



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

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Deadline for next issue: Tuesday 15 March 2011

President's Message

There are some great articles to be found in this month's newsletter. The story about the Surville Cliffs kohuhu gives cause for concern, while the mass flowering of scarlet mistletoe in the Catlins warms one's heart. Trip reports are always interesting –please send in a brief report from your camps or long weekends over December and January. Did you find any interesting species or did you not find plants you were expecting to find? Please also add your records of flowering and fruiting to the Network's phenology system. The more records that are added, the better picture we can get of what is happening around the country. New to our website is an on-line quiz (see later in the newsletter). Give it a go and see how you do.

The Proposed National Policy Statement on Indigenous Biodiversity is an important piece of legislation for native plant conservation. There are some good policies, but the use of biodiversity offsets is controversial. The principle is that there is to be "no net loss", which is good in theory. It is difficult, though, to envisage comparable compensation for the loss of a dune ecosystem or an area of forest that has evolved over hundreds of years. You may hold a different view. As noted in the newsletter, submissions close in early May, so check out the policy statement on the Ministry website. The NZPCN Council is due to meet next week on 22 February. Let us know if you wish to raise an issue or concern that should be discussed at that meeting.

*Philippa Crisp
Greater Wellington*

TEST YOUR PLANT KNOWLEDGE USING THE NEW ON-LINE QUIZ

The Network has launched a new on-line quiz to help you test your knowledge of the New Zealand flora. The more you know your plants, the easier you will find the questions which are generated from our flora database. Users can select from three levels of difficulty (Hard, Moderate or Easy). You may choose whether you wish to test your knowledge of native plants, exotic or both. Finally, you may select if you want to use Latin or common names. If you wish to test your knowledge, follow the link below:

- [Start the quiz](#)



PLANT OF THE MONTH – *Acaena rorida*



Acaena rorida. Photo: Peter de Lange.

Plant of the month for February is *Acaena rorida*. This mat-forming perennial is endemic to the north-west Ruahine Range in the North Island. It inhabits damp hollows and crevices in tussock grassland and limestone areas.

The foliage is soft and dull in colour; an interesting pale olive, apple green or pinkish-purple. Although exact flowering times are not known, both flowers and fruits have been seen during April. It is easily cultivated in a damp position; it spreads to form dense patches. Seed is rare

because fruiting is uncommon in cultivation, but it grows easily from division.

Its threat status is considered to be 'Nationally Critical'; its main threats are competition with weeds and hybridisation with *Acaena anserinifolia*. The Network fact sheet for *Acaena rorida* can be found at: www.nzpcn.org.nz/flora_details.asp?ID=1

Bush Walk and Talk

Margi Keys (makeys@nettel.net.nz)

Since 2004, an outdoor programme called *Bush Walk and Talk (BWT)* has been running on Auckland's North Shore. Participants learn how to identify native tree species, shrubs and ground ferns. We are interested in discovering what is flowering or fruiting, and noticing treasures on the ground (e.g., tiny seedlings, seed and pollen cones, moss, fungi, wildlife). We also identify birds seen and heard, check out pest plants and discuss relevant environmental issues as they arise.

On *BWT*, we walk quite slowly for about two hours so we can take it all in. We walk much slower than trampers. It's all about the journey. Participants enjoy like-minded company and learn about the local plants and wildlife at the same time. We walk rain or shine, so participants must come prepared for any weather.

The North Shore of Auckland contains the most bush of any New Zealand town. It is largely mixed podocarp/broadleaf forest, with some specimens up to 900 years old. The walks we do are mostly in the largest North Shore bush reserves. There are 56 of these with formed walking tracks through bush that may be explored on *BWT*; 30 are large enough to spend two hours in. Some have sea views.

We have new discoveries each month. Outstanding sights throughout the year include large old totara and kahikatea. Some trees have fruit eaten and spread by kereru, such as karaka, puriri, tawa and taraire. Karaka fruit ripen in late January and early February. Others have pretty flowers that are attractive to smaller birds like tui and silvereye. These develop into seed capsules: kohekohe, kohuhu, karo, manuka, kowhai, rewarewa and whau. In addition to interpretation, we collect seeds for propagation in the Kaipatiki Project nursery.

