TRILEPIDEA

Newsletter of the New Zealand Plant Conservation Network

No. 226

February 2023

Deadline for next issue:
Friday 17 March 2023

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 info@nzpcn.org.nz

Postal address:
PO Box 147
Mangonui 0442
NEW ZEALAND

PLANT OF THE MONTH, p. 6

Hibiscus diversifolius subsp. *diversifolius*. Photo: Bill Campbell.

Thank you from the NZPCN conference organisers

Alex Fergus, Jesse Bythell, Jo Smith

Kia ora e te whanau o ki Rōpū Hononga Koiora Taiao ki Aotearoa—hello New Zealand Plant Conservation Network family. It has been more than two months since our conference, hauropi whakahou ki Aotearoa – Restoration Ecology in New Zealand took place in Tāhuna – Queenstown. Work and life have continued apace for the conference organisers, hence this belated message of appreciation to all attendees and conference supporters. As was reported in our December newsletter, our four-day programme of workshops, presentations, awards, social activities, and field trips ran seamlessly between 4 and 7 December, thanks for the most part to our troupe of volunteers.

It may reflect the location, the topic, or the general mood of the country, but our 2022 conference was the largest (non-joint) NZPCN conference we have hosted yet. Popularity was such that in the weeks before registration closed, we had to turn away a further 20 or so registration requests as the venue was at capacity. Once again, our apologies to those who we could not make room for. We must also send a special thanks to those people who in the days before the conference, heeded our 72-hour wellness reminder, and opted to forgo the conference due to ill-health or COVID-19 concern. Thank you for this personal sacrifice. We are aware that some people did contract COVID-19 either while travelling to or attending the conference, and the organisers apologise to those who fell ill (this includes one of the organisers). We mitigated the risk to a pragmatic level, but risk remained. We sincerely hope anyone who picked up COVID-19 during the conference has subsequently recovered.

Perhaps a group of botanists is called a 'gush'? Conference attendees admiring tiny turf plants growing in a shallow depression channel derived from artesian springs at the base of the bordering terrace-scarp at Butterfields Wildlife Reserve. Photo: Jesse Bythell.

The conference would have been impossible to run without the support of our sponsors, and special thanks must go to our principal sponsors: Wildland Consultants, Manaaki Whenua – Landcare Research, e3Scientific, RealNZ, and the Queenstown Lakes District Council. Huge thanks to our four fascinating keynote speakers, whose words we know have triggered much ongoing discussion, especially within the Queenstown Lakes District community: Geoff Rogers, Estelle Pērā-Leask, Peter Heenan and Adam Forbes. To all other presenters, thank you again. We know how much work putting together a presentation or a poster is, and without your commitment and enthusiasm to share your research or your projects we wouldn't have had a conference at all. Thanks also to those who agreed to have their presentations filmed and published online. We will be checking in with you soon, before announcing the platform and date when these will be available. To our workshop leaders, our field trip leaders, to all local businesses who volunteered their premises or other in-kind support, and to the Queenstown Lakes District community, thank you so much. Within the NZPCN council we wish to give specific thanks to our treasurer Bill for the additional work required processing and following up all conference related income and expenses.

To all of you who attended the conference, thank you for sharing your passion for plants and ecology, thank you for helping create a positive, supportive, lively, and frequently hilarious atmosphere where people felt safe and encouraged to participate. It was a pleasure to meet many new members of the NZPCN and a great joy to talk shop (and some nonsense) with long-time friends. Of final note, the Queenstown Lakes District Restoration Pathways workshop, which was begun during the conference, will be run in mid-May, with the dates and location being confirmed shortly. We warmly invite anyone with stories or experience in restoration in the Queenstown Lakes or Central Otago Districts to get involved.

Tribute to Audrey Eagle

John Barkla (mjbarkla@xtra.co.nz)

Audrey Eagle died at Birchleigh Rest Home, Mosgiel, on 27 November 2022, aged 97. Much has been written of Audrey's life and extraordinary achievements but to the Botanical Society of Otago (BSO), she was a long-time friend, supporter, and for 14 years, our Patron.

