m. **Grade:** easy, bring gumboots, tide will be low.

Leader: Wayne O'Keefe,
ph: 07 315 7556 or 021 02385608,
e-mail wayneokeefe@yahoo.co.nz.

Wanganui Museum

Meeting: Tuesday 2 July for a talk titled 'Limestone floras of Castle Hill Basin and Mt Brown' by Morgan Cox, Department of Conservation, Canterbury Conservancy. **Venue:** Museum's Davis lecture theatre.

Contact: Clive Higgie,
e-mail: clive.nicki@xtra.co.nz.

Wellington Botanical Society

Field trip: Saturday 6 July to the Rata Street Loop Walk, Naenae. **Meet:** 9.30 a.m. at bus terminus at top of Rata St.

Leader: Chris Hopkins,
ph: 04 564 3980; **Deputy-leader:**
Chris Horne, ph: 04 475 7025.

Meeting: Monday 15 July at 7.30 p.m. for a talk titled 'A social history of the fern in New Zealand by Patrick Brownsey, Research Fellow, Te Papa.

Venue: Lecture Theatre M101, Murphy Building ground floor, west side of Kelburn Parade.

Nelson Botanical Society

Field trip: Sunday 21 July to the Brook Waimarama Sanctuary.

Register: with Pam McConnell,
ph: 03 545 0975

Meeting: Monday 22 July 7.30 p.m. for a talk titled 'Notable trees' by Brad Cadwallader.

Venue: Jaycee Rooms, Founders' Park.

Canterbury Botanical Society

Meeting: Friday July 5 at 7.30 p.m. for a talk by Jessica Hill, the recipient of the student award for 2012 – 13. **Venue:** Room A5 University of Canterbury.

Contact: Gillian Giller,
ph: 03 313 5315,
e-mail: ggillerma1@actrix.gen.nz.

Field trip: Saturday July 13 to the Ridgens'

Leader: Alastair McDonald
Contact: Gillian Giller,
ph: 03 313 5315,
e-mail: ggillerma1@actrix.gen.nz.

Otago Botanical Society

Field trip: Saturday 6 July to Evansdale Glen (foul weather back up date Sunday 7 July). **Meet:** 9.00 a.m. at Botany Department car park, 464 Great King Street.

Contact: David Lyttle,
ph: 03 454 5470,
e-mail: djlyttle@ihug.co.nz

Meeting: Wednesday 10 July at 5.20 p.m. for a talk titled 'Plants and vegetation of Dunedin 150 years ago' by Dr Peter Johnson.

Venue: 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: David Lyttle,
ph: 03 454 5470,
e-mail: djlyttle@ihug.co.nz