Bush walks can be tailored to meet the needs of particular groups. Two or three hours on a weekend morning is perfect; mid-week walks can be organised too. Please phone to discuss (Margi Keys, 09 443 6919 or 0274 481 581).

Surville Cliffs kohuhu (*Pittosporum serpentinum*) survey (field seasons 2009 and 2010)

Peter J. de Lange, Janeen Collings, Andrew Townsend and Jeremy Rolfe (pdelange@doc.govt.nz)



Fig. 1. Surville Cliffs kohuhu (*Pittosporum serpentinum*).

The Surville Cliffs kohuhu (“Threatened/Nationally Endangered”) (Fig. 1) is endemic to the 120 ha exposure of serpentinitised peridotite (harzburgite and iherzolite) known as the Surville Serpentinite formation of the Tangihua Complex Ophiolite Sequence (Brook 1989; Issac et al. 1994). This serpentinite rock forms the Surville Cliffs and Plateau of North Cape, Te Pahi (Fig. 2). Because serpentinite is “overloaded” with iron¹, nickel, magnesium, chromium and other “problem childs” like asbestos it presents a rather toxic environment for plants to grow on. Those that do, therefore, over time often become “tied” to that substrate and this is why serpentinite exposures worldwide are recognised as “hot spots” for plant endemism. The Surville Serpentinite formation is no different so, aside from the Surville Cliffs kohuhu there are a further 11 vascular plants species, subspecies and varieties endemic to the area and probably another 10 awaiting formal description. Not surprisingly, a range of invertebrates has also been described as endemic to the area (and we suspect many more have yet to be described), making the 120 ha serpentinite exposure one of the most biologically significant parts of New Zealand. Serpentinite aside, if one considers also that this area has never been glaciated and was, for a long time, an isolated island, it is hardly surprising it has such a diversity of plants, as well as a range of habitats and/or “ecosystems” unique to the area. Notable unique habitats/”ecosystems” in this area include coastal serpentinite cliff, talus and boulder field (Fig.2), serpentinite coastal forest and shrublands, extensive areas of ferricrete soils (the only ones known for New Zealand occur here (Fig. 3)) and, where erosion has stripped the A and B horizons of that soil, large areas of ferricrete iron-stone pavement (Fig. 4) supporting an unusual and as yet poorly studied lichen-field.

The subject of this article, the Surville Cliffs kohuhu was first described as a subspecies of *P. ellipticum* (de Lange 1998). It was later elevated to species rank in 2003 on account of its distinctive seed morphology, which Webb & Simpson (2001) suggested was more similar to *P. fairchildii* and *P. ralphii* than *P. ellipticum*. Within the serpentinitised zone, the Surville Cliffs kohuhu is now confined to the cliffs, though we suspect that it probably once occurred on the plateau, because that area has been repeatedly burned over much of the early part of last century, resulting in widespread soil erosion and extensive modification of plateau vegetation. From the conservation viewpoint, the Surville Cliffs kohuhu has remained somewhat of an enigma. The exact number of plants, their gender ratio and population structure have never been reliably determined. Though this information is obviously critical to any informed threat assessment, obtaining these data has never been easy. The Surville Cliffs are a major challenge to get around, not so much because they are steep but rather

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Fig. 2. Surville Cliffs and Plateau looking west toward the Ngawhenua Stream (which delineates the fault boundary between serpentinite and non-serpentinised peridotite and basalt).

1 The super saturation of iron and magnesium (the so called mafic elements) in base rich rocks such as serpentinite where the term “ultramafic” (meaning over rich in the mafic elements magnesium and iron (i.e. ma[gnesium] + f[errous] = “mafic”) comes from. Ultramafic rocks are those containing base-rich elements like iron, magnesium and nickel in levels $\geq 90\%$. Another term for these rocks is “ultrabasic”



Fig. 3. A ferrocrete (or Nodular Oxidic) soil profile—these soils are unique to the serpentinised zone of North Cape.

