TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 117.

August 2013

Deadline for next issue:
Monday 16 September 2013

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.

Please note:

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

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

There is a word limit of 1000 words. Longer articles are welcome but, with your help, an abridged version will appear in the newsletter and the full story will be posted on the website.

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

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NEW ZEALAND

PLANT OF THE MONTH, p. 2

Pseudopanax linearis

President's message

Spring is in the air in the central North Island, although winter did not even seem to arrive properly this year in Rotorua, with only a handful of frosts. So it is time to start planning trips into the field, or mountains, or anywhere of interest. But, before you head away, it would be good if you could consider forwarding a nomination (or more than one) for the NZPCN awards. There is a large number of worthy recipients out there in the community, and it is always exciting to see these people/organisations/businesses/local authorities recognised for their contributions. For those of you who attended the seed collection workshop at the conference, remember to plan some seed collection trips.

The Yellow-Eyed Penguin Trust conference in Dunedin in October is of considerable interest, particularly if you are looking for motivation and help with community conservation work. And, of course, the NZPCN AGM is in Wellington on 6 November. Please put this in your diary, particularly those in and around Wellington. We look forward to seeing you there.

Before closing off, I can't resist sharing some botanical snippets from a recent trip to dunes near Thornton, on the coastal edge of the Rangitāiki Plains in the eastern Bay of Plenty. Coastal māhoe (*Melicytus novae-zelandiae*) is managing to establish beneath boxthorn (*Lycium ferocissimum*) in the presence of cattle, sheep, rabbits, and hares, protected by the fierce boxthorn (Fig. 1, 2).

Figure 1. Coastal māhoe seedling establishing beneath boxthorn in a grazed paddock. Photo: Sarah Beadel.

Figure 2. Coastal mahoe can attain relatively substantial sizes when protected from browsing by small groves of boxthorn. Photo: Sarah Beadel.

Thornton kānuka (*Kunzea* aff. *ericoides* (d); classified as Taxonomically Indeterminate-Threatened-Nationally Vulnerable) is also present in the area. Thornton kanuka is a taxonomically distinct form of kānuka with a very distinct candelabra-like form that is almost entirely restricted to the Thornton dunes. On a neighbouring property, although also surrounded by boxthorn, it has not fared so well. This situation has led to it being a non-target victim of herbicide sprayed to kill the boxthorn.

Luckily there are more extensive remnants of Thornton kānuka in an adjacent reserve and on other private properties.

Happy botanising out there.

Sarah Beadel, President

PLANT OF THE MONTH – *PSEUDOPANAX LINEARIS*

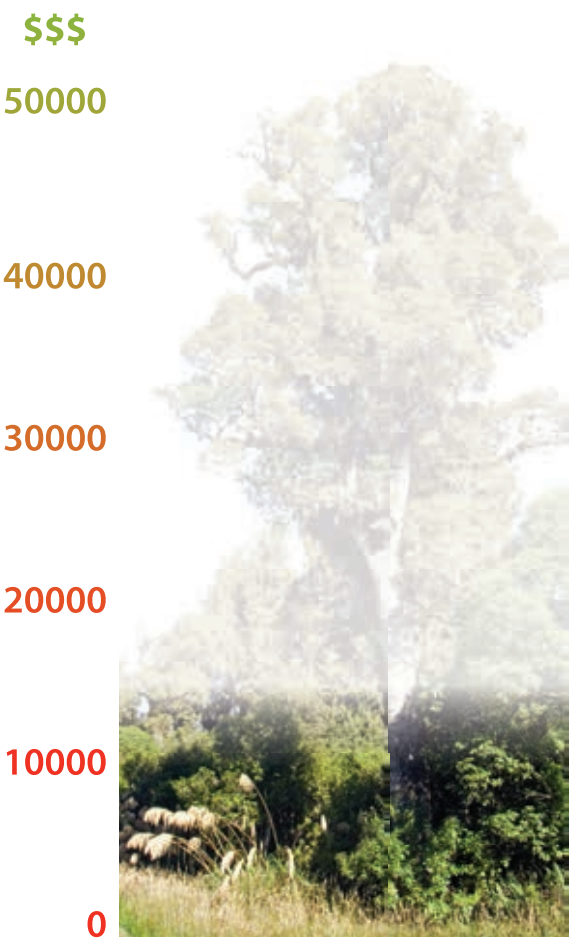
Pseudopanax linearis. Photo: John Barkla.

