



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 128.

July 2014

Deadline for next issue:
Friday 15 August 2014

SUBMIT AN ARTICLE TO THE NEWSLETTER

Contributions are welcome to the newsletter at any time. The closing date for articles for each issue is approximately the 15th of each month.

Articles may be edited and used in the newsletter and/or on the website news page.

The Network will publish almost any article about plants and plant conservation with a particular focus on the plant life of New Zealand and Oceania.

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

Postal address:
P.O. Box 16102,
Wellington 6242,
NEW ZEALAND

PLANT OF THE MONTH, p. 2



Alseuosmia quercifolia

Plant Conservation Awards 2014

The prestigious New Zealand Plant Conservation Network Awards are now in their tenth year. We are now calling for nominations for the 2014 awards. The purpose of these awards is to acknowledge outstanding contributions to native plant conservation. The award categories are:

- Individual involved in plant conservation
- Plant nursery involved in plant conservation
- School plant conservation project
- Community plant conservation project
- Local authority protecting native plant life
- Young Plant Conservationist of the Year (under 18 years on 30 June 2014)

Information about the awards and nomination forms are available on the Network website (www.nzpcn.org.nz) or print the final page of this issue of the newsletter. We look forward to your nominations; you may make multiple nominations under different categories. Anyone is eligible to make nominations, not just Network members. The awards will be presented at the Network **Annual General Meeting** to be held in Wellington in October. Nominations close **Monday 1 September 2014**.

Annual General Meeting

The 2014 Annual General Meeting of the New Zealand Plant Conservation Network will be held in Wellington on Tuesday 14 October at the Wellington Botanic Gardens Begonia House (adjacent to the Lady Norwood Rose Garden) commencing at 6.00 p.m. After the AGM and the presentation of the awards, there will be "The Mysterious Secrets of Uncle Bertie's Botaniarium" followed by drinks and nibbles.

We need your help with phenology recording!

Matt Ward, Network Council member (mattward@gmail.com)

In December last year, I wrote an article about phenology recording on the NZPCN site. Since then, it appears that there are definitely more people contributing to the website's observation database. I think we could increase the number of contributors even more.

In December, I made a suggestion in the article regarding recording the phenology of the same species throughout the country during the same season. This may show the variation from the effects of local climatic conditions; these conditions may be spatial or altitudinal. For example, if we, the observers, were to accurately record the first flowering of naturally occurring *Sophora microphylla* along the entire length of the country, it's quite possible the dates would vary.

I would like to invite and motivate you all to do just that; record the first, last, and degree of any kowhai species flowering anywhere in the country. We have eight endemic species in New Zealand and two introduced species (see Table 1).

PLANT OF THE MONTH – *ALSEUOSMIA QUERCIFOLIA*



Alseuosmia quercifolia. Photos: Jeremy Rolfe.

of the grove" after the sweet smell of these flowers and the species name "*quercifolia*" relates to the oak-shaped leaves. A great scented garden addition, best planted in partial shade in rich, moist soil. It is not threatened.

Plant of the Month for July is *Alseuosmia quercifolia* (oak-leaved toropapa). This endemic shrub can be found in lowland forests within only the North Island. It is most common in the Waikato but is also found from Te Pahi to near Awakino in the west and, in the east, it is present to about Thames and the lower Hauraki Plains, with a few old records from East Cape. *Alseuosmia quercifolia* is a shrub 1.5 m high to 1 m wide, with small trumpet-shaped flowers that are cream to pink in colour.

The genus *Alseuosmia* is Latin for "perfume

The Network fact sheet for *Alseuosmia quercifolia* may be found at:

www.nzpcn.org.nz/flora_details.aspx?ID=1490

Sophora microphylla is the most widespread of the species and would likely show some interesting phenological patterns. However, any information for any of the kowhai species would prove valuable since there is little presently stored on the database.

Table 1. Species of kowhai present in New Zealand.

