



TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

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Deadline for next issue:
Friday 15 September 2017

SUBMIT AN ARTICLE TO THE NEWSLETTER

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

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

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

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

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NEW ZEALAND

PLANT OF THE MONTH, p. 2



Pteridium esculentum.
Photo: Jeremy Rolfe.

NZPCN Biennial Conference—Hokitika, 14–18 November

A reminder to all that registration is open for the NZPCN 2017 biennial conference which will be held in Hokitika from 14 to 18 November. The conference website has links to both the registration page, which will also allow you to sign up for workshops and field trips, and the abstract submission page, should you be interested in delivering a presentation at the conference.

Early-bird registration closes in just over a month on 30 September 2017 after which prices will increase by 10%. Network members should log in to the website to obtain the discounted prices before registering. More information regarding the conference can be found on our website: www.nzpcn.org.nz/page.aspx?nzpcn_events_conference_2017

Interested in delivering a presentation during the conference?

If you are interested in delivering a presentation during the conference you will find the link to abstract submission via the conference page on the website. An auto-generated email form will ask for a few of your details and will get you to identify the session you wish to deliver your presentation in. Here you can also paste in or attach your abstract. Abstract submission will close on 8 September. The NZPCN 2017 conference committee will assess abstracts and notify authors by 15 September if their presentation has been accepted. All standard presentations (not keynote) should be 15 minutes long (a further 3 minutes will be allowed for questions).

Student attendance and travel grants

The first two students to register and complete the abstract submission process will have their conference registration cost reimbursed and the Network will assist their travel costs to Hokitika. Please draw this to the attention of the students and tertiary education providers you know in your region. These travel grants, alongside our discounted student registration costs, and our student colloquium, are all part of our push for this conference to provide a platform for students to share their plant related research.

NZPCN annual awards

It is the time of year again when the Network is seeking nominations for its prestigious annual awards which acknowledge outstanding contributions to native plant conservation. The award categories are for an individual, a school, a council, a community group, a plant nursery and a young plant conservationist (under 18 years as of June 30, 2017). Here is an opportunity to acknowledge someone/a group, within your networks and memberships who is/are doing a great job of protecting New Zealand native plants!

Anyone may make a nomination, including multiple nominations under different categories. Nominations close Monday 25 September. Winners will be announced at the NZPCN conference in November. Please send nominations, preferably by email to Catherine Beard, email: cbeard@doc.govt.nz, or by post: Attention: Catherine Beard, Department of Conservation, Private Bag 3072, Hamilton 3240. A pdf of the nomination form is at the end of the newsletter (or download it from www.nzpcn.org.nz).

PLANT OF THE MONTH – *PTERIDIUM ESCULENTUM*



Pteridium esculentum. Photo: Jeremy Rolfe.

Plant of the month for August is *Pteridium esculentum* (bracken, rarauhe).

*When Tom and Elizabeth took the farm
The bracken made their bed,
and Quardle oodle ardle wardle doodle
The magpies said.*

Denis Glover "The Magpies"

It is often assumed that the ubiquitous bracken fern is not a native. This mistaken idea may be caused by the use of an English name, perhaps it would be easier if we simply referred to our species by the Māori name 'rarauhe'. Another possible explanation for why people assume bracken is not native could be because of its rampant growth after other native vegetation has been cleared.

Bracken belongs to the family Dennstaedtiaceae; species in this family can be found on all continents except Antarctica. The botanical name refers to both its appearance and its usage—Pteris meaning 'fern' and esculentum meaning 'edible'. Ferns in the Dennstaedtiaceae are characterised by bearing sori on the margins of the pinnae. Rarauhe is deeply rooted and the pinnae are dark green on the upper leaf surface and paler beneath. It is a distinctive species of fern and cannot easily be confused with any other native fern.

Māori used bracken for a wide range of purposes including food, medicine and building materials. Bracken roots were carefully processed and sometimes sweetened with tutu juice or mixed with whitebait to form cakes. Bracken root was a significant carbohydrate in the diet of Māori who lived in areas too cold to cultivate kumara. Areas of recently cleared bush and rough pasture with bracken are important habitat for New Zealand pipits (At Risk – Declining).