because the rock is loose and the surrounding vegetation very hard to traverse. Indeed just getting to North Cape requires tenacity, with even the best 4WD enthusiast at the wheel taking one and a half to two hours solid driving to get there². Therefore, few people have thoroughly explored the area and traverses to the bases of the cliffs are rarely undertaken. As a result, conservation assessments for the Surville Cliffs kohuhu, and indeed most other of the endemic vascular plants, have had to rely on anecdotal observations and limited surveys followed by broad estimates. The Surville Cliffs kohuhu illustrates this point well for, at about the time of its original description as a subspecies, reports by former Auckland Museum Herbarium curator, Mr Anthony Wright, suggested there were 1000s of plants, though brief surveys of the cliff habitat between 1991–1996 by one of us (with former Department of Conservation, Northland Conservancy,

botanist Lisa Forester and volunteers Gillian Crowcroft and Denis McKay) estimated a total population of c.500 adults. Disturbingly, no seedlings or saplings were seen.

In 2009, we initiated a detailed survey of the serpentinised zone of North Cape in which we are recording all endemics, taking GPS readings of all those regarded as threatened, looking for new species (e.g., we may have a new *Rhabdothamnus* and a *Libertia*—time will tell), searching for weeds, mapping the flora and also collecting the bryophytes, lichens and seaweeds, which have never been properly documented. As part of that survey, we are recording numbers of Surville Cliff's kohuhu. So far, we have found 85 individuals (24 “male”³ and 22 female, the rest of unknown gender, and—a first for this species—we have found eight saplings). We still have not seen any seedlings of the Surville Cliffs kohuhu. We have also seen possum browse on several individuals including at least two saplings. It is important to stress that possum numbers, though low at North Cape, are a serious threat to that area, and their impact is perhaps more serious than has been believed because they seem to target serpentinite endemics rather than plants preferred elsewhere in Te Pahi, e.g., pohutukawa (*Metrosideros excelsa*).

For example, we have noted that another common serpentinite endemic, *Parsonsia praeurptis*, no longer seems to be fruiting successfully. We suspect this is due to possums, which became widespread in the area sometime during 1991–1996 and which have been observed eating the flowers, flower buds and fruits of this scrambling plant.



Fig. 4. An extensive area of ironstone pavement—although seemingly barren these habitats are rich in an amazing diversity of lichens and mosses, and are the key habitat of the threatened spiral sun orchid (*Thelymitra matthewsii*) at North Cape.

2 Permits are required for general public access to North Cape. To apply for a permit, contact the Department of Conservation Kaitaia Area Office, ph: 09 408 6014.

3 Surville Cliff's kohuhu is gynodioecious, like all other New Zealand *Pittosporum*, meaning that individual plants of the species bear only female flowers or hermaphrodite flowers—thus “male” plants usually have a gradation from perfect flowers to those wholly male. Another widely used term to explain this situation is “inconstant males”—because male plants are inconstant with respect to the proportion of male and perfect flowers on a single plant.

While our results for the Surville Cliffs kohuhu are alarming because it is evident that we have previously grossly overestimated its abundance, at last we are finally getting real data to work with. Currently, over two field seasons (2009 and 2010) we have covered about 60% of the cliffs and plateau. While we anticipate that we will find more plants, we suspect in nothing like the numbers reported by past field workers. Other results from the survey are still coming in and include a new population of the Surville Cliffs bastard grass (*Uncinia perplexa*) (in numbers of individuals, this species is now well past the 250 mature individual mark, and we now have two populations but it still qualifies as “Threatened/Nationally Critical” because its area of occupancy is < 1 ha); we have at least four new species of liverwort that may be endemic to the area (*Frullania* subg. *Microfrullania* (AK 306672; North Cape”), *Lejeunea* (AK 307124; “serpentinite”), *Cheilolejeunea* (AK 313147; “serpentinite”) and *Cheilolejeunea* (AK 306858; Surville Cliffs)) and confirmed that a new endemic species of the moss genus *Weissia* (*Weissia* (AK 308852; North Cape) found by chance there by Dr Jessica Beever in the 1980s is alive and well and common only on serpentinite. Sadly, pines (*Pinus radiata*) (Fig. 5) are colonising the cliffs (all individuals seen were 8–9 years old and these have been eradicated), and hakea (*Hakea sericea*) is more common than people had thought. Several lichens gathered from ironstone nodules in the ferricrete pavements remain a puzzle. North Cape also has the single largest known population in New Zealand of the “Threatened/Nationally Critical” dwarf greenhood (*Pterostylis puberula*) as well as being the only secure mainland site for the threatened tropical moss *Calymperes tenerum* (cf. Fife & de Lange 2009; de Lange & Fife 2010).