Endemic species	Natural Location	Description
<i>Sophora chathamica</i> – coastal kowhai	North, South and Chatham Islands – see profile for further specific locations	Leaves to 150 mm long that have leaflets 6-16 mm long by 4-8 mm wide that slightly overlap and get smaller towards the tip. Bunches of drooping yellow flowers . Dry ridged and knobbly seed pods 50-180 mm long containing hard yellow seeds.
<i>Sophora fulvida</i>	Northland, Auckland and Waikato. The southern limit occurs at Mt Karioi on the south side of Raglan Harbour.	Leaves to 140 mm long that have equal-sized small yellowish-hairy leaflets 1.8-7.5 mm long. Bunches of drooping yellow flowers . Dry ridged and knobbly seed pods 60-190 mm long containing hard yellow seeds.
<i>Sophora godleyi</i> – papa kowhai, Godley's kowhai	North Island (in the west from Mokauiti River to Manawatu)	Leaves to 170 mm long that have equal-sized yellowish-hairy leaflets 2-8 mm long. Bunches of drooping yellow flowers . Dry ridged and knobbly seed pods 60-120 mm long containing hard yellow seeds. Juveniles with zig-zagging branches.
<i>Sophora longicarinata</i> – limestone kowhai	South Island (Takaka Hill and immediate environs, Arthur Range and western Marlborough)	Leaves to 140 mm long that have equal-sized leaflets 3.3-5.8 mm long. Bunches of drooping yellow flowers . Dry ridged and knobbly seed pods 70-160 mm long containing hard yellow seeds.
<i>Sophora microphylla</i> – weeping or small leaved kowhai	Throughout the main islands of New Zealand but scarce in parts of Northland.	Leaves 30-50 mm long that have spaced equal-sized leaflets 4.5-12.5 mm long. Bunches of drooping yellow flowers . Dry ridged and knobbly seed pods 50-200 mm long containing hard yellow seeds.

<i>Sophora molloyi</i> – Cook Strait kowhai, Molloy's kowhai	North Island (Cape Terawhiti, Turakirae, Palliser Bay) and Cook Strait (Stephens, Rangitoto, Chetwode, Titi, Arapawa and Kapiti Islands)	3m tall bearing leaves to 100mm long that have equal-sized leaflets 5-12mm long. Bunches of drooping yellow flowers . Dry ridged and knobbly seed pods 50-200mm long containing hard yellow seeds.
<i>Sophora prostrata</i> – prostrate kowhai	Confined to the eastern South Island from Marlborough to the Waitaki Valley	2 m tall with zig-zagging branches bearing leaves to 25 mm long that have leaflets 4 mm long. Drooping orange-yellow flowers . Dry ridged and knobbly pointed seed pods to 50 mm long containing hard brown seeds.
<i>Sophora tetraptera</i> – large leaved kowhai	Eastern portion of the North Island from East Cape south to Wairarapa, extending west toward Taihape, Lake Taupo, along Waikato River to Lake Karapiro.	Leaves 100-220 mm long that have widely-spaced greyish-green leaflets 15-40 mm long with bunches of drooping yellow flowers and dry ridged and knobbly seed pods 100-280 mm long containing hard yellow seeds.

Introduced species	Naturalised	Description
<i>Sophora cassioides</i> – Chilean pelu	2004	Often sold by nurseries as <i>Sophora microphylla</i> cv. 'Goldilocks'. Dark, glossy green, round leaflets which are evenly spaced at the base and become overlapping toward the apex of the leaf. Smaller flowers , which open very widely.
<i>Sophora howinsula</i> – Lord Howe kowhai	2007	Ornamental shrub, small tree, this species has long been grown in New Zealand under the name <i>S. tetraptera</i> 'Otari Gnome'

Even a garden specimen may be recorded as planted. If you are not sure of the species you have observed and wish to record, take a photo of the flower and a leaf, post it on the NZPCN Forum (www.nzpcn.org.nz in grey on left hand side)) with its location, and we will very likely be able to identify what you have seen. Below are known flowering times for the endemic species (Table 2.), which may help you identify species or, alternatively, lead the website into amending its records. As can be seen in Table 2, there are out-of-season examples that are valuable contributions to the NZPCN database.

Table 2. Flowering times of endemic species of kowhai present in New Zealand.

Species	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<i>Sophora molloyi</i>				Known	Known	Known	Known	Known	Known			
<i>Sophora microphylla</i>					Occasional	Occasional	Occasional	Known	Known			
<i>Sophora chathamica</i>								Known	Known		Known	Known
<i>Sophora prostrata</i>					Occasional							
<i>Sophora fulvida</i>											Known	Known
<i>Sophora godleyi</i>											Known	Known
<i>Sophora tetraptera</i>										Known	Known	Known
<i>Sophora longicarinata</i>	Known	Known									Known	Known

Known flowering time: Occasional flowering:

If kowhai is not your cup of tea, maybe you would like to record the flowering of *Clematis paniculata*. This is the easiest of the *Clematis* spp. to positively identify, due to the size and colour of the flower. It is likely to commence flowering about now. You may need binoculars for this challenge because this species is often flowers high in the canopy with well veiled vines winding into the tree tops. It is often seen when looking at a stand of trees from afar that almost appear to have snow on them. This is another widespread species with which numerous observations may very well see a longitudinal trend. On the website profile for *C. paniculata*, we have thousands of recordings relative to the presence of the vine, yet there are only about 40 phenological observations. It would be brilliant to increase the phenological records up into the hundreds.