You can view the NZPCN website factsheet for *Pteridium esculentum* at: www.nzpcn.org.nz/flora_details.aspx?ID=2230

Helping revise the XIX International Code of Nomenclature for Algae, Fungi and Plants

P.J. de Lange, Department of Natural Sciences, Unitec Institute of Technology (pj.delange@xtra.co.nz)

Every six years, the world's botanists and mycologists get together for the International Botanical Congress. These are, as you may well imagine, seriously major events, bringing much kudos (as well as angst) to the hosting nation. This year the 19th International Botanical Congress (IBC) was hosted by China, with the event held at Shenzhen (Fig. 1), a relatively new and upcoming city of c.10 million people located in south-eastern China, near the border of Hong Kong. For this IBC, over 6000 conference attendees had registered; their needs were met by 10,000 English-speaking local Chinese volunteers as well as an unknown number of bus drivers, police and security officials.



Figure 1. Shenzhen, Futian District; outside the main entrance to the Shenzhen Conference Centre, July 22. At this stage, the venue was still being set up for the main Botanical Congress so was hosting an International Anime and World Turtle Conference.

Through the auspices of the New Zealand Department of Conservation, I attended the Shenzhen IBC (23–29 July)—the single largest conference I have ever attended. Here I report on the process of revising the International Code of Nomenclature for Algae, Fungi and Plants (ICN), a meeting that was held the week before (16–21 July) the main Congress (23–29 July).

As many people are probably aware, there are codes that govern the way botanists, horticulturists, mycologists, phycologists and zoologists formalize the nomenclature (‘naming,’ if you like) of the life forms they research. For many years, algae, bacteria, fungi and plants have been governed by various codes but, over the last 100 years (especially the last 64 years), there has been a concerted effort by botanists, mycologists and phycologists to operate under a single universal code. The idea of an international code was first mooted in 1867 by Alphonse de Candolle (28 October 1806 – 4 April 1893). Alphonse desired that the world’s botanists (which in his world also included mycobiota) worked under the same rules and practices to avoid potential confusion and conflict. The initial codes were relatively simple, covering what was then believed to be the Plant Kingdom. Over time, these ideas were unified, eventually morphing into the International Code of Botanical Nomenclature (ICBN), which was mostly adopted by the world’s botanists from the 1900s onwards as a guiding document to assist and rule on the provision of taxonomic ranks, taxonomic actions and process, and the names stemming for these. I say ‘mostly’ because for a brief period there was an alternative American Code – set up by Nathaniel Lord Britton (January 15 1859 – June 25 1934) the Director of the New York Botanical Gardens. Britton was, it seems, dissatisfied with various aspects of ICBN, so he elected to take it upon himself to set up an American one (Arthur et al., 1907). Because Britton had an enormous wealth of staff and resources available, his idea gained impetus and when it was adopted by the U.S.A. Department of Agriculture, the American Code could no longer be ignored internationally. Finally, a meeting held at Cambridge University, United Kingdom, in 1930 attempted to merge some of Britton’s legacy. The most salient was the requirement that any taxonomic name must be based on a single type specimen, lodged in a single institution – a sensible move as hitherto the ICBN had accepted multiple type collections for a single taxon, lodged in multiple institutions. However, many of Britton’s other ideas were gradually rejected and today the world operates under a single code for algae, fungi and plants (McNeill et al., 2012).

The governance of the ICN and its predecessor the ICBN is undertaken by an elected Bureau of Nomenclature (Fig. 2) run under the auspices of the International Association of Plant Taxonomists (IAPT). The Bureau works with a raft of nomenclature committees and special committees covering the different life forms and various other aspects that the code covers. Proposed changes to the code are published in *Taxon*, the Journal of IAPT, and, every six years the Bureau meets the week before the IBC and revises the code in a public meeting (the “Nomenclature Session”) to which all botanists are invited. The process whereby the code is revised is, however, not as simple as just having a meeting. For a start, not all those people who have made proposals or have opinions on them can afford to attend the Nomenclature Sessions in person. Also, there are potentially many proposals to cover. Thus, before the Nomenclature Sessions, a postal vote is held with voting being undertaken by IAPT members and by various institutions such as the world’s herbaria. Postal votes help reduce the number of proposals that need to be discussed at the actual Nomenclature Sessions. Nevertheless, those proposals rejected by a