For now, our survey continues. Irrespective, it does seem likely that the Surville Cliffs kohuhu will require a new threat assessment—though we still have another 40% of habitat to check!

Acknowledgements

The authors acknowledge the help and support of the Kaitiaki Area Office, Northland Conservancy, Department of Conservation during our last two field seasons at North Cape. Permission for access to and from North Cape was kindly granted by Ngati Kuri, Tangata Whenua of Te Hikurua Te Ika a Maui. Peter de Lange wishes to acknowledge the assistance of Drs Beever, Braggins and Renner in assisting with the identification of bryophytes collected from the serpentinite area of North Cape.

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Fig. 5. A eight year old pine (*Pinus radiata*) growing on the ridgeline of the Surville Cliffs above the eastern tributary of the Ngawhenua Stream.

Mistletoe magic

Claudia Babirat, Department of Conservation (cbabirat@doc.govt.nz)

If you were hoping for a kiss under the mistletoe over the holiday period, Catlins Conservation Park in South Otago was the place to be. In January the forest literally turned red as hundreds of scarlet mistletoe, *Peraxilla colensoi*, burst into flower—the biggest mass flowering in over 12 years.

“It’s not unusual to see a few mistletoe flowering every year,” says Department of Conservation (DOC) ranger Graeme Loh, who was one of the first to notice the prolific floral display. “But hundreds flowering heavily, that’s something special.”

Graeme believes that the flowering is linked to weather. “For example, last year’s flowering was very poor, not unusual in an ‘El Nino’ season with a cool, wet, windy summer,” he says. “But the warm winter temperatures that we then had may be responsible for the mass flowering this season.”

Like all native mistletoe, *P. colensoi* (one of four found in the Catlins), is a hemi-parasite, producing its own food through photosynthesis but extracting water and nutrients from its host plant using



specially adapted roots called haustoria. *Peraxilla colensoi* stands out as being New Zealand’s largest mistletoe species. Texts say that it reaches up to 3 m in diameter, but Graeme has found specimens many times larger than that. “One measured 17 m tall, and 12 m at its widest point—a massive thing!”

Although scarlet mistletoe has been recorded growing on 16 different host species, its most common host is silver beech (*Nothofagus menziesii*), which is the only beech tree species in the Catlins.



The Catlins is certainly a stronghold for scarlet mistletoe; Graeme estimates that one hectare in the Thisbe area contains more mistletoe than all mistletoe remnants in the North Island combined! Yet why *P. colensoi* does so well in the Catlins remains somewhat of a puzzle, as does its distribution pattern.

“There are massive numbers of large, old mistletoe in some places on the forest fringe, but in other areas it’s died out completely,” says Graeme. “The dense patches appear in old forest where it forms an ecotone with a fringe of 100-year-old regenerating beech.” The mistletoe’s distribution over time is equally patchy. According to Graeme, “Dead branches of its durable wood are an indicator that it was once more common.

“In our study plot in 1998, we were concerned to see the loss of many mistletoe when the host trees fell in wind and snow storms. We saw no regeneration and could count over 50 annual rings on large fallen *Peraxilla*. It was looking like a grim end of an era. Recently, though, we have been excited to find a lot of mistletoe seedlings in 7–10 m tall beech saplings that are colonising the canopy gaps.”

The good news is that the Catlins still has enough mistletoe for the species to have an important role in

Scarlet mistletoe in the Catlins Conservation Park.
Photos: Claudia Babirat.

the ecosystem. “The bellbirds and tui were having a feast,” Graeme says. “Mistletoe nectar is full of high quality sugar, which will give their chicks the energy burst they need.”