Plant of the month for August is *Pseudopanax linearis*. *Pseudopanax linearis* is endemic to the South Island, being found in alpine forest in damper regions mainly west of the Main Divide in Fiordland, the Southern Alps and northwest Nelson. Generally, a higher altitude shrub growing to about 3 m tall, it has the general appearance of a small lancewood with few branches and narrow thick leaves. The leaflets are simple; the juvenile leaflets are longer, reaching 15–25 cm and ascending; the adult leaflets shorter, reaching 5–10 cm. The small size and narrow thick leaves with obvious mid-vein make it distinctive from other *Pseudopanax* spp. Grown in cooler climates; it would make an attractive pot specimen in home gardens. You can see the Network fact sheet for *Pseudopanax linearis* at: www.nzpcn.org.nz/flora_details.aspx?ID=1199

Fundraising for the Network's Endowment Fund

The recent launch by the Network of an endowment fund to help pay for plant conservation action has already proved a success and, with further donations of $500, more than $13,000 has been raised over the last two months. However, the long term target for this fund is still a long way off so your help is needed. The Network will need at least $50,000 before it could consider offering annual grants to pay for fencing, weed control, monitoring, animal pest control, translocation, propagation, etc. The sooner we have enough money in the fund the sooner we can start sponsoring action.

In order to reach that long term goal the Network encourages members to think about how they could raise money for this fund. Further donations are always welcome (using the website donation page or by contacting the Network) and donations do not have to be large ones but perhaps you have an idea for a fund raising event such as a sausage sizzle, a quiz night, an auction, a raffle? Or perhaps you know potential sponsors of the fund that you would be willing to approach. All fund raising ideas are welcome and all donations to the fund are also welcome. If every one of the Network's members (close to 1000) managed to raise $100 then we would reach $100,000 in no time. Please contact the Network if you have good ideas for events or ways to increase the size of the fund: info@nzpcn.org.nz



Growing native terrestrial orchids from seed; the first steps towards orchid conservation in New Zealand

Jonathan Frericks, School of Biological Sciences, Victoria University of Wellington (jonathan.frericks@gmail.com) and Carlos Lehnebach, Museum of New Zealand Te Papa Tongarewa, (CarlosL@tepapa.govt.nz)

Orchids comprise one of the top five plant families (Asteraceae, Cyperaceae, Orchidaceae, Plantaginaceae, Poaceae) with conservation issues in New Zealand (de Lange et al., 2009). Currently, there are 34 orchid species and about 14 taxonomically undetermined entities included in the list of threatened and uncommon plants (de Lange et al., 2009). Unlike many other threatened plants, the propagation of New Zealand orchids for conservation purposes, such as re-introduction or ex situ conservation, has never been accomplished. This is because the knowledge of the orchid-fungal interactions of native orchids is lacking and the skills to implement these techniques have never been developed in New Zealand.

Unlike other plants, orchid seeds are very small and do not have endosperm (the tissue that surrounds the seed and provides nutrition to the embryo during germination). Orchids have overcome this hurdle by forming a partnership with fungi. This interaction can be species-specific and the seeds of some orchid species will not germinate unless the right fungal partner is present in the soil and the seed is infected. This partnership lasts for the entire life of the plant; but not always with the same fungus and some orchid species may swap partners during their lifespan (Rasmussen, 2002). These fungi are commonly found inside the roots where hyphae form highly compacted coils inside the cells; these structures are called pelotons (Dearnaley, 2007) (Figure 1).

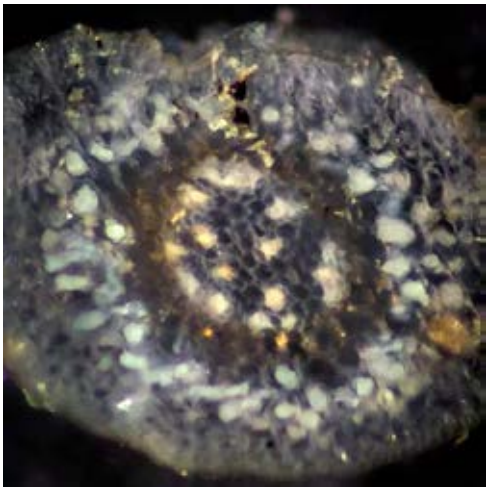


Figure 1. Cross-section of a lateral root from Microtis unifolia. The cloudy pelotons can be seen in the cortical cells surrounding the dark circle containing the vascular bundle. Photo: Jonathan Frericks.