Figure 2. The Bureau of Nomenclature, showing from left to right, the Chair, Dr Sandra Knapp (British Museum of Natural History), Rapporteur-général, Dr Nicholas Turland (Freie Universität Berlin), Vice-rapporteur, Dr John Wiersema (USDA), Dr Anne Monro (CSIRO) and Dr Yun-Fei Deng (Chinese Academy of Sciences). Note the twin screens projecting on the left-hand side the new code under development and the previous code for comparison.

postal vote can still be reinstated for discussion if raised again at the Nomenclature Session meeting, provided the motion is seconded by five or more people. Even assuming all rejected proposals remain rejected there are still those that postal votes indicate need further discussion and Nomenclature Session attendees can also raise a proposal ‘from the floor’. The key distinction of the ICN revision is that it is a truly democratic, public process. Indeed, the whole session is carefully recorded and documented and, as an added measure, this year’s revision was even filmed by the Chinese.

During July 2011, I attended my first ever “Nomenclature Session” at the 18th IBC held in Melbourne, Australia. I confess I was so ‘rattled’ by the various botanical and mycological deities I was sitting with that I found I had no desire to speak during debates, despite wanting to comment on proposals, for fear of putting my foot in it. Voting I also found singularly bizarre. When I registered for that meeting, I was handed a white perforated A4 card on to which 30 numbers had been printed, each number could be carefully torn out as a single rectangular numbered slip, i.e., Card 1, 2, 3 et. seq. (Fig. 3). I noted I got a white card but some people got white cards and up to three different coloured cards. When I queried this, I was told that white cards marked “P” were individual votes; white cards without a “P” were an institutional vote, and that these counted as single votes. However, the coloured ones, representing institutional votes, had different values, green ones represented two votes per card, yellow three votes, and red (orange) five votes. Provided one had been nominated as the proxy by a particular institution you could also cast that institution’s votes (up to five institutions per person). Proxy votes can be granted only if an institution has provided the Bureau of Nomenclature with the signed documentation to say you can act on its behalf. Obviously, one is then honour bound to vote as directed by that institution, even if you personally don’t agree with its decision.



Figure 3. Voting Cards—white represents a ‘delegate’ (individual) vote and, in this case, orange and green institutional votes from the Allan Herbarium, Landcare Research, and the Auckland Museum Herbarium.



Figure 4. The standard “Show of Hands” vote. As each hand had to be carefully counted some people jokingly complained of suffering pins and needles for having to hold their hands up for so long.

Voting is done in two ways: 1., a ‘show of hands’ (Fig. 4), and, if necessary, 2., by a ‘card vote’ (Fig. 5). Card votes must be called from the floor; they can happen at any time, meaning you can call one before or after a ‘show of hands’ vote. If a card vote has been called, then you are told what number to use on your card sheet (Fig. 3), you then carefully (and remember these sheets are perforated—so ‘carefully’ is the operative word) tear the appropriate numbered rectangle out and then place that in the relevant ‘yes’ or ‘no’ box (Fig. 5). After each card vote, counters count each card and then the votes are sealed in labelled bags and handed to the chair who announces the result. Before each vote, whatever kind, the Chair makes clear the requirements for the vote, e.g., the number you must use (if it’s a card vote), the proposal you are voting on, and what is needed to pass or reject it (i.e., is this a 50% vote or a >60% qualified majority vote?).



Figure 5. The less frequently undertaken ‘Card’ vote. Here Dr Schori of the USDA carries the green ‘Yes’ box, whilst the red “No’ box is can be seen behind her.

At the onset of the meeting, the Chair announces the rules and ways in which votes will be done. Certain actions, such as a new ‘Article’ require supermajorities (usually 60% or

more in favour) whereas others, like say a ‘Recommendation’, require a simple majority (50% or more in favour) to carry the motion. Seconding requires five or more seconders. For clarity, each comment from the floor is not only recorded on tape but the speakers must then write the date, time, their name, organisation and country, before providing a succinct summary of the verbal comments they just made. Speakers must also speak using a microphone, clearly first stating each time, their name and where they come from, e.g., ‘de Lange, Auckland, New Zealand’, which can be tiresome when you are being asked several questions in the same conversation string. Tiresome or not, as the entire meeting is documented, this is necessary so that the typists can tell who is speaking on the tapes, rather than have to guess. Of course, the card you also filled out helps this documentation process.