But it’s not just the birds that benefit. University of Canterbury researcher, Dr Dave Kelly, and his team have discovered that the flowers are designed to be opened by birds. The bird’s head brushes against the sticky pollen which is then transferred to other flowers. In autumn, birds also feed on the bright orange fruit, rubbing them on to the small branches of neighbouring trees once they’ve passed through the gut, effectively ‘planting’ them.

Nationally, scarlet mistletoe is listed as ‘At Risk’ of extinction, in the ‘Declining’ category; it’s threatened by deforestation and possum browsing. “Maintaining a healthy forest takes a lot of work,” Graeme emphasises. “The fact that mistletoe is surviving and flowering in the first place is a result of a decade of intensive possum control work undertaken by the Animal Health Board [AHB] using aerial 1080”.

DOC and AHB manage this part of the Catlins as an Operation Ark project. The project aims to actively maintain the numbers of the mohua (classed as ‘Nationally Endangered’) and curb bovine tuberculosis through possum, rat and stoat control. It’s hard work – but it has its rewards. As Graeme puts it: “It gives me great pleasure to see other features of this forest flourishing as a result of our management.”

New endemic genus for toetoe

Peter J. de Lange, Department of Conservation (pdelange@doc.govt.nz)

The five endemic New Zealand toetoe have been placed into a new endemic genus *Austroderia* (Linder et al. 2010). The move long hinted at (see Barker et al. 2003) draws together a unique New Zealand lineage distinct from *Cortaderia* s.s. and unified by chromosome number (see Murray et al. 2005) and leaf anatomy. In particular, species of *Austroderia* have several prominently sclerified veins in addition to the midrib (features not seen in *Cortaderia*), the sheaths of *Austroderia* are distinctly waxy and remain intact after disarticulation (those of *Cortaderia* s.s. are not waxy and typically fragment longitudinally and transversely with age—features routinely used in New Zealand to separate our indigenous “*Cortaderia*” from naturalised *Cortaderia*). The new combinations are:

Austroderia fulvida (Buchanan) N.P.Barker et H.P.Linder

Austroderia richardii (Endl.) N.P.Barker et H.P.Linder

Austroderia splendens (Connor) N.P.Barker et H.P.Linder

Austroderia toetoe (Zotov) N.P.Barker et H.P.Linder

Austroderia turbaria (Connor) N.P.Barker et H.P.Linder

In the same paper, the problem of dealing with morphological divergent *Danthonia* is discussed at length. An expanded *Rytidosperma* is retained though the monotypic New Zealand endemic *Pyrrhanthera* (*P. exigua*) is dropped, being now treated as *Rytidosperma exiguum* (Kirk) H.P.Linder. This move makes sense because, beyond chromosome number, there is little to distinguish *Pyrrhanthera* from *Rytidosperma* in whose clade it is firmly nested. Linder et al. (2010) provide an interesting insight into the current “hot topic” of merging paraphyletic groups to satisfy the cladistic need for monophyly—an issue that remains contentious here with respect to dumping *Hebe* and its allies into *Veronica* (see Garnock-Jones et al. 2007), which is a move still not widely favoured in New Zealand (see de Lange & Rolfe 2010). Linder et al. (2010) state that one solution to their research findings would be to merge all segregate genera of *Danthonia* back into *Danthonia* resulting in what they term “a single mega-*Danthonia*” but they argued against this:

“Many of the segregate genera are morphologically distinctive, and their species share a likeness. It would be inconvenient to lose this shorthand summary of these patterns of similarity. Most of the segregate genera occupy a particular continent, thus only part of

the range of the whole subfamily. These are generally geographically and also ecologically definable. A mega-*Danthonia* would include many species that have never been included in *Danthonia* and would therefore require 142 new combinations, which would be undesirable given that one of the criteria is to minimize nomenclatural changes. A monotypic subfamily carries very little information, as it duplicates all the information already contained in the genus. The segregates would provide much more information, as each genus specifies a part of the variation within the subfamily. On the basis of these arguments, we think that it would be better to retain the generic rank at the segregate level, rather than have a single genus for the subfamily.”

