

# TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

# No. 147

February 2016 Deadline for next issue:

#### SUBMIT AN ARTICLE TO THE NEWSLETTER

Monday 14 March 2016

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



*Brachyglottis turneri*. Photo: Jeremy Rolfe.

# New Zealand Indigenous Flora Seed Bank (NZIFSB) monthly report

Jessica Schnell (J.L.Schnell@massey.ac.nz) and Craig McGill (C.R.McGill@massey.ac.nz)

#### Whanganui seed collector workshop

The second seed collecting workshop for 2016 was held 9-10 February at Bushy Park Sanctuary, Whanganui. The workshop was attended by 14 people from Horizons Regional Council, Te Rūnanga O Ngāti Apa and the Whanganui Botanical Society. The formal lectures of the first day generated discussion and questions on the seed bank and seed bank practices including the importance of collecting seed of the same species from multiple locations. The question of storing mycorrhizal fungi beneficial to or needed for plant growth with the seed bank was also discussed. The second day of the workshop, which also took place at Bushy Park Sanctuary, was a practical training session that allowed participants to put into practice the theory learnt the previous day as well as collecting seed for banking. The practical session resulted in two more species, *Piper excelsum* (kawakawa) and *Microlaena avenacea* (bush rice grass), being collected. Both these species can be dried to a moisture content suitable for banking. In addition, seed of *Hedycarya arborea* (pigeonwood) was collected for desiccation screening to determine if it can be dried to the low moisture needed for banking without losing viability.





The Whanganui Seed Collecting workshop participants (back row, left to right: Craig McGill, Esther Williams, Neil Gallagher, Rachel Ritter, Gabe Rehm, Jessica Schnell, Geraldine Wood, Chris Shenton, Tui Cameron; front row, left to right: Margi Keys, Ron Taiapa, Phyllis Leigh, Lina Swislocki, Marcos Schleiden, Mandy Brooke; absent: Aaron Madden). Photo: Anthea McClelland.

Aaron Madden and Mandy Brooke using the pole pruner to harvest some pigeonwood seeds. Photo: Jessica Schnell.

#### Cromwell Seed Collector workshop 14-16 March 2016

This training workshop in Cromwell is now full. However, if there are any people who would like to attend the workshop, they can go on a waiting list by contacting Jessica Schnell on (06)3569099, ext 83236 or email: J.L.Schnell@massey.ac.nz. Sometimes registrants are forced to withdraw and vacancies become available.

# PLANT OF THE MONTH – *BRACHYGLOTTIS TURNERI*



Brachyglottis turneri. Photo: Jeremy Rolfe.

Plant of the month for February is *Brachyglottis turneri*. This interesting shrub daisy is found in the North Island, mostly in the Taranaki region but extending across to Whanganui National Park and down to Pohangina Valley. It can grow to around 2 m, usually on damp mudstone cliffs or where seepages occur above rivers and streams. Its leaves are 10–20 cm long and 7.5–15.5 cm wide, with a broad auriculate (resembling an ear or ear lobe) base. Flowers are bright yellow appearing in spring and summer. It is considered Threatened -Nationally Critical.

You can see more about *B. turneri* at the Network website factsheet: <u>http://www.nzpcn.org.nz/</u> <u>flora\_details.aspx?ID=380</u>

#### Royal Botanic Gardens, Kew Wakehurst Place visit

Craig McGill visited the Royal Botanic Gardens, Kew Wakehurst Place in January to meet with Michael Way, who has been the acting contact for New Zealand within the Millennium Seed Bank Partnership and Ruth Bone, the new International Projects Officer, Pacific, for the Partnership. Ruth will be visiting New Zealand in March to help with the seed collecting in the South Island and to familiarise herself with the New Zealand Project.

#### Have you seen this lichen??

#### Allison Knight (alli knight@hotmail.com)

The search is on for *Dibaeis absoluta*, one of the 975 lichens (54%) that were classified as Data Deficient in 2012 (de Lange et al., 2012), since not enough is known to assign a meaningful category.