Audrey was born in Timaru in 1925. She was raised and educated in England where she trained as an engineering draughtswoman, a training that influenced her later botanical drawings which are notable for their detail and accuracy. She married Harold Eagle in 1949 and the couple opted to move back to New Zealand. Audrey was one of the founding members of the Waikato Branch of the Royal Forest and Bird Protection Society.

During this time, she participated in various field trips and excursions, developing a passion for the New Zealand flora. She once remarked that she the thought the best way to learn about the plants was to draw them. This idea was perhaps the genesis of her remarkable career as a botanical illustrator, which ultimately culminated in 'Eagle's Complete Trees and Shrubs of New Zealand' which incorporated and extended the material from her two previous books. In scope, it is more comprehensive than any work of botanical illustration covering New Zealand's tree and shrubs that had been produced hitherto and it is unlikely that a project of this magnitude will ever be completed again by one artist.

I first met Audrey in May 1991 when she assisted on a DOC trip with John Heaphy, Wayne Hutchinson, Colin Ogle, Robyn Ogle, and myself, in a survey for *Veronica speciosa* along the coastal cliffs of north Taranaki. Over two days we searched the coast between the clifftops at Mokau south to Pukearuhe. At that time Audrey lived in New Plymouth, following the death of her husband Harold in 1988.

I knew a little of Audrey's background before ever meeting her though. Rather famously, she was the last person to collect a specimen of the now extinct mistletoe *Trilepidea adamsii*, on the first Waikato Branch Forest and Bird Society field trip in 1954. The only known illustrations of it are hers and 19th –

early 20th century botanical artist Fanny Osborne. This mistletoe gives its name to the newsletter of the New Zealand Plant Conservation Network and the Network's logo utilises the Fanny Osborne illustration.

I rekindled my friendship with Audrey again in Dunedin when I moved there in 1997. She had moved a year earlier to be closer to her daughter Alison. Audrey lived out at Macandrew Bay on the Otago Peninsula, and soon developed a garden containing many of the special plants she had come to know and appreciate.

Audrey became a keen supporter of the BSO, which was re-invigorated in 1999 under the stewardship of Dr. J. Bastow Wilson and Barbara Anderson. Newsletter No. 15 of that year includes her request for specimens of nine taxa from the Canterbury/Otago region for what she was then calling Volume 3 of 'Eagle's Trees and Shrubs of New Zealand'.

David Lyttle, stalwart of the BSO, recalls first getting to know Audrey in 2002 when he joined the BSO, at which time she was a regular attendee at meetings and a participant in field trips. "*Through a shared interest in growing native plants, I ended up visiting Audrey's home in Macandrew Bay in December 2004 to help her divide her Poor Knights Lily plants (*Xeronema callistemon*) (Fig. 1). She had three pots lined up on her deck each containing a vigorous plant in full bloom. We successfully divided and re-potted the crop and I was rewarded with three plants that I still have, though my plants have never matched Audrey's originals. Audrey's garden was a treasure trove of rare and unusual native plants which she had propagated so she could get material in flower or in fruit for her work. There was a fine specimen of* Pittosporum obcordatum *growing next to her letter box so you did not need to remember the street number to know you were at the right address. Her gardening interests were not confined to native plants. She grew a selection of ornamentals and was an accomplished vegetable grower. She had her own strain of runner beans that she considered far superior to anything that came from a garden shop and was happy to bring the seed along to BSO meetings and share it with other members. At this stage she was still in the process of completing the illustrations for 'The Complete Trees and Shrubs'. Her work area was meticulously tidy and the visitor could see the great care and patience that went into producing a finished watercolour painting.*"

Figure 1. Audrey's *Xeronema callistemon* on her deck at Macandrew Bay, Dunedin. Photo David Lyttle.

Many botanists, both local and much further afield supported Audrey in the lead up to the publication of her life's work by gathering specimens and providing notes and taxonomic advice. In particular she spoke highly of Tony Druce, Colin Ogle, Peter de Lange, Shannel Courtney and locally, Professor Alan Mark. One sought-after shrub was what we knew by the tag name of *Pimelea* "Turakina" (now *Pimelea actea*). I remember collecting and sending Audrey a fruiting specimen, and much later she wrote a thank you note to which were attached the seeds of this threatened plant, such was her concern for the welfare of the species.