During the last six months, we have been involved in a project aiming to propagate native terrestrial orchids from seed using symbiotic germination methods. Although these techniques have been long used overseas for conservation purposes, they have never been implemented in New Zealand. The project is largely being developed by Jonathan Frericks as part of his MSc (Ecology and Biodiversity) thesis at Victoria University of Wellington and has been sponsored by grants from Otari Wilton's Bush Trust, Wellington Botanical Society, Australian Orchid Foundation and San Diego County Orchid Society.

Several genera of terrestrial orchids are included the study; some of them include vagrant and endemic species, other "weedy" or common species and other species currently ranked as Threatened (Figure 2). These orchids are *Microtis unifolia*, *Pterostylis patens*, *Simpliglottis cornuta*, *Simpliglottis valida*, *Spiranthes novae-zelandiae* and *Thelymitra longifolia*. To find out which species of fungi these orchids use, pelotons were extracted from the roots of each orchid species and grown in the laboratory on Petri dishes with agar containing nutrients and antibiotics. When several fungi were observed growing in the same Petri dish, these fungi were sub-cultured to obtain pure strains of each fungus and eliminate contamination. Identification of these fungi is difficult based on morphology alone (Gardes & Bruns, 1993) and there are still many species new to science. Because of this, DNA sequencing is the most efficient approach

Figure 2. *Spiranthes novae-zelandiae* (Threatened) in the field. Photo: Jonathan Frericks.

to identify each culture. The DNA markers used for identification are the highly variable internal transcribed spacer (ITS) region and the more conserved large ribosomal subunit (LSU). The sequences obtained from these markers were later compared with those stored in the GENBANK database available on the internet (http://www.ncbi.nlm.nih.gov/genbank/). Preliminary results suggest these orchids have a high diversity of fungi in their roots; up to 36 different fungi have been detected. These taxa belong to three phyla: Ascomycota, Zygomycota, and Basidiomycota. Some of these fungi are closely related to fungi known to form symbiotic relationships with orchids and promote germination.

Figure 3. Seeds of *Thelymitra longifolia* at early stages of germination. Rhizoids can be seen as single narrow white projections emerging from the swollen seeds. The finer white branching filaments are hyphae of a potentially symbiotic fungal partner.
Photo: Jonathan Frericks.

To demonstrate whether the fungi extracted from the orchids' roots are actually able to form a symbiosis and promote germination; seeds of each orchid species were set up on an oatmeal media in Petri dishes and inoculated with the fungi previously extracted (Figure 3). The dishes will be monitored for a three-month period during which time the seeds may have sprouted their first green shoots, or else the fungus will have consumed the seed. If green shoots are observed, it means symbiosis has occurred and therefore the fungus used for the inoculation is the correct fungal partner for that orchid.

Figure 4. Informational sign in front of seed packets buried at Otari-Wilton's Bush. Seed packets are marked with flagging tape.
Photo: Jonathan Frericks.

Another part of this study compares seed germination in the laboratory with observations in the field. At Otari-Wilton's Bush, a seed germination experiment was set up and packets containing seeds of *Microtis unifolia* and *Thelymitra longifolia* were buried (Figure 4). These two orchids grow naturally at Otari-Wilton's Bush; the former is rather weedy and occurs in most of the planted areas; the latter is found only at one site. The packets have been placed at various distances from established plants to find out whether there is distance-correlated variation in the establishment of fungal symbioses. In other words, are seeds more likely to germinate close to an adult plant or further away? This experiment was set up only four weeks ago. After two more months, seed packets will be recovered and seed germination in each packet scored. After analysing these results I will be able to determine whether these orchids have different requirements for symbiosis to occur, whether there is greater chance of symbiosis to occur near established orchids, and whether certain areas within Otari-Wilton's Bush are more suitable for orchids to establish than others.

Overall, results from this project will help us to understand the extent of specificity of the orchid-fungus interaction in a selected group of New Zealand orchids, identify the fungus that promotes seed germination in each of these orchids and the factors that may limit their colonisation of and establishment in new sites. This project has allowed us to bring to New Zealand orchid conservation techniques commonly used overseas and, in the long term, we expect to contribute to the conservation of orchids by propagating those endangered and uncommon orchids from seed.

Acknowledgements

Thank you to Mike Lusk, Chris Ecroyd, Kevin Matthews and Jeremy Rolfe for providing plant material and helping in the field; to The Te Papa MSc Scholarship in Molecular Systematics awarded to Jonathan Frericks; to the academic supervisors at Victoria University of Wellington (Dr Peter Ritchie and Dr Andrew Munkacsi); and to Kingsley Dixon, Belinda Newman and Wei Han Lim from Kings Park and Botanic Garden, Perth.