At last year's John Child Bryophte and Lichen Workshop, Jon Terry drew attention to this shocking deficit. He set up the nucleus of a group to work towards improving the situation. *Dibaeis absoluta* is the first lichen we are tackling. It is quite striking and beautiful (at least to a lichenologist!) and is easy enough to recognize, with its distinctive sessile, pale candyfloss pink apothecia. These have a faint white powder coating when dry and are brighter pink when wet. The apothecia are sessile and lie flat against the thallus, which is pale to bright green when wet, fading to pale grey as it dries. I suspect this lichen is relatively common (though often overlooked or unrecorded). It grows on shady disturbed ground around tracks and uprooted soil mounds in the forest, spreading over soil banks or damp rock.

You could help address the data deficiency by keeping an eye out for *Dibaeis absoluta* and noting date, location, substrate, size of thallus and number of thalli seen. If possible, take photos and send all these details to us and, ideally, put



Dibaeis absoluta pink apothecia, green thallus.



Dibaeis absoluta on soil and rock bank.

them on NatureWatch (<u>www.naturewatch.org.nz</u>) where the identification can be confirmed and they will provide a permanent record for all to see. Please send copies to: <u>alli</u><u>knight@hotmail.com</u> and <u>jon@jonterryecology.com</u>. The more photos and records of distribution that come in, the closer we will get to understanding the real distribution and conservation status of this striking lichen.

Two other crustose lichens with pink or pinkish apothecia are the common *Dibaeis arcuate* and *Baeomyces heteromorphus* but, in both of these species, the apothecia are distinctly stalked. *Icmadophila splachnirima*, in the same family as *Dibaeis*, also has sessile candy-floss pink apothecia, but it has a glaucous green, distinctly foliose thallus. Images of all these species can be found by searching on NatureWatch: <u>naturewatch.org.nz/observations</u> and in Knight (2014): <u>www.nzpcn.org.nz/page.aspx?flora non vascular lichens</u>

#### References

- de Lange, PJ; Galloway, DJ; Blanchon, DJ; Knight, A; Rolfe, JR; Cowcroft, GM; Hitchmough, R, 2012. Conservation Status of New Zealand Lichens. *New Zealand Journal of Botany* 50 (3): 303-363.
- Knight, A, 2014. *Lichens of New Zealand: an introductory illustrated guide*. Botanical Society of Otago.



Dibaeis absoluta habitat: clay bank in forest



*Dibaeis absoluta* on dry soil bank. Photos: Allison Knight.

#### **Canterbury Botanical Society December field trip to Ashley Gorge and Lees Valley** *Miles Giller (broadleaf@actrix.co.nz)*

A good forecast (cooler, dry weather) saw 13 members first explore the roadside and a small greywacke spur beside the Ashley Gorge Road. Kanuka (*Kunzea serotina*) dominated the rubbly slopes but the exposed spur itself supported a suite of small shrubs and herbs including *Carmichaelia monroi* (both flowering and in early pod) and several specimens of a finer softer plant that we suspected might have been a hybrid between *C. monroi* and *C. corrugata* (Declining). *Helichrysum intermedium* grew on steeper faces, where we also found *Heliohebe raoulii* and *Hymenophyllum villosum*. *Carex breviculmis* and *Brachyglottis bellidioides* seemed to occupy the most exposed broken rocks, sometimes among straggling stems of the *Coprosma acerosa/brunnea* group (Declining/Data Deficient). The parasite *Exocarpos bidwillii* was seen, generally close to taller host vegetation. A few specimens of *Brachyscome sinclairii* were located and set us in anticipation of the afternoon's visit to Lees Valley.

After lunch beside the middle bridge, we continued on to Lees Valley, the valley floor looking rather brown in the dry summer. A first short stop had us searching a road-side *Coprosma intertexta* (Declining) patch in the hope of confirming a female plant; eventually some immature fruit were found confirming the sex. The highlight of the day, however, was our foray into the Lees Valley Department of Conservation reserve on the De Bourbels (Mount Pember) alluvial fan where we hoped we might relocate several species of both high



Botanising the Mount Pember fan.

intrigue and conservation value. We expected to need to look hard for *Brachyscome pinnata* (Nationally Critical), but quickly found it scattered throughout. At first, we wondered how significantly it differed from the *B. sinclairii* we had seen in the morning; later comparison of photos showed that the pinnae of *B. pinnata* were generally larger and more regular and numerous, sometimes even imbricating