In case you are not sure how to record a phenological observation into the NZPCN website, here is a run-down. Once you know which species you wish to record, find it on the 'Flora' dropdown menu [Record your observations]. This will also prompt you to become a recorder if you are not a member who has logged in. Type in the Latin or common name of your species and hit "Search"; it will appear on the right. You can then hover over the "Record observation" on the far right and start the data entry. Below are the steps you need to follow:

- Step 1) Select or create a site — follow the instructions to create a site, once you have logged an observation that site will be remembered as an existing site.
- Step 2) Enter event details — Event type (8 choices)
 - Degree (5 choices)
 - Abundance (3 choices)
 - Date of observation (any date can be added here, so that historic data can be logged if you wish)
 - Status (3 choices, if you are not sure if a plant is wild, naturalised or cultivated, please think about the situation where it was found, for example, was the location a remnant, covenant, garden or reserve; were there other plants exactly the same age regularly spaced nearby, suggesting planted; or were there several generations represented, suggesting possibly wild)
- Step 3) Upload a photo (optional)—currently, the photo needs to be reduced to 500KB (but this is likely to change in the future); providing a photo will provide greater credibility to the data over time.
- Step 4) Submit—check your details and hit "SUBMIT".



Clematis paniculata flowering in August 2011, Waitewaewae Track, Otaki Forks. Photo Matt Ward.

If you have any suggestions or queries regarding recording observations, please feel free to post your inquiries or views on the Forum. The Forum is read by at least three members of the NZPCN council, so we will definitely get your message.

Fifty of the most recent phenology observations are posted on the home page and can be viewed by members and non-members. The more recordings posted, the more interesting they are to read. Let's see if we can start the ball rolling with observations countrywide of *Sophora* spp. and *Clematis paniculata*. I, for one, would be fascinated to see some patterns occur.

Request for help

Nga Manu Nature Reserve would like your support with our latest project to fund raise for QR codes on our new information signs around the reserve. The QR codes will connect technology with conservation and, by doing so, we hope to connect a new generation with information on our unique native flora and fauna. Please check out our PLEDGEME group funding proposal at www.pledgeme.co.nz/projects/2203.

Donations can be made on line and rewards are available for all levels of funding. Please pass this request on to others that you feel would like to support Nga Manu Nature Reserve.

Lichen notes 3—new substrata for the “map lichen”, *Rhizocarpon geographicum*, in New Zealand (addendum)

David Galloway (gallowayd@xtra.co.nz)

Rhizocarpon geographicum on a painted wooden fence: in the last issue of *Trilepidea* I drew attention to the lichen *Rhizocarpon geographicum* growing on a painted wooden fence in Scotland Street, Roxburgh, Central Otago (*Trilepidea* 127, p6). I inadvertently omitted to send the image of this so here it is now (Fig. 1).



Figure 1. *Rhizocarpon geographicum* (right) and *Physcia dubia* (left) on painted white, wooden fence in Scotland Street, Roxburgh, Central Otago. The eroded central portion of the *Rhizocarpon* has exposed the underlying tannalised timber on which *Lecanora polytropa* and *Candelariella vitellina* are growing. [Photo: Janet Ledingham].

Encouraging the next generation of botanists

Marcia Dale, Dunedin (imaginarycrayfish@gmail.com)

When you're expecting a baby people are quick to tell you how much your life is about to change. True, but with a bit of adaptability you can continue many of your previous pursuits, albeit with slight modifications. One activity that I've found is particularly suitable for little people is botanical field trips.

Have you ever noticed that botanists tend to move at toddler pace a lot of the time? My 15 month old daughter actually found the pace a little too slow at one point on the last trip and toddled on ahead of the main group. Botanists also tend to share little people's enthusiasm for tiny details. When everyone is down on their hands and knees examining a turf community, little people will happily join in, poking and prodding just like the big people are doing (and occasionally letting out exclamations of glee and delight – well, that's mostly from the big people).