Next to the chair sits the Rapporteur-général and Vice-rapporteur (Fig. 2). These two people are the critical functionaries of the Bureau who handle each proposal when presented to *Taxon*. They debate the proposal with the relevant experts and committees and they then provide a written assessment and, at the Nomenclature Session, a verbal assessment on where they believe the proposal would sit in the new code, and how critical it is – whatever they say though, it must be objective. The rest of the panel comprises key advisers and a recorder whose rather difficult and somewhat thankless task is to write into the code—projected on screen—the proposed changes, rewordings and so forth, and record their outcome. As you can imagine, this is not an easy job—over a hundred people are watching your every move (think how hard it is to type with just a few people watching you). All these people then form the core of those who will turn these discussions into a revised code.

At the onset of the Nomenclature Sessions, all proposals are listed by the Bureau (these days they appear on screen (Fig. 2) as well as in a hard copy summary that is given to participants when they register). All those rejected by postal vote are (as noted earlier) are still listed. In most cases these remain rejected. Proposals that concern examples are automatically passed to the Nomenclature Subcommittee for consideration (so these are not discussed). Those that concern ‘Articles’, ‘Recommendations’ and ‘Notes’ and were not rejected by postal vote, are up for discussion (and that includes proposals that had been rejected by postal vote but which have been resurrected at the Nomenclature Session). In addition, proposals may come ‘from the floor’, provided these are written in the necessary format, seconded and submitted to the Bureau within the strictures given by the chair at the onset of the meeting. Those ‘from the floor’ proposals are the last ones to be discussed.

The whole process reminds me of the classic statement attributed to historian Professor John H. Arnold, University of Cambridge, that ‘War is sometimes described as long periods of boredom punctuated by short moments of excitement’. The Nomenclature Sessions are rather like that, i.e., they can be excruciatingly boring, punctuated by short moments of excitement. Some sessions can be rather long and, because of the procedure, discussions are often run like a court hearing. Nevertheless, in the sessions good humour is much appreciated. One must, of course, be courteous but it’s quite OK



Figure 6. A rare sunny day outside the School of Business Studies, University of Peking, the venue for the Nomenclature Sessions.

to politely ‘lose your rag’, and protracted debate can be ceased abruptly by anyone from the floor shouting ‘Call the Question’ (but only after you have raised your hand and been recognised by the chair). Though when one does so, one often feels that one is being discourteous by doing so.

With that background, let’s move to the 19th Nomenclature Session held the week before the main IBC in Shenzhen. The preliminaries of the Nomenclature Session started on the afternoon of July 16 at the University of Peking HSBC Business School (PHBS) (Fig. 6), University Town (Fig. 7), Nanshan District, Shenzhen, China. That afternoon, Nomenclature Session attendees were bussed to



Figure 7. University Town, Pingshan 1st Road, Shenzhen.

into the Nomenclature Sessions), and instructed to proceed downstairs. Downstairs, passports were again checked, then we went through scanners and entered another level where we picked up our delegate and institutional votes (I had the institutional votes from the Auckland Museum Herbarium (AK) and Allan Herbarium (CHR)) (Fig. 3), after which we were offered refreshments before a ‘meet and greet’ dinner at a nearby university canteen. In the process, I met up with a range of botanists and mycologists I had last seen in Melbourne in 2011. We also had a chat with the Bureau of Nomenclature Chair, Dr Sandy Knapp – based in the British Museum of Natural History—and the world expert on the Solanaceae; we had a nice chat about Australasian *Solanum* in the *S. nigrum* complex.

The next day we started the sessions at 7.30 am sharp. That day, I opted for the shuttle bus as Shenzhen was beset by a typhoon and in between the thunder, lightning and torrential rain the temperature was a steady 38°C with 100% humidity. Having just left New Zealand’s winter, these temperatures were a bit much for me to cope with. At the first full day, it was noted that we were going to be discussing 397 Proposals, the largest number since the Stockholm Code (1953) was debated in 1950 (that dealt with 500). Of the 397, Sandy Knapp noted that 87 had been rejected by mail and 67 were examples only, so in effect we had 245 proposals to discuss in detail. We were instructed on the voting process, and how to raise a proposal ‘from the floor’. Then we started with a discussion on the ongoing matter of name registration and the findings of the mycology special committee—this discussion was intended as a precursor to ‘warn and inform’ people to the main debate to be held on 21 July later that week. After this discussion, we started sequentially with General Proposals and then Article 4 through to Article 60, the Appendices and Glossaries.