'Eagle's Complete Trees and Shrubs of New Zealand' was published by Te Papa Press in 2006 and the two-volume set brought together Audrey's botanical artworks from her best-selling 1975 and 1983 publications. This was followed by a 6-month long exhibition of her botanical paintings at the Otago Museum.

In the lead up to this magnum opus it became apparent that there was insufficient space in the books for all the wealth of comments and observations that Audrey had amassed since she started gathering such information in 1967. The BSO wanted to ensure this valuable information was made accessible to the wider botanical community and worked with Audrey to publish a Supplement to coincide with the publication of her artistic volumes. Funds for this project were generously provided by the Wellington and Nelson Botanical Societies and the Waikato and Dunedin Branches of the Royal Forest and Bird Protection Society, all organisations that Audrey had a long association with.

Profits from this venture, donated by Audrey, were the basis of a self-perpetuating fund established by the BSO as the 'Audrey Eagle Publishing Fund'. The aim of the Fund is to promote the dissemination of New Zealand botanical literature by contributing to publication costs.

Audrey published a second supplement in 2014, (digital only) that contains the specific locality of where, by whom and when, the specimens illustrated in 'Eagle's Complete Trees and Shrubs of New Zealand', were collected.

In 2004 the BSO held the first Audrey Eagle Botanical Drawing Competition. Audrey, along with Allison Knight, judged the competition and Audrey awarded prizes during the AGM that year. The competition bearing her name continues to be a regular and popular BSO fixture to this day.

Audrey participated in a trip to the Chatham Islands in 2007, led by Peter Johnson (Fig. 2). This trip was notable for the number of BSO members on it and another prominent New Zealand botanical artist, J. Bruce Irwin. Audrey enjoyed herself immensely in the company of fellow botanists and was often seen comparing notes with Bruce.

Figure 2. Audrey on the Chatham Islands in 2007. Photo David Lyttle.

In 2008 Audrey became the Patron of the BSO. She continued to attend Society meetings, the occasional field trip, wrote articles for the newsletter, promoted the drawing competition and provided sketches that graced the cover of our newsletter.

Over the years Audrey received numerous honours and awards for her work. The BSO nominated Audrey for the 2009 Allan Mere Award. This was a very popular nomination supported by several Botanical Societies and other botanical colleagues. We had the great pleasure of seeing the Allan Mere presented to Audrey at the monthly Botanical Society of Otago meeting on 14th October 2009. Perhaps the most fitting award recognising her contribution to New Zealand botanical science was the honorary Doctor of Science degree awarded to her by the University of Otago on 4 May 2013 (Fig. 3).

Figure 3. Audrey with Alan Mark and Kath Dickinson prior to her DSc graduation 2013. Photo David Lyttle.

With advancing years, we saw less and less of Audrey but some members, especially Allison Knight, kept in contact and updated her on Botanical Society matters. Audrey Eagle contributed so much to the BSO and we always felt honoured to have someone of such botanical standing in our midst. Her presence, kindness, and huge generosity are greatly missed but her name and memory live on in so many of our Society's activities.

Honours and Awards

In 1976 Audrey received a **Nature Conservation Council citation**.

She was winner of two **Watties Book of the Year Awards** (now known as the Ockham New Zealand Book Awards); third prize in 1976 for 'Trees and Shrubs of New Zealand' and second prize in 1983 for 'Trees and Shrubs of New Zealand second series'.

In 1985 Audrey won the **Loder Cup** and in the same year became a **Distinguished Life Member of the Royal Forest and Bird Protection Society.**

Audrey was appointed a **Companion of the New Zealand Order of Merit** in the 2001 Queen's Birthday Honours, for services to botanical art.

In 2007, the two-volume edition of Eagles Complete Trees and Shrubs of New Zealand earned her the **Montana Medal for Non-Fiction** and the **Booksellers Choice Award**. Audrey was a recipient of the **Allan Mere Award** by the New Zealand Botanical Society, in 2009. The University of Otago conferred an **honorary Doctor of Science degree** on her in 2013.