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Flora of Sub Antarctic Islands get online makeover

Thanks to Network member and plant photographer Jane Gosden, the Network's plant species pages for Sub Antarctic Islands have been substantially improved. In the last month, over 500 images have been loaded of species such as *Bulbinella rossii*, *Stilbocarpa polaris*, *Poa foliosa, Plantago triantha*, *Drosera stenopetala* and *Waireia stenopetala* amongst many others. Few people have the opportunity to visit these amazing islands so the species pages of the Network website maybe the closest many of us will ever get to seeing their remarkable flora. A huge thanks goes to Jane for allowing the Network to use her images. If you have images you would like to display on the Network website please contact us at: info@nzpcn.org.nz

Stilbocarpa polaris on Enderby Island. Photo: Jane Gosden.

Online image library close to 26,000

In the last few months, the Network has been inundated with a fantastic array of plant images to load on the Network website. Photographers from throughout New Zealand have sent images to the Network. They include Sir Alan Mark, Jane Gosden, Mike Thorsen, John Barkla, Pat Enright, Jesse Bythell, Rowan Hindmarsh-Walls, Jeremy Rolfe, Simon Walls, Jacinda Amey, Gary Houliston, Karen Baird and Colin Ogle. This means we are now 100 images shy of reaching 26,000 images in the Network's online image library. We also have 3000 more images to load over the next couple of months taking us ever closer to the 30,000 mark. If you take photographs of plants and have a collection of images on your computer that are not being used then please consider sending them to the Network to load on the website (provided they are accurately identified and preferably have a location and date). A prize will be given to the person who provides the 30,000th image loaded on the Network website. Images can be sent on a CD to the Network at PO Box 16-102, Wellington, or individual images can be sent to info@nzpcn.org.nz.

Mangere Island restoration project

Kate Caldwell (kate_caldwell@hotmail.com)

This winter I was part of a lucky team of planters who visited Mangere Island, in the Chathams, to help out with a restoration project that's been going on for over 30 years. Mangere and its close neighbour Little Mangere are the eroded remains of an ancient volcano. Mangere is a 113 ha slab of rock, mostly edged with vertical cliffs, rising from an often rough and stormy ocean. It has a cool climate, with frequent strong winds and severe salt storms.

Geranium traversii and *Aciphylla dieffenbachii* on Mangere Island with Little Mangere Island in the background. Photo: Kate Caldwell.

Black robin. Photo: Kate Caldwell.

Mangere Island was clothed in forest until the 1890s when the common ecological injuries of early colonization were visited upon the island. Almost all the bush was burned, the land was used as a sheep farm, and rabbits and cats were introduced to the island. Luckily for native Chatham Island birds (although unfortunately too late for the endemic species of bellbird, fernbird and rail), it was eventually decided that Mangere would make a fine refuge for Chatham Island wildlife, and the island was gazetted as a nature reserve in the 1960s. At that point, only a tiny remnant of its primeval past remained: five fragmented hectares of scrub and forest that had escaped grazing by growing amongst giant boulders that had fallen, over the years, from the cliffs above. The rest of the island was mostly open grass. The forest would need to be extended if Mangere was to provide a decent habitat for birds, particularly the black robin. The then Wildlife Service kicked off restoration planting in the 1970s, establishing shelterbelts of flax and akeake (*Olearia traversiorum*) in the basin below the existing patch of bush. It was at this time that the black robin was famously brought back from the brink of extinction, with the last seven birds of the species being transferred to Mangere from Little Mangere Island.

The initial plantings have been gradually added to almost every year since they started. Since the early 1990s, 100,000 akeake have been transported to Mangere by fishing boat, carried on backs up hills, and carefully planted. Amazingly, they manage to slowly win out over the rank pasture grass, in gale force winds, without any watering. Once the grass is shaded out, and the akeake is tall enough to provide some shelter, other fruiting forest species are planted. These include Chatham Island matipo (*Myrsine chathamica*), Chatham Island mahoe (*Melicytus chathamicus*), hoho (*Pseudopanax chathamicus*), Chatham Island ribbonwood (*Plagianthus chathamicus*), nikau (*Rhopalostylis sapida*) and ngaio (*Myoporum semotum*). None of these species (perhaps no native New Zealand tree species!) is as tough as akeake, so this diversification planting takes a bit more time. A suitable cranny within the existing vegetation needs to be found for each plant, taking into account the favoured conditions of the species. For example, ribbonwood needs a good amount of shelter, but also light and high nutrient levels if it is to thrive. Nikau likes moister sites and needs shelter, and also does well with some light, but can't compete well with grass. Coming from a horticultural background, I love this type of planting. I've always been taught that if you put the right plant in the right place, it will flourish all by itself. This is exactly what we want for a nature reserve like Mangere.