Little people take their botanising very seriously and tend not to shirk away from using all means

necessary to get a plant identified. Hugh Wilson's field guides occasionally suggest using taste as a means of identification and my daughter shows no hesitation at following his instructions (Fig 1). And, if they start getting hungry, there is usually an obliging *Coprosma acerosa* or *C. repens* nearby with colourful berries to munch on.

Little people are able to enjoy botanical outings in ways that big people sadly are not. I would happily bounce around in nature's trampoline (*Plagianthus divaricatus*) (Fig. 2) if I didn't think I'd destroy it in the process. They are also very egalitarian in their enjoyment of plants, finding a flowering head of cocksfoot just as enthralling as any native rarity.

There are some perils to look out for, mostly in the form of the eye-level-of-little-people spikes of *Aciphylla* (Fig. 3). The native sections of botanical gardens have them scattered about willy nilly with seemingly no regard for a parent's shattered nerves. Other perils are not so obvious, such as when you lie your baby down on a soft patch of turf then, when you pick her up, you find to your horror that you've left a baby-shaped depression in an otherwise perfect mound of *Azorella trifurcata* in Peter Johnson's immaculate garden (Fig. 4). But spiky Spaniards aside, botanising with little people can be a relaxing and rewarding experience for all. Sowing the seeds of a love of plants early on can only be a good thing. And, if nothing else, plenty of fresh air is a sure fire way of getting to that Holy Grail—a sleeping baby.



Figure 1. Diagnostic tasting is very helpful



Figure 2. Gabi in ribbonwood (*Plagianthus divaricatus*)



Figure 3. *Aciphylla horrida* and toddlers is a combination that induces panic in parents



Figure 4. Gabi makes an impression lying on *Azorella trifurcata*.

Two interactive keys updated

Murray Dawson, Landcare Research (DawsonM@landcareresearch.co.nz)

In July 2014, I updated two of the interactive plant identification keys that I am responsible for. The Key to Native Orchids (www.landcareresearch.co.nz/resources/identification/plants/native-orchid-key) has been updated to include extensive additional character scoring, particularly of fruiting material, from Allan Herbarium (CHR) and Auckland War Memorial Museum (AK) herbarium specimens. Many thanks to Kath Stewart and Jenny Dent for helping me with this. Also fixed in this version of the orchid key are broken links to orchid profiles as a result of changes to the NZPCN website.

The New Zealand Weeds Key (www.landcareresearch.co.nz/resources/identification/plants/weeds-key) has had 86 new species added, along with a set of habitat characters (e.g., grasslands, parks, gardens and footpaths; roadsides and disturbed sites, etc.) for all weeds within the key. This raises the total to over 600 taxa (species, subspecies, varieties, hybrids and cultivars).



The TFBIS (Terrestrial & Freshwater Biodiversity Information System) Programme funded both of these popular keys. TFBIS is also funding app versions of many of the plant keys hosted by Landcare Research for smartphones and tablets.

A new interactive key to *Cotoneaster* species present in New Zealand

David Glenny, Landcare Research (GlennyD@landcareresearch.co.nz)

Cotoneaster is an ornamental shrub genus common in New Zealand gardens and in the wild. None is native to New Zealand; most species have their origin in the Chinese Himalaya. Most species in the key are known from the wild, a number of species are troublesome weeds, and one is banned from sale (*Cotoneaster simonsii*). *Cotoneasters* are frost-hardy, some will grow under native forest canopy, and their seeds are spread by birds. These features make them invasive weeds in both native forest and scrub ecosystems and in agricultural ecosystems.



The key uses features from leaves, flowers, and fruit to make identification through most months of the year possible. Each species is illustrated to show leaves, flowers, fruit, and pyrenes in detail. Factsheets will be added in the next 12 months. Cultivated species have been included in the key because, since 1988, the number of naturalised and casual species in New Zealand has increased from 7 to 17 and is likely to increase further.

The key is at <http://www.landcareresearch.co.nz/resources/identification/plants/cotoneaster-key>, or can be found by searching with the words “*Cotoneaster* key NZ”.

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):

10th Australasian Plant Conservation Conference (APCC10)

Hobart, Tasmania: 11–14 November 2014. The four sub-themes are: • Securing biodiversity; • Prioritising actions; • Animals in plant conservation; • Engagement and communication in the modern world. Submit your abstract now. More information: [click here](#).