Breaks, aside from lunch when people were ferried by shuttle bus to the university canteen, were brief. I soon found that discussions were often frank but I was impressed with the excellent humour of the attendees. Unlike the Melbourne Code meetings, where I witnessed some ‘intense’ shouting matches and threatened ‘walk outs’, the Shenzhen Code meeting ran like clockwork, with minimal drama and only the odd snide remark or outburst.

As with the Melbourne Code meetings there was an undercurrent of angst surrounding two key issues: ‘name registration’ and the way that mycobiota were to be treated by the code. Mycobiota (i.e., fungi) have always been a bone of contention ever since Linnaeus elected to treat fungi as plants. As such,

the Business School from the nearby Vienna Hotel, Pingshan 1st Road. All attendees were required to carry their passports at all times. Security was tight and we were actively discouraged from walking about the neighbourhood at night (though frankly it was perfectly safe). At the Business School, our passports were scanned, Chinese visas checked and then delegates were handed a satchel of information and our all-important name tag (Fig. 8), which had to be worn at all times (without it you would not be admitted



Figure 8. The all-important security pass without which you were not allowed access to the Nomenclature Sessions.

various codes have attempted to deal with mycobiota as ‘honorary plants’, which has at times deeply divided the ‘botanical’ community. Over the last 20 years, mycologists have become more strident in their insistence that mycobiota be accorded greater recognition by the Code. Perhaps the most obvious way this had been expressed was the decision made in the 2011 18th Nomenclature Sessions in Melbourne to change the name of the Code from the ‘International Code of Botanical Nomenclature’ to the current ‘International Code of Nomenclature for Algae, Fungi and Plants’ (ICN). Fungi, we should all by now know, are not ‘plants’. In fact, they belong to their own Kingdom Eumycota—distinguished amongst other things by their heterotrophy and having cell walls made of chitin (though some of what we regard as ‘fungi’ also belong to the Kingdom Chromista and they have cell walls of cellulose not chitin). So, fungi rather than being closely allied to plants, are more closely allied to animals. To treat fungi as botanical subjects is regarded by many as displaying profound ignorance.

At the 2011 Code meeting, the mycologists were present in force and discussion got very heated on all things fungal. As a result, a special committee had been set up to look at ways of treating mycobiota. At the Shenzhen meeting, the committee reported back on its findings and we were asked to vote on them – the most critical aspects were the decision to take all those articles, recommendations and notes that apply only to mycobiota and place these together in one place within the main code. The other key issue was that the mycologists wanted the autonomy to make their own nomenclatural decisions at their International Mycology Congress meetings (held on a four-yearly cycle). They proposed that the decisions they reached there would be binding but that they would continue to provide an update of them to be published in the six-yearly cycle of the ICN.

The issue of registration is perhaps more contentious. The overriding ethos of the last four codes has been ‘stability of names’. As readers may well appreciate, it’s annoying when you have learned a plant by a particular name and then ‘voilà’ it suddenly changes. Consider Hall’s totara, which most people knew as *Podocarpus hallii*, then people started calling it *P. cunninghamii*, and now its *P. laetus*. This has come about because of the matter of ‘priority’ *Podocarpus laetus* was described in 1847, *P. cunninghamii* in 1884 and *P. hallii* in 1889. Unless the younger name (*P. hallii*) is conserved over the older ones (*P. laetus*, *P. cunninghamii*) then the correct name for ‘Hall’s totara’ is the earliest effective and legitimately published name *P. laetus*. Over the last 20 years, there has been a call for the rejection of priority arguing that stability of names is preferred over the constant shuffling that otherwise happens as older names are discovered; names that then have priority unless the more commonly used younger name has been formally conserved.

One reason so many older names are coming to light is because of the electronic age. Databasing of the world’s libraries, herbaria and museum collections has increasingly brought to light a plethora of names and taxonomic actions that had been forgotten, or incorrectly applied by researchers (e.g., *Podocarpus laetus* had been incorrectly applied to an unrelated Australian species *P. elongatus*). If the priority rule is followed, this could then result in significant taxonomic upheaval – consider the New Zealand problem of *Asplenium richardii* (Brownsey & Perrie 2017) as just one of many local examples.