There are only a few spots of grass on the whole island left unplanted with akeake, and gaps for diversification planting are diminishing. The first akeake planted by the Wildlife Service are now

Carrying a load of akeake to a planting site. It was windy! Photo: Helen Clarke.

Geranium traversii. Photo: Kate Caldwell.

three or four metres tall and their crowns have formed a continuous canopy in areas. Without any woolly grazers around, the small patch of bush where the robins live has thrived and spread. Robins, with all combinations of coloured leg bands, come in for a look as you wander through the open understorey, and snipes shuffle around in the leaf litter. Almost all of the eastern side of the island is now filling up with plants.

On the western side, self-seeded flax forms dense thickets and thick scrub of the endemic koromiko, *Hebe dieffenbachii,* covers entire slopes. Below the hebe, in the guano-enriched soil, burrow titi, prions, petrels and penguins. Through the branches, silvereyes and tits dart and flit. Throughout the forest and scrub, and even feeding on the ground in open places, parakeets are common.

We spent two weeks on the island, planting, clearing tracks, controlling weeds and looking around. A highlight was exploring the herbfields, which are full of rare and interesting plants. Associated with windswept ridge tops and seaward facing slopes, these herbfields are mosaics of *Disphyma papillatum*, *Geranium traversii*, *Festuca coxii*, and *Aciphylla dieffenbachii* with occasional clumps of Chatham Island forget-me-not, *Myosotidium hortensium*. *Lobelia arenaria* creeps along the ground. The Critically Endangered (de Lange et al., 2009) *Linum monogynum* var. *chathamicum* seems to be holding its own. It is heartening to see threatened species thriving in a healthy ecosystem like this. In these wild herbfields, the indigenous plants give even the exotic grasses a good run for their money and don't look like they'll be out-competed anytime soon. Even where the forget-me-nots are growing on a hillside thick with pasture grass, their own dead leaves form a mulch around them which suppresses the grass completely.

Other botanical highlights were walking through huge, bouncy swards of *Poa chathamica*, and seeing the wind swish through massive drifts of *Carex trifida*. In some of the most exposed and salt-blasted spots on the island, the beautiful *Olearia chathamica* grows in windswept mounds.

One night we ventured out with head torches, along tracks alive with weta, in search of the endemic coxella weevil *Hadramphus spinipennis,* which lives almost exclusively on *Aciphylla dieffenbachii.* To our delight, we found dozens of these nocturnal beauties, some with little weevil babies. We even came across some pairs in the act of making babies. Mangere has the largest known population of these incredible invertebrates, a consequence of the island also having the largest population of *Aciphylla dieffenbachii.*

I'd love to visit the island in summer when everything is in flower, but, even in winter, the island was teeming with life. This didn't feel like a proprietary visit, but rather a lucky glimpse into a world whose rhythms are not, like almost everywhere else on earth, modified and moderated by humans. Of course, Mangere is far from untouched, but its restoration is well on its way.

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DOC wants to seek international recognition for Taieri Scroll Plain

The Department of Conservation (DOC) has identified the Taieri Scroll Plain, Nokomai patterned mire and Waihola-Waipori wetlands in its draft Otago Conservation Management Strategy (CMS) as areas worthy of international recognition. The draft CMS is currently out for public comment. Ken Stewart, acting Otago Conservator, said "The natural and landscape values of these wetlands make them good candidates for recognition as Wetlands of International Importance under the Ramsar Convention, but it is something that we would want to discuss with landowners, Ngāi Tahu, Otago Regional Council, Fish and Game, and others in the community. We are floating these ideas in our draft CMS and would welcome feedback as part of the consultation process". The Taieri Scroll Plain, a large wetland in the Maniototo and Styx Basins that is part of the upper reaches of the Taieri River, is "the only one of its kind in New Zealand", Mr Stewart said.

The Taieri Scroll Plain. Photo: Geoff Rogers.