In 2017 Audrey was selected as one of the **Royal Society Te Aparangi's "150 women in 150 words"** celebrating the contributions of women to knowledge in New Zealand.

Acknowledgement

Many thanks to David Lyttle for sharing his memories of Audrey and for helpful suggestions and comments on this tribute.

PLANT OF THE MONTH – *HIBISCUS DIVERSIFOLIUS* SUBSP. *DIVERSIFOLIUS*

Bill Campbell (billcampbell@xtra.co.nz)

The plant of the month for February is *Hibiscus diversifolius* subsp. *diversifolius,* sometimes referred to as native hibiscus, swamp hibiscus or prickly hibiscus. The Maori name is puarangi. This species is found only in the upper part of the North Island, from about Reef Point in the west and Doubtless Bay in the east northwards. Outside of New Zealand it is found in tropical Africa, Australia, New Guinea, the Philippines, many Pacific islands and Central and North America. New Zealand plants match subspecies diversifolius.

Hibiscus diversifolius subsp. *diversifolius* is a plant of coastal wetlands and streamsides, often growing with raupo (*Typha orientalis*) at the back of dune slacks or close to brackish streams. Very occasionally it may be encountered in gumland scrub or on ultramafic rubble.

The plant can have a variety of growth habits and may be erect, semi-erect or prostrate. It is usually multi-branched and can form dense thickets or sprawling tangles at sites where it occurs naturally. The species is very attractive when in flower, with its many large white or yellowish dark centred flowers. It is sometimes grown as a garden plant on account of the attractive large flowers and foliage.

Hibiscus diversifolius subsp. *diversifolius*: (left) close up of flower, Tauroa Point, Ahipara, 21 December 2007; (centre) foliage and stems, showing prickly stems and leaf petioles, Waitahora Lagoon, Te Paki, 7 December 2018; (right) growth habit, Waitahora Lagoon, Te Paki, 7 December 2018. Photos: Bill Campbell.

The species is readily distinguished from the other two large flowered native hibiscus species by the presence of prickles on the stems and leaf petioles. It is also a much larger plant in all respects.

Hibiscus diversifolius subsp. *diversifolius* is indigenous to New Zealand (non-endemic) and has a current conservation status of Threatened – Nationally Critical. The biggest threat to the species in New Zealand is browsing animals, particularly feral cattle and horses. These find the plants particularly palatable and they devour them whenever they can reach them. Some populations are known to have been wiped out through the clearance of land for coastal housing development.

The genus *Hibiscus* is derived from a name of very ancient origin used by the Roman poet Virgil for the marsh mallow plant. The species epithet comes from the Latin "diversus" and "folium" and refers to the differing or various shaped leaves.

You can view the NZPCN website factsheet for *Hibiscus diversifolius* subsp. *diversifolius* at https://www.nzpcn.org.nz/flora/species/hibiscus-diversifolius-subsp-diversifolius/

Botanical news from the Wairarapa – January 2023

Trevor Thompson (tthompson@qeii.org.nz), Regional Representative – Wellington-Wairarapa, QEII National Trust

Time for another brief update on botanical work, hopefully of interest, being undertaken by myself with some very welcome helpers in the last year.

There are a number of ongoing projects involving rare plants, both nationally rare and endangered and regionally rare, along with major ongoing ecological weed control, so important to maintaining the vestiges of native forest remnants and other habitats. We have been targeting all the usual bad guys along with wilding pines. This work has been coupled with many enhancement plantings, both to re-establish native cover and to reintroduce species formerly present.

Below is a very brief summary of the rare plant works undertaken during the last 12 months.

Rare local species

Coprosma wallii, Coprosma obconica—A new population of these two species set up some time ago in the eastern hill country in a legally protected area was released and given a rank grass suppressing carpet of sheep dags. Sheep dags are a zero value product farmers are only too happy to give away, with an added bonus of slow release fertiliser and some deterrence to rabbits and deer graze.

Coprosma wallii.

Olearia gardneri is also planted here in good numbers and is doing well. A companion planting of *Sophora microphylla*, which is a common plant growing in association with *Olearia gardneri*, will eventually shade out the exotic grass.