Australasian Systematic Botanical Society Conference

'Next-generation Systematics': 24–28 November 2014: Massey University campus, Palmerston North.

Information and registration details: <http://www.massey.ac.nz/~jtate/ASBS2014NZ.htm>

Auckland Botanical Society

Meeting: Wednesday 6 August at 7.30 p.m. for a talk by Brenda Osborne. **Venue:** Unitec School of Health Sciences, Gate 4, Building 115, Room 2005.

Contact: Maureen Young, email: youngmaureen@xtra.co.nz.

Field trip: Saturday 16 August to North Waikato/South Auckland. **Leader:** Jenni Shanks.

Contact: Maureen Young, email: youngmaureen@xtra.co.nz.

Kaipatiki Project

Community Planting Days: Saturday 2 August at Station St, Hobsonville Point; Saturday 6 September at Upper Eskdale Reserve, Glenfield. Time: 9.30 a.m. – 12.30 p.m. Cost: free; enjoy the great outdoors planting native trees; bring your family, school, club, church or workmates. Free BBQ for all planters—please bring a spade if you have one.

More info: www.kaipatiki.org.nz/volunteer

Rotorua Botanical Society

Field trip: Saturday 2 August to Maketu Spit. **Meet:** the car park, Rotorua, at 8:30 a.m. or meet at the Kaituna River at 9:15 a.m. **Grade:** easy.

Leader: Sarah Beadel, ph: 07 345 5912 (h); 021 924 476; sarah.beadel@wildlands.co.nz.

Wanganui Museum

Meeting: Tuesday 5 August at 7.30 p.m. for the AGM and members' evening. **Venue:** Museum's Davis lecture theatre.

Contact: Colin Ogle, email: robcol.ogle@xtra.co.nz.

Wellington Botanical Society

Field trip: Saturday 2 August to Colonial Knob Scenic Reserve and the adjacent Porirua Scenic Reserve. **Meet:** 9.30 a.m. at car park on Raiha St, next to Camp Elsdon.

Leader: Leon Perrie, ph: 381 7261 (wk), 027 419 1378.

Meeting: Monday 18 August at 7.30 p.m. for the AGM and the Druce Memorial Lecture titled 'The special plants and places of Otago' by John Barkla, DOC, Otago.

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

Nelson Botanical Society

Meeting: Monday 18 August at 7.30 p.m. for a talk by Chris Ecroyd titled 'Flora of North-west Victoria, Australia.'

Venue: Jaycee Rooms, Founders Park, Nelson.

Canterbury Botanical Society

Field trip: Saturday 9 August to **the** West Melton grasslands.
Meet: 9.00 a.m. at Yaldhurst Hotel for carpooling or at the entry to the Rifle Range, end of Chattertons Road at 9.30 a.m. **What to Bring:** boots or walking shoes, thermos and lunch, lots of warm clothes, magnifying glass. **Car-pooling cost:** \$2 to cover 20 km.

Leader: Jason Butt,
ph: 027-459-2011

Te Ara Kakariki Greenway Canterbury Trust

Canterbury Plantout 2014: planning for the 2014 Canterbury Plantout is underway. The lower catchment event will be held on 6 September, with the upper catchment event on 20 September.

Join mailing list:
register@kakariki.org.nz.

Botanical Society of Otago

Meeting: Wednesday 20 August at 5.20 p.m. for a talk by Councillor Gretchen Robertson Otago Regional Council, titled 'Council focus on biodiversity'. **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.

Field trip: Sunday 31 August to Saddle Hill. **Meet:** Botany Department car park at 10.00 a.m. Good footwear is essential.

Contact: Robyn Bridges,
ph: 03 472 7330, email:
robyn.bridges@otago.ac.nz.



PLANT CONSERVATION AWARDS: 2014

The New Zealand Plant Conservation Network is now accepting nominations for the 2014 awards. The purpose of these awards is to acknowledge outstanding contributions to native plant conservation.

The award categories are:

- Individual** involved in plant conservation
- Plant nursery** involved in plant conservation
- School** plant conservation project
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NOMINATION FORM

Category (please circle):

Individual *Plant* *Nursery* *School*
Community *Local Authority* *Young Plant Conservationist*

NAME OF NOMINEE: _____

Contact details for person, school, nursery, community group or local

authority:

Address: _____

Phone: _____ Email: _____