These are sentiments I heartily agree with but then I have never subscribed to worshipping the God of “Monophyly”.

Acknowledgements

I thank John Barkla for drawing my attention to this paper.

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National Statement on Indigenous Biodiversity

The Minister of the Environment has given notice of the proposed National Policy Statement on Indigenous Biodiversity. This national policy statement “seeks to improve the management and preservation of biological diversity outside the public conservation estate”. It is produced under Section 46A of the Resource Management Act 1991 and requires local authorities to identify local areas of significant indigenous vegetation and habitats in their regional policy statements and regional and district plans. The responsibility then lies with regional authorities to ensure there is no net loss of biodiversity. This, of course, is consistent with an objective of the Network when it was established that “no indigenous plant species or community will become extinct nor be placed at risk as a result of human action or indifference”.

The proposed policy statement, accompanying report and submission form may be viewed at www.mfe.govt.nz/npsbiodiversity. Alternatively, if you would prefer a hard copy of the documents, they may be obtained free by e-mailing your request to orders@mfe.govt.nz. In addition to the documents, the Ministry for the Environment is running a series of public workshops from February 21 (Napier) to April 5 (Dunedin), see www.mfe.govt.nz/npsbiodiversity to find out when there will be a workshop near you. To help the Ministry gauge the numbers likely to attend each meeting, please RSVP to biodiversity@mfe.govt.nz with the location of the meeting you wish to attend in the subject line.

Members of the Network are undoubtedly repositories of much relevant information about significant indigenous vegetation and habitats in their local area so have your say in this important consultation process. Submissions close at 5.00 pm on 2 May 2011. They may be sent by e-mail to biodiversity@mfe.govt.nz or by post to Ministry for the Environment, PO Box 10362, Wellington.

New Zealand Ecological Society Conference, Ecology in the Heartland: Celebrating 60 years of the New Zealand Ecological Society

Willie Shaw and Chris Bycroft, Conference co-convenors

The 2011 New Zealand Ecological Society conference will be in Rotorua from August 28 to September 1. The student day will be on Sunday the 28th, with three days of concurrent sessions from Monday 29 August to Wednesday 31 August, and the field trips on Thursday 1 September.

The term heartland generally refers to either the central (inland) area of a country, or an area of strategic importance (e.g. economic, strategic or traditional values are dominant). In New Zealand, the heartland has meant a number of things, from heartland rugby teams (based around the less populated areas of New Zealand), small towns and rural areas, to economically important central places. In New Zealand, the heartland of New Zealand ecology could mean different things to different people. To many the heartland in ecology may be our premier National Parks, Conservation Parks, and offshore islands. It could be related to existing ecological values and lost elements of our biota. To others it will be the ecology in their backyards in urban and rural areas. Heartland ecology may have economic significance (e.g. tourism) to some people and to others the values will be more intrinsic (maintaining ecosystem processes and biodiversity). Heartland ecology could be, from some perspectives, parts of our remote country and, to others, urban areas where ecological values can be appreciated by more people. It can also mean inland ecology, but with most of New Zealand's economic zone being ocean we cannot forget these areas either. Perhaps, with the increased urbanisation in New Zealand the heartland of New Zealand is now the urban areas.

We invite proposals for symposia for the Conference in Rotorua. If you are interested in organising a symposium, please provide a few paragraphs describing the theme. It would be ideal if you could also suggest some potential speakers (including potential keynote speakers). These proposals will be reviewed by a scientific committee that may suggest alternative speakers, or combine some proposals together if appropriate. Please send your proposal by Friday 25 February 2011 via e-mail to: chris.bycroft@wildlands.co.nz.

Potential symposia suggested to date (in no particular order) that you may be interested in organising, or helping to organise are:

1. Ecology of volcanic/geothermal areas.
2. Plantation forestry
3. Restoration ecology – likely to be a major theme of the conference.
4. Mainland islands
5. Landscape ecology – we already have one potential organiser for this one.
6. Freshwater ecology
7. Māori theme?
8. Tourism/ecotourism and ecology
9. Pros and cons of various options of energy generation from an ecological perspective
10. Forest ecology – 2011 is the United Nations International year of forests
11. Central North Island forest ecology
12. A theme related to celebrating 60 years of the society
13. Pacific Island or South Pacific ecology

We are also keen to hear of suggestions for keynote speakers and potential sponsors.