The Taieri River is the fourth longest river in New Zealand and follows an s-shaped course from the Central Otago block mountains to the sea near Dunedin. The upper catchment is a mosaic of tussock grasslands, farmland, wetlands and bogs that help store water and release it slowly into the river, protecting fish, wildlife and cultural values, and water sources. The Taieri Scroll Plain wetland is habitat for significant populations of the 'At Risk' (de Lange et al., 2009) tufted hair grass (*Deschampsia cespitosa*) and *Carex tenuiculmis*. Rare saline soil plant communities are also present and they include species more usually associated with the coast such as glasswort, *Atriplex buchananii* and *Selliera*. Dryland terraces adjoining the wetland have occasional populations of the threatened dryland cress, *Lepidium solandri*.

The river is well known for a number of rare native fish species and is an important trout fishery. Less well known is that the Taieri River has several internationally and nationally recognised geological and landform features. The Ramsar Convention recognises Wetlands of International Importance as being important for their economic, cultural, scientific and recreational value.

Mr Stewart said the department looked forward to hearing people's thoughts about wetlands and discussing these ideas with the community. You can view the draft Otago CMS on the DOC website at www.doc.govt.nz/cms. You can have your say by filling out a submission form on the webpage. Submissions are open until 13 September 2013.

Media release: 6 August.

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de Lange, P.J.; Norton, D.A.; Courtney, S.P.; Heenan, P.B., Barkla, J.W.; Cameron E.K.; Hitchmough R.; Townsend A.J. 2009: Threatened and uncommon plants of New Zealand (2008 revision). *New Zealand Journal of Botany* 47: 61–96.

Explaining scientific names (6): The shape of things

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

Many plant names include objects that reflect their appearance. This is a practical way to describe shapes which are familiar, such as needles or slippers. However, some objects that were common at the time the plant was named may be less familiar to modern readers, for example mitre in the ecclesiastical sense. Other objects used in plant names may help to describe shapes that existing shape terminology does not cover, e.g. bottle-shaped.

Here are some examples of genera (both exotic and native) that have objects as part of their names:

- *Calceolaria* – from the Latin calceolus 'slipper or little shoe', which alludes to the shape of the flower.
- *Cerastium* – from the Greek keras 'horn', referring to the seed capsules of some species looking like horns as they emerge from the calyx.
- *Cyathea* – from the Greek kyatheion 'little cup', which refers to the shape of the indusium.
- *Corynocarpus* – from the Greek koryne 'club' and the Latin suffix –carpus 'fruit'.
- *Cystopteris* – from the Greek kystis 'bag' and pteris 'wing' or 'fern', which alludes to the sack-like covering of the sori.
- *Dacrycarpus* –from the Greek dacrys 'tear' and the Latin suffix –carpus 'fruit', which refers to the tear-shaped fruit.
- *Lagenophora* – from the Latin lagen 'bottle, flask' and the Greek –phora 'carrier' meaning 'bottle-carrier', probably in reference to the cypsela (fruit), which is urceolate (urn-shaped).
- *Mitrasacme* – from the Greek mitra 'headband, turban, cap' and acme 'tip, point' meaning mitre-tipped. The hat worn by some Roman Catholic clergy is also called a mitre and the plant name probably refers to this shape.
- *Notogrammitis* – from the Greek noto- 'back' and gramma 'line', which refer to the elongated shape of the sori (spore clusters on underside of the fronds).
- *Oplismenus* – from the Greek hoplismos 'weapon', referring to the spiked awns.
- *Thelymitra* – from the Greek thely- 'female' and mitra 'headband, turban, cap', which refer to the fused stamens.

Oplismenus hirtellus subsp. *imbecillus* with its dramatic awns. Photo: Colin Ogle.

Astelia subulata with awn-shaped leaves.
Photo: John Barkla.

Cushion-shaped *Myosotis pulvinaris*.
Photo: Jesse Bythell.

Specific names often include objects to help describe their features. Below are some commonly encountered examples:

- *Awn-shaped* – from the Latin subulam 'awl', e.g., *Astelia subulata*.
- *Cushion-shaped* – from the Latin pulvinar 'a cushion' meaning cushion-shaped, e.g., *Myosotis pulvinaris*.
- *Feather-shaped* - from the Latin pinna 'feather', e.g., *Brachyscome pinnata*.
- *Ring-shaped* - from the Latin anulat 'ring', e.g., *Hebe annulata*.
- *Shield-shaped* – from the Latin umbo 'shield', e.g., *Xenasma umbonatum*.
- *Sickle-shaped* – from the Latin falx 'scythe' or 'sickle', e.g., *Cyrtomium falcatum*.
- *Spindle-shaped* – from the Latin fusus 'spindle' and -formis 'shape', e.g., *Catenella fusiformis*.
- *Whip-shaped or whip-bearing* – from the Latin flagrum 'whip', with various suffixes such as-aris and –fero, e.g., *Carex flagellifera*