(especially apparent on young leaves). However, it was the distinctive foliage of *Plantago spathulata* and *Sonchus novae-zelandiae* (*Kirkianella novaezelandiae*—Nationally Vulnerable) that probably took most of our attention, especially for the photographers among us. *Sonchus novae-zelandiae*, in particular, exhibited a range of leaf shapes and colours though we agreed that one particularly colourful leaf might have owed its mottled appearance to a fungal growth on the surface. A small cluster of a silvery-leaved herb had us intrigued, with consensus being that it was probably a *Craspedia*—though a flower needs to be seen to



Sonchus novae-zelandiae.

remove the doubt. *Aciphylla subflabellata* (Declining) plants were seen in localised patches, thankfully with some evidence of recent recruitment. Alice Shanks pointed out *Rytidosperma thomsonii* (Data Deficient) and several patches of what appeared to be *Rytidosperma merum* (Nationally Vulnerable). The diminutive herb *Stackhousia minima* was eventually located, growing near mats of *Leucopogon nanum* (Naturally Uncommon), rambling *L. fraserii* and occasional sprawls of *Coprosma petriei*.

## Research on Metrosideros excelsa

*L Thomson, Associate Professor (Agroforestry), University of Sunshine Coast (lex.thomson@gmail.com)* I am interested in getting in contact with anyone in New Zealand undertaking research on *Metrosideros excelsa.* I am particularly interested in the use of different varieties in horticulture and landscaping for a publication on 'Diversity Matters in Pacific Islands Trees'.

Alternatively, if anyone has any other example where tree genetic diversity within a New Zealand tree species is important for conservation and use then maybe we could substitute for it for pohutukawa (we want to have one or more New Zealand examples in the book).

Anyone with relevant information is asked to contact me through the above email address.

## 2016 French Film Festival

#### Cianna Canning, Alliance Francaise (<u>info@frenchfilmfestival.co.nz</u>)

The 2016 Alliance Française French Film Festival will take place from 17 February to 13 April throughout the country. I am contacting you because some of the films selected in this year's line-up deal with environmental issues, which I know are key concerns for your organisation.

From the creators of award winning *March of the Penguins*, the César nominated documentary <u>Once</u> <u>Upon A Forest (Il était une forêt)</u> examines the intricacies of the natural world and the perfect balance between all life within these unique environments. This stunningly shot film aids in further raising awareness of environmental issues, a message that will resonate strongly with the New Zealand Plant Conservation Network.

Another must-see at this year's festival is the award-winning animation <u>April and the Extraordinary</u> <u>World</u>. This captivating tale, beautifully drawn by acclaimed cartoonist Tardi, is set to inspire the next generation of scientists and environmental activists alike.

Tickets for these films and the rest of the festival selection are now available at your local screening location. For a full list of films, dates and cinema locations, and to book tickets, head over to our website at <u>www.frenchfilmfestival.co.nz/dates-and-venues/</u>.

If you have any queries please don't hesitate to contact us (<u>www.frenchfilmfestival.co.nz</u>). We look forward to seeing you at the 2016 Festival!

# **UPCOMING EVENTS**

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

# Australian National Seed Science Forum

Evening event: Monday 14 March. Main programme: 15–16	<b>Registration closes 29 February</b>
March 2016.	at: <u>www.seedpartnership.org.au/</u>
	seedscienceforum/registration.

# Botanical painting: Mediterranean plants from the hills and shores of South Pelion

Further information: http:// www.lagouraxi.com/LRCH BotanicalPainting_EN_2016_01. pdf
Details: <u>www.anpc.asn.au/</u> conferences/2016
Registration: www.nzepiphytenetwork.org
<b>Contact:</b> Maureen Young, email: youngmaureen@xtra.co.nz.
<b>Contact:</b> Maureen Young, email: youngmaureen@xtra.co.nz.