Phenology records top 3000

The Network's phenology recording system now has more than 3000 records of the flowering and fruiting of more than 300 [native](#) and exotic plant species in New Zealand. The observations stretch back over several years and provide a useful record of the variability of flowering and fruiting throughout New Zealand. If you would like to log your observations, please register as a recorder and then use the online recording system. Note that Network members need not register as they are automatically allowed to log observations:

- [On-line phenology recording system](#)

A field form is also available for recording phenology observations:

- [Phenology Field form](#)

Council meeting

As noted by the President, there will be a Council meeting in Wellington on Tuesday 22 February. If you have any issue that you would like to have raised, please contact the President, Philippa Crisp (Philippa.Crisp@gw.govt.nz) or the Secretary, John Sawyer (jsawyer@doc.govt.nz).

CURRENT FORUM THREADS

- Eastern Cottonwood, *Populus deltoides*, has been found naturalising in the Whangarei District on the banks of the Hatea River, Parihaka. Does anyone know of other sites?
- Does anyone know where I am able to purchase good quality hand lenses for plant identification, etc.?

UPCOMING EVENTS

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

XVIII International Botanical Congress

Melbourne 23–30 July: probably the cheapest option for New Zealanders to ever be able to attend this international event. Registrations are now open.

Further details: www.ibt2011.com/news/Issue3-1.htm.

Conservation Biology Conference

Come to Christchurch! The 25th International Congress for Conservation Biology will be held in Christchurch, New Zealand, 28 November – 2 December 2011. Join us for five days as we celebrate 25 years of groundbreaking research, premier networking opportunities, and dynamic discussions among the leading minds in conservation biology. This year's theme, *Engaging Society in Conservation*, addresses biodiversity around the world—specifically biodiversity's continued declines at an ever-increasing pace, while much of society carries on with business as usual. How can conservation biologists engage with the broader society to achieve positive outcomes for conservation without compromising our scientific rigour or integrity? Do you have a solution to share?

Remember when you met Ed Monton in Canada in 2010; 2011 is the year of Kia Ora the Kakapo! Stay tuned for the first meeting between Ed and Kia Ora, coming soon!

Information: www.conbio.org/2011 or contact the scientific programme committee at 2011@conbio.org.

Auckland Botanical Society

Field trip: Saturday 19 February at Muriwai Regional Park at 2.00 p.m. **Leader:** Mike Wilcox.

Contact: Maureen Young, e-mail: youngmaureen@xtra.co.nz.

Meeting: Wednesday 2 March, the AGM followed by a talk by Alison Wesley titled 'Flora of Chile and Patagonia. **Venue:** Unitec School of Health Sciences, Gate 4, Building 115. Room 2005.

Contact: Maureen Young, e-mail: youngmaureen@xtra.co.nz.

Field trip: Saturday 19 March to Awhitu Dune Lakes. Combined trip with the Waikato Botanical Society. **Leader:** Tricia Aspin.

Contact: Maureen Young, e-mail: youngmaureen@xtra.co.nz.

50th Anniversary of the Hamilton Junior Naturalist Club

Reunion: Easter, 22–25 April at Te Kauri Lodge, Kawhia Road, Oparau. Come for a day or the whole weekend! All former members are warmly invited.

Contact: jennip@ihug.co.nz, or search Junats on Facebook for more information.

Waikato Botanical Society

Field trip: Sunday 6 March to Te Tuhi Track, western Kaimai Mamaku Forest Park. Combined trip with Rotorua Botanical Society. **Grade:** medium/hard.

Leader: Kerry Jones:
ph: 027 747 0733 or 07 855 9700 (h), e-mail: kmjones@doc.govt.nz.

Field trip: Saturday 19 March to Awhitu Dune Lakes. Combined trip with Auckland Botanical Society. **Leader:** Tricia Aspin.

Contact: Jan Butcher,
ph: 09 236 9722 or 027 2413701,
e-mail: jjbutcher@ps.gen.nz.