Registration offers a way to resolve some of these issues. The concept is straight forward. Basically, any taxonomic act, be it describing a new taxon, or making a new combination must first be registered. That way, the registration agency can check if the new taxon name or combination has been used before (i.e., preoccupied) and, further, it offers a way of cementing a taxonomic action that then overrides the rules of priority. In effect, if registration is accepted then after an agreed date, any taxonomic act undertaken without a registration number will be invalid. Many people struggle with this but it’s a process already required for mycobiota (in effect since 2012) whereby any newly erected fungal or lichen name or any combination involving these lifeforms must be registered either on MycoBank or Index Fungorum; without the necessary proof of registration your taxonomic act has no validity. Does registration stop priority? Sort of. It means that unless a name is registered it doesn’t exist so it provides a benchmark for newly described taxa and a way of cross-referencing older names and the basic book-keeping that governs how combinations are formalised. The process of conserving

names or arguing priority is still there and probably always will be but the ongoing drive to ensure greater stability of names is now so firmly entrenched that it will become increasingly harder to justify reversion to an older, obscure name, no matter how valid it may be. I am not sure what I feel about this but the shift toward stability seems inevitable. I certainly favour registration – the mycologists have shown the way and it seems to work well.

The issue with plants though is: Who will control registration? Previous attempts at registration resulted in the promulgator of the idea losing their position on the Bureau of Nomenclature. Feelings ran so high at that time that many Americans were threatening to go back to their own Code of Nomenclature. Tempers and feelings aside though, registration will not go away and now that mycologists do it, sooner or later botanists will have to follow. As such, in 2011, it was agreed that another special committee on registration be created to investigate the idea.

At this year's Nomenclature Session, the findings of that committee were to be discussed. Judging by early morning breakfast sessions at the Hotel Vienna, and the university canteen lunch and dinner chats, any discussion on registration looked set for some major disagreement.

Following on from day one, the Bureau of Nomenclature set a cracking pace and as it continued to thunder and rain outside that suited most of us. Despite the obvious discomfort of our 'hosts', many of us found walking from our Hotel to the Business School pleasant, safe and rewarding (even in the rain), in terms of seeing local wildlife and culture. Part of the walk traversed an old lychee (*Litchi chinensis*) orchard, the fruits of which were being harvested. Those who walked the path were treated to sights that included green tree frogs, whose calls sounded like chain saws starting up, numerous passerines, and, for the botanically inclined, a raft of ferns, some, like *Christella dentata*, familiar to me as an uncommon species at its world southern limit in New Zealand. Lunch time breaks allowed walks along the Dasha River, though the oppressive heat and humidity soon reduced one's clothing to a sodden mess.

On Friday 21 July, the majority of the proposals had been covered and it was now time to return to the registration and mycological discussions. Despite the potential for protracted debate, matters were cleared up within three hours. Registration for plants will proceed – slowly. At this stage, registration will be built into the International Plant Names Index (IPNI—<http://www.ipni.org/index.html>) though there was considerable debate about other world databases, who will fund and run the process, and whether registration will disadvantage 'third world countries'. Further thought and development will be needed but, in principle, registration is here to stay.

Then it was the mycologists' turn. Despite a few raised voices and negative remarks, overall the sentiment was that the proposed changes made sense. The alternative was, as Dr David Hawksworth so freely admitted, 'we (as in mycologists) will just do it anyway'. So, the new code, the 19th code, known as the Shenzhen Code, will now include a section entirely devoted to mycobiota. That section will be ratified on a four-yearly cycle but mycologists will remain within the aegis of the ICN and, as they said, botanists are always welcome at their conferences.