# Waikato Botanical Society

<b>Field trip:</b> Saturday 12 March 6 to a <i>Hebe speciosa</i> site North of Aotea Harbour.	<b>Leader:</b> Mike Paviour, ph: 027 801 9452, email: <u>mpaviour@doc.govt.nz</u> .
<b>Field trip:</b> Saturday 19 March to Mt Tarawera (combined with Rotorua Botanical Society). See below for details.	
Rotorua Botanical Society	
<b>Field trip:</b> Saturday 5 March to Military Track, Waiaua Scenic Reserve, Opotiki. <b>Meet:</b> the car park, Rotorua at 7.45 a.m. or Opotik i-site/DOC office at 9.30 a.m. <b>Grade:</b> easy.	<b>Leader:</b> Tim Senior, ph: 0800 884 881, ext 6010 (wk) or 07 315 7371 (hm), email: <u>tim.senior@boprc.govt.nz</u> .
<b>Field trip:</b> Saturday 19 March to Mt Tarawera (combined with Forest and Bird and Waikato Botanical Society) (Sunday 20 March reserve day if Saturday is wet). <b>Meet:</b> at 8.30 a.m. at Te Puia car park (southern end) (ex Maori Arts and Crafts Institute) at the south end of Rotorua on SH30 just north of the SH 5 (Old Taupo Rd) or 9.15 a.m. azt DOC Ashpit Road campground, Lake Rerewhakaaitu. <b>Grade:</b> medium-hard, in particular confident walking on steep mobile scoria slopes and along high and sharp ridges. <b>Registration:</b> minimum age 14 years, m <u>aximum</u> of 30 people on trip on a first come basis but <u>must</u> register with Sandra Goodwin by Monday 14 March. <b>Cost:</b> free. <b>Bring:</b> minimum 2 litres water, lunch and snacks, wet weather and warm gear, sun hat, sunblock, boots or sturdy shoes, gaiters and/or leggings and	<b>Leader:</b> Paul Cashmore. <b>Contact:</b> Sandra Goodwin, ph: 07 362 8865, email <u>sgoodwin@actrix.co.nz</u> .

gloves (for pulling out pines).

## Whanganui Museum Botanical Group

<b>Meeting:</b> Tuesday 1 March at 7.30 p.m. for a talk by Jill Rapson,	<b>Venue:</b> Museum's Davis Lecture
Massey University, titled 'Dune wetlands'.	Theatre.
<b>Field trip:</b> Sunday 6 March to the Titoki Street wetland, Castlecliff. <b>Meet:</b> at Police Station at 9.00 a.m.	<b>Leader:</b> Mike Dickison. <b>Contact:</b> Robyn Ogle ( <u>robcol.ogle@xtra.co.nz</u> )

## Wellington Botanical Society

<b>Field trip:</b> Saturday 5 March to Baring Head - Tupoki Takarangi Trust. <b>Meet:</b> at 9.30 a.m. at the car park with large sign at entrance on Coast Road, c. 16 km south of Wainuiomata, ample parking, toilets. <b>Bring:</b> extra layers as this site is very exposed.	<b>Leader:</b> Robyn Smith, ph: 04 236 6086 (h), email: <u>robsmithii@xtra.co.nz</u> . If using train or bus, please phone Robyn to arrange to be met at bus depot.
<b>Meeting:</b> Monday 21 March for two talks: first by Barbara on Otari-Wilton's Bush, and secondly by student Gagandeep Jain on 'The functional role of betalains in <i>Disphyma australe</i> under salinity stress'.	<b>Venue:</b> Victoria University Lecture Theatre M101, ground floor Murphy Building, west side of Kelburn Parade; enter building off Kelburn Parade about 20 m below pedestrian overbridge.

# **Nelson Botanical Society**

<b>Field trip:</b> Sunday 20 March to Hackett, Chromite Mines. <b>Meet:</b> at the Church steps at 8.00 a.m. <b>PLEASE:</b> all participants must register with the leader Susan Cook by Thursday 16 March because of the requirements for our PLB protocol.	<b>Leader:</b> Susan Cook, ph: 03 544 6175.
<b>Field trip:</b> Friday 1 April to Sunday 3 April for the April Camp at Cape Campbell.	<b>Leader:</b> Cathy Jones. <b>Registrations:</b> David Grinsted, ph: 03 542 4384.
Canterbury Botanical Society	
<b>Meeting:</b> Monday 7 March for a talk by Philip Grove, Environment Canterbury, titled 'Canterbury Wetlands'. <b>Venue:</b> Upper Riccarton Library, 71 Main South Road.	<b>Contact:</b> Gillian Giller, email: ggillerma1@actrix.gen.nz.
Otago Botanical Society	
<b>Field trip:</b> Saturday 5 March to Taieri Mouth Track to John Bull's Gully. <b>Meet:</b> at 8.30 a.m. at the Botany Department car park.	<b>Contact:</b> John Steel, ph: 021 2133 170, email: john.steel@otago.ac.nz