Rotorua Botanical Society:

Field trip: Sunday 6 March to Te Tuhi track, western Kaimai Mamaku Forest Park. **Meet:** The car park Rotorua 8.00 a.m. or end of Te Tuhi Road off Old Te Aroha Rd at 9:15 a.m. **Grade:** medium/hard.

Leader: Kerry Jones, ph: 027 747 0733 or 07 855 9700 (home),
e-mail: kmjones@doc.govt.nz.

Wanganui Museum Botanical Group

Field trip: Sunday 27 February to Taihape to search for *Pittosporum obcordatum*. **Meet:** at Wanganui Police Station 8.30 a.m. or at 10.20 a.m. in Taihape, by arrangement; arrive at the Rowlands' home 10.30 a.m.

Leader: Colin Ogle,
ph: 06 347 8547,
e-mail: robcol.ogle@xtra.co.nz.

Meeting: Tuesday 1 March at 7.30 p.m. a talk by Peter Cave titled 'Overland from Kathmandu to Istanbul'. **Venue:** Museum's Davis lecture theatre.

Contacts: Robyn and Colin Ogle,
ph: 06 347 8547,
e-mail: robcol.ogle@xtra.co.nz

Wellington Botanical Society

Meeting: Monday 21 February at 7.30 p.m. a talk by Barry Edwards, President, Forest and Bird Protection Society, titled 'Physical and social dimensions of ecological corridors—a Wellington perspective'.

Venue: lecture theatre MYLT101, ground floor Murphy Building, west side of Kelburn Parade. Enter building off Kelburn Parade about 20m below pedestrian overbridge.

Field trip: Saturday 5 March to Baring Head, Wainuiomata. Botanise the 284 ha Baring Head block, now in public ownership, managed as part of East Harbour Regional Park. **Meet:** at 9.00 a.m. at "White Bridge" on Coast Rd. From Wainuiomata take Coast Rd to the car park at the "White Bridge".

Co-leaders: Chris Hopkins, ph: 04 564 3980, and Owen Spearpoint, ph: 562 8780.

Meeting: Monday 21 March at 7.30 p.m. a talk by Kath Dickinson, University of Otago, titled 'Putting the 'B' back in Biodiversity— what you can learn just from your backyard'.

Venue: lecture theatre MYLT101, ground floor Murphy Building, west side of Kelburn Parade. Enter building off Kelburn Parade about 20m below pedestrian overbridge.

Percy Scenic Reserve Open Day

Sunday 27 February, 1.00-3.00 pm: The areas on display will be the Druce Memorial Alpine Rock Garden, Fern House and Alpine House. Hope to see you all there, and please tell other interested people.

Contact: Jill Broome, ph: 04 570 6505, e-mail: Jill.Broome@downer.co.nz.

Nelson Botanical Society

Field trip: Sunday 20 February to Parachute Rock, Nelson Lakes National Park.

Leader: Bee Grant, ph: 03 539 6364.

Field trip: Sunday 20 March to Mt Lodestone, Kahurangi National Park. **Meet:** at Selwyn Place between the church steps and the large gum tree at 8.00 a.m.

Leader: Don Pittham, ph: 03 545 1985.

Easter Camp: Thursday April 21 to Monday April 25 at 2011 at Pine Valley Lodge, north bank of the Wairau River. **Cost:** \$15.00 per person per night.

Leader: Cathy Jones, ph: 03-546-9499, e-mail: jonesc@doc.govt.nz.

Canterbury Botanical Society

Meeting: Friday 4 March a talk by Meliessa Hutchinson titled 'Hawaii'. **Venue:** room A5, Canterbury University.

Contacts: Miles and Gillian Giller, ph. 03 313 5315.

Field trip: Saturday 12 March to Broxton (near Doctors Hill).

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

Botanical Society of Otago

BBQ: Friday 4 March, from 12:00 noon to 2.00 p.m. to welcome new botany/ecology students and BSO members. **Venue:** the front lawn, Botany House Annex, Great King Street.

Contact: [David Orlovich](mailto:David.Orlovich@otago.ac.nz), ph: (03) 479 9060.