NZ Plant Conservation Network awards: 2013

The prestigious New Zealand Plant Conservation Network Awards are now in their eighth year. We are now calling for nominations for the 2013 awards (see the nomination form attached at the back of the newsletter). 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 at 30 June 2013)

Information about the awards and nomination forms are available on the Network website—www.nzpcn.org.nz

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 on **Wednesday 6 November 2013**. Nominations close on **Friday 4 October 2013.**

Yellow-eyed Penguin Trust conference: Who's speaking and about what?

Three workshops of direct relevance to community conservation work will precede the conference on the afternoon of 16 October:

- **Governance as leadership** convened by Margy-Jean Malcolm of Unitec NZ
- **Sustainable fundraising – what really works?** Heather Newell of Foresee Communications
- **Integrated Pest Management** hosted by Orokonui Ecosanctuary

You can find more details about these hands-on workshops at http://yellow-eyedpenguin.org.nz/conservationinc/april-2013-third-circular

We have an impressive line-up of conference speakers chosen for the insights they can offer to what works in community-led conservation and how to make it work. Here is an outline of the keynote speakers for both days.

The conference will be launched by the Minister of Conservation, Hon. Nick Smith, who will stay to respond to questions you may wish to ask. The Department of Conservation hosts the first session. You will have ample opportunity to ask the questions we all want answers to. Key players, Director-General Lou Sanson and Deputy Director-General of Conservation Services Kevin O'Connor, will explain DOC's new arrangements for doing conservation alongside community groups. Paula Wilson will discuss the future of the Biodiversity Fund which she manages. And DOC's new Commercial Business Director will speak about DOC's efforts to stimulate corporate support for conservation causes.

Business leaders will discuss how the private sector regards conservation causes and sponsorship relationships with groups. Martin Snedden, head of New Zealand's Tourism Industry Association, proposes to tell us about tourism's perspective on what we do and how tourism might fit as a player in the new conservation landscape. Dom Quin, Fonterra Brands NZ Ltd, wants to tell us how the corporate sector values sponsorships. Gareth Morgan is hopeful he will avoid arrest at the North Korean border to give us the benefit of his energetic views as a business leader, philanthropist and conservation commentator.

To complement these presentations, we have an array of fantastic speakers, all chosen to expand on conference themes of connectedness, staying viable, what's feasible and meeting conservation needs. To see who these speakers are, and for the full draft programme, check out the *Conservation Inc* page on our website http://yellow-eyedpenguin.org.nz/conservationinc

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?

The Yellow-eyed Penguin Trust 25th anniversary national conference for citizen-based conservation organisations. Its aim is to strengthen and diversify the community base for biodiversity conservation in New Zealand. **Date:** Dunedin 17–18 October 2013, 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 Dunedin Centre 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 – Friday 25 October, 2013.	**Submit proposals** for symposia, papers and posters online at www.5GBGC.com.

Auckland Botanical Society

Meeting: Wednesday 4 September at 7.30 p.m. for a talk by Mark Smale titled 'Gumlands/Frost Flats'. **Venue:** Unitec School of Health Sciences, Gate 4, Building 115, Room 2005.	**Contact:** Shona Myers (shona.myers@vodafone.co.nz).
Field trip: Saturday 21 September to Seaforth, Hatfields Beach.	**Leader/contact:** Maureen Young (youngmaureen@xtra.co.nz).

Kaipatiki Project

Kaipatiki Project Community Planting Day: Saturday 7 September. **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.	**More info:** www.kaipatiki.org.nz/volunteer

Waikato Botanical Society

Field trip: Saturday 31 August for a Threatened Plant Collection working bee. **Meet:** 10.00 a.m. at Waikato University Gate 8, Hillcrest Rd, outside Science and Engineering main entrance (E-F link stairway). **Bring:** gloves, old clothes and boots for weeding, planting and propagating activities.	**Contact:** Liz Overdyck, email: eg3@waikato.ac.nz, ph: 07 825 9743.
Meeting: Monday 2 September at 5.30 p.m. for a talk by Brian Cutting titled 'Gardening for wildlife – gardens as a restoration tool'. Venue: Environment Centre 25 Ward Street Hamilton.	**Contact:** Cynthia Roberts, e-mail: croberts@doc.govt.nz, ph: 07 8581034.
Field trip: Saturday 14 September to Kaingaroa Frost Flats - Rangitaiki Bog Pine forest (combined with Rotorua Botanical Society).	**See below for details.**