Some of the more esoteric discussion would have puzzled or worried a less nomenclature versed onlooker. Some protracted argument happened about whether hyphens were needed, and what does one do with a double vowel that is hyphenated, say a species called *pseudo-occidentalis*? Is it '*pseudo-occidentalis*', '*pseudooccidentalis*' or '*pseudoccidentalis*'? Also, some authorities use an '*' or ':' do we need to keep doing this? I was intrigued to find that some mycologists are describing new taxa on the basis of a DNA sequence only, citing the DNA chromatograph or sequence strand as the type specimen. Can that really be done? I can say that it has been already but whether a portion of DNA sequence truly constitutes a 'specimen' is another matter. I was pleased that the section on hybrids has been pulled from the appendices and will be incorporated into the code. I regret now that I didn't write a paper arguing for the use of just the one spelling for New Zealand (we have at least 35 Latinized ways of doing it, which drive the average botanist nuts trying to remember – is it *novae-zelandiae*,

novaezeelandiae, *novozelandiae* etc, etc?) Who knows? Maybe next time I will do something about it. Did I enjoy the process? Most certainly. Nomenclature is a little esoteric, true, and judging by the audience there is urgent need for an injection of young blood. I counted about 180 attendees, most over 60, many over 70 years of age, which, based on the overall number of people at the Shenzhen IBC, is roughly 3% of the international botanical 'gene pool'. It's a worry. Of course, this is my take on the meeting, those with a greater interest in a comprehensive summary (and probably more accurate – as I had to go on memory not tapes) of the meeting should refer to Turland et al. (2017).

Acknowledgements

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New Zealand Indigenous Flora Seed Bank (NZIFSB)

Monica Swadel (M.Swadel@massey.ac.nz) and Craig McGill (C.R.McGill@massey.ac.nz)

A day of seed cleaning with Otaki volunteers

Late last month, the seed bank was grateful to have the help of five enthusiastic volunteers from Otaki join us for a day of seed cleaning. This is the third occasion on which volunteers from Otaki have helped the seed bank with the processing of collections. The ongoing support of the Otaki group to the seed bank is much appreciated, particularly at what is a very busy time for the seed bank with collections of Myrtaceae continuing to arrive.

The Myrtaceae seed collections have risen to nearly 350 samples, all in the space of the last three months. This has more than doubled the entire NZIFSB seed collection. Every collection needs to be sieved to remove debris, a process that is great for building muscle strength in the upper arms!



Dedicated volunteers from Otaki cleaning seed by hand.

The help of the Otaki volunteers enabled all remaining Myrtaceae collections requiring sieving to be completed. The collections are now ready to be counted before banking.

In addition to sieving the Myrtaceae seed collections, the volunteers helped with cleaning other seed such as *Pennantia corymbosa*, *Raukaua anomalus*, *Melicytus lanceolatus*, *Veronica pimeleoides* subsp. *faucicola* (At Risk—Naturally Uncommon) and *Epilobium hirtigerum* (Threatened—Nationally Critical). All of these species have now been accessioned into the seed bank.

Thanks to Dee Armstrong and team for contributing to the conservation efforts of the NZIFSB and for your continued support.



The Otaki group (left to right): Rosli Adams, Barbara Littlejohns, Dee Armstrong, Lyndsay Knowles, Jean Hollis.

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):

New Zealand Plant Conservation Network Biennial Conference

Conference: Tuesday 14 to Saturday 18 November. Venue: Regent Theatre, Hokitika. The conference will be followed by the John Child Bryophyte and Lichen workshop on Sunday 19 November to Tuesday 21 November.

Registration: www.nzpcn.org.nz/page.aspx?nzpcn_events_conference_2017.

Auckland Botanical Society

Meeting: Wednesday 6 September at 7.30 pm for the Lucy Cranwell Lecture to be given by Dr Paul Champion. **Venue:** Auckland War Memorial Museum.

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

Field trip: Saturday 16 September to Waikowhai Park.

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

Field trip: to The Pureora Forest Park (PFP) camp, 26–29 November; a few beds remain in dormitory accommodation, all meals supplied (by the on-site chef), linen on the beds and shared ablutions. Cost: \$185.00 each; a deposit of \$50 will secure your place. Cancellations: If you decide to withdraw on or after November 15, there is a \$10 cancellation fee unless you can find someone else to go instead. If you withdraw before November 15, the fee is \$5, unless you have a replacement in mind.