Rotorua Botanical Society

Field trip: Saturday 14 September to Kaingaroa Frost Flats - Rangitaiki Bog Pine forest (combined with the Waikato Botanical Society). **Meet:** the car park, Rotorua, 8.30 a.m. **Grade:** medium; need 4WD for forest; contact leader one week before to supply vehicle details (spare seats available for those with no 4WD but booking necessary).	**Leader/Contact:** Sarah Beadel, ph: 07 345 5912 or 021 924 476.

Wanganui Museum

Field trip: Saturday 31 August or Sunday 1 September to the native orchids of Junction Road, off Rangitatau East Road. **Meet:** at Police Station at 9.30 am; bring lunch, hand lens and relevant books if you have them. **Leader:** Kevin Luff.	**Contact:** Clive Higgie, e-mail: clive.nicki@xtra.co.nz.
Meeting: Tuesday 3 September for a talk by Rudolf Schulz titled 'Aeonium succulents'. **Venue:** Museum's Davis lecture theatre.	**Contact:** Colin Ogle e-mail: robcol.ogle@xtra.co.nz).
Field trip: Sunday 29 September to see Eucalyptus in Wanganui. **Meet:** in front of City College on St Hill St at 1.00 p.m.; bring hand lens, pen, lunch.	**Leader:** Colin Ogle e-mail: robcol.ogle@xtra.co.nz).

Wellington Botanical Society

Field trip: Saturday 7 September to Wright Hill Reserve: Deliverance and Salvation tracks. **Meet:** 9.30 a.m. at Fitzgerald Place, South Karori.	**Co-Leaders:** Chris Horne, ph: 04 475 7025; and Barbara Mitcalfe*, ph: 04 475 7149 (*TBC).
Meeting: Monday 16 September for a talk by Paul Champion, NIWA, titled 'Adapting to aquatic life'.	**Venue:** Lecture Theatre M101, Murphy Building ground floor, west side of Kelburn Parade.

Nelson Botanical Society

Field Trip: Sunday, 15 September to Lakehead track, Lake Rotoiti.	**Leader:** please register with Beryce Vincenzi, ph: 03 528 4549.
Meeting: Monday 16 September at 7.30 p.m. for a workshop on Orchid key.	**Venue:** Seniornet, Pioneer Park.
Field trip: 25-28 October for Labour Weekend camp to Shuckards' Taipare Bay.	**Leader:** Shannel Courtney, ph: 03 546 9922

Canterbury Botanical Society

Meeting: Friday 6 September at 7.30 p.m for a talk by Murray Dawson. **Venue:** Room A5 University of Canterbury.	**Contact:** Gillian Giller, ph: 03 313 5315, e-mail: ggillerma1@actrix.gen.nz.
Field Trip: 14 September to Rakaia Island. Meet: Mahaanui DOC offices at 8.00 a.m. (31 Nga Mahi Road Sockburn) or at 8.30 a.m. opposite the Arts Crafts church, Dunsandel, at 8.30 a.m.	**Contact:** Jason Butt, ph: 027 459 2011, e-mail: jason@waioralandscapes.co.nz.
Field trip: 14-17 November for the annual Show Weekend Camp to 'Island Hills' station, inland from Culverden. **Cost:** $30/person/night.	**Bookings:** Gillian Giller, ph: 03 313 5315.

NEW ZEALAND PLANT CONSERVATION NETWORK

PLANT CONSERVATION AWARDS: 2013

The New Zealand Plant Conservation Network is now accepting nominations for the 2013 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 at 30 June 2013)

More information about the awards scheme and additional nomination forms are available on the Network website - www.nzpcn.org.nz. You can 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 on **Wednesday 6 November 2013**.

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: _____

REASONS FOR NOMINATION:
(*Please add more details on separate pages if required*.)

Your Name: _____

Relationship to Nominee: _____

Your contact details:

Address _____

_____

Phone _____ Email: _____

Please send your nomination form by Friday 4 October 2013 to:

New Zealand Plant Conservation Network
P.O. Box 16-102
Wellington, New Zealand
Email: melissa.hutchison@wildlands.co.nz
www.nzpcn.org.nz