Register: by emailing Margi Keys (margikeys93@gmail.com); full payment should be made by 15 November to M A Keys 03 1578 0012854 01. **Further information:** www.doc.govt.nz/Documents/about-doc/concessions-and-permits/conservation-revealed/pureora-forest-park-lowres.pdf www.timbertrailodge.co.nz/timber-trail-lodge/ <http://3xplore.com/2017/07/19/timber-trail-lodge-luxury-in-nowhere/>

Rotorua Botanical Society

Field trip: Saturday 9 September to the *Myosotis pottsiana* sites, Galatea Foothills, Urewera. **Meet:** the car park, Rotorua at 8.00 a.m. **Grade:** moderate.

Leader: Sarah Beadel, ph: 07 345 5912 or 021 924 476; email: Sarah.Beadel@wildlands.co.nz.

Wellington Botanical Society

Field trip: Saturday 2 September to the Forest of Tane, Tawa. **Meet:** 9.30 a.m. at 58C Kiwi Crescent, Tawa, Wellington; if coming by train need a lift from Redwood Station, contact Richard or walk for 25 minutes via Tawa St, The Drive, and Larsen Crescent to Kiwi Crescent.

Leader: Richard Herbert, ph: 04 232 6828 or 027 445 5942.

Meeting: Monday 18 September at 7.30 p.m. for a talk by Dr Wendy Nelson titled 'Seaweeds of central New Zealand: What do we have at our back door?'

Venue: 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

Field Trip: Sunday 17 September to Inches Wairoa Valley for weeding. **Meet:** 9.00 a.m. at the Cathedral steps; contact Shannel if intending to come.

Leader: Shannel Courtney, ph: 03 546 9922; wk: 03 546 3148; email: scourtney@doc.govt.nz

Meeting: Monday 18 September at 7.30 p.m. for a talk by Roger Gaskell titled 'Some Plant Projects in the Motueka DOC District.'

Venue: Jaycee rooms Founders Park.

Canterbury Botanical Society

Meeting: Monday 4 September at 7.30 p.m. for a talk by Matt McGlone titled 'Where Did the Plants of New Zealand Come From?' **Venue:** Upper Riccarton Library community meeting room, 71 Main South Road.

Contact: Alice Shanks, ph: 03 337 1256, email: alice@caverock.net.nz.

Field trip: Saturday 9 September to Rakaia Gorge. **Meet:** at the Yaldhurst Hotel car park at 8.30 a.m. to carpool (50 m after the Main West Coast Road-Pound road roundabout) or in the Rakaia Gorge camp ground at 10.00 a.m. **Cost:** suggested petrol reimbursement \$10. Bring: your lunch, thermos, walking boots, rain coat and sunhat. **Grade:** Come prepared to walk and scramble through steep riverside forest, scrubby banks and riverbed.

Contact: Alice,
email: alice@caverock.net.nz, or
ph: 027 366 1246 if you intend to
come along so you can be advised
if the trip is cancelled.

Otago Botanical Society

Meeting: Wednesday 16 September at 5.30 p.m. for the Annual Geoff Baylis Lecture to be given by Dr Susan Walker titled 'Living in the Rainshadow: New Zealand's Most Distinctive and Threatened Ecosystems'. **Venue:** the Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel; use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Rm. 215, 2nd floor. Please be prompt because we have to hold the door open.

Contact: Robyn Bridges,
ph: 03 472 7330.

Field trip: Saturday 30 September for a visit to Hereweka Gardens. Meet: on site at the gardens at 10.00 a.m. There will be plants on sale.

Contact: David Lyttle,
ph: 03 454 5470.



NEW ZEALAND PLANT CONSERVATION NETWORK

PLANT CONSERVATION AWARDS: 2017

The New Zealand Plant Conservation Network is now accepting nominations for the 2017 awards. The purpose of these awards is to acknowledge outstanding contributions to native plant conservation.

The award categories are:

Individual involved in plant conservation

Plant nursery involved in plant conservation

School plant conservation project

Community plant conservation project

Local authority protecting native plant life

Young Plant Conservationist of the Year (under 18 years on 30 June 2017)

More information about the awards 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 **2017 NZ Plant Conservation Network Conference** in November. Winners will be informed in advance of the meeting. Nominations close on **Monday 25 September 2017**.

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 Monday 25 September 2016 to:

Attention: Catherine Beard (NZPCN Awards Convenor)

Department of Conservation

Private Bag 3072, Hamilton 3240

Or by email to cbeard@doc.govt.nz