Tupeia antarctica (white fruited mistletoe)—This species is found predominantly on large old black maire in the Wairarapa, with a few strongholds holding most plants. All my efforts working for many years (18) have failed to establish new plants on black maire. However, other unrelated species are now the preferred host tree for successful establishment. Approximately five years ago I was contracted to work with *Tupeia* in an area of forest to bolster numbers after the old black maire were dying one by one with no evident recruitment.

Between possums and a rapid decline in living host trees with heathy *Tupeia* present I was able to garner just enough seed to set up new successful recruitment, at much lower altitude and with better accessibility for management, to equal the original source population of 18. The original population is now critically low at approximately six plants, mostly in poor shape.

Recently, I came across a number of others that were planted and are now able to be seen, so the trend of decline has been reversed by changing host trees. Many trips climbing steep hill country and scaling some difficult trees to harvest fruit will no longer be necessary. Preserving the genetics of the particular former stronghold can be said to have been achieved and I expect the first fruit to be produced this year perhaps.

Another area near Wainuiomata has also seen some successful plantings now established and further plantings done this year.

Wild existing populations, generally widely scattered and small in number, continue to decline due to old and dying host trees, with little or no recruitment. Thankfully, the insurance populations planted are likely to now contain the vast majority of plants in the Wairarapa, being approximately 100 plus. Fensham Reserve now has a population of plants, recently found after I carried out planting there about six years ago. Other new areas have been planted but can't be counted until they are seen to be properly established.

Alepis flavida—Likely the rarest plant in the lower North Island, with a steadily declining source population of approximately five plants in a remote part of eastern Wairarapa. While I have set up two limited populations, plus one significant managed new population at my home property, climatic conditions have been unfavourable with little viable fruit produced for a number of years due to weather extremes. Flowering spikes are now in evidence and the most recent new plant has flower spikes developing after four years. Incidentally, the well established *Peraxilla tetrapetala* failed to flower at all this year . I have numerous host trees planted and ready, so am hoping for a bumper crop of *Alepis* fruit this year.

Alepis flavida juvenile flower buds, 31 December 2022.

Nationally rare plants

Olearia gardneri—As mentioned earlier in locally rare plants, while there were 140 plants nationwide when I first found a new population of hundreds back in 2012, there have been a further five populations set up now. One new population was added last year in another legally protected area (as are all of them). Numbers of *Olearia gardneri* are now likely to be 900 plus, with more to come. A big thank you to Norfolk Road Nursery and Otari botanical gardens for growing plants. Fifty plants were also supplied via Norfolk Road Nursery to Hawke's Bay to re-establish a former presence of *Olearia gardneri* in the bay.

Brachyglottis pentacopa (Threatened – Nationally Critical)—This small tree, found only on one significant feature on the Mataikona coast, has suffered serious goat graze and decline. The deer fenced area put in place last year was planted out with cutting grown plants. A recent check revealed six plants surviving, with three of these looking good. Otari botanical gardens and Norfolk Road Nursery are both growing significant numbers of plants for further plantings and some will go back into the deer fenced enclosure. More regular checks on plants will be needed and seaweed mulch will be tried around the plants for grass suppression and slow release fertiliser, capitalising on shaded areas under kanuka. More seed will be collected this year also for additional plants to be grown. Persistence will pay off.

Brachyglottis pentacopa planting check, 29 December 2022.

I am still keen to see a new population set up as insurance, given the vulnerability of the current population and the risk of a major fire wiping it out this population in one hit. I am working with a local hapu representative on this project as well.

Climate change consequences on native plants?

Extremes of climate may or may not be responsible for observed losses of individual tree species, both exotic and native. Some plant losses are unexplained, particularly the deaths of *Tupeia antarctica*.

New projects in the pipeline for this year

Establishing a meaningful population of *Pittosporum obcordatum* (Threatened – Nationally Vulnerable) at a legally protected site.

Establishing two new populations of local *Corokia cotoneaster*. While not a nationally rare plant, 200 plus seed and cutting grown plants, sourced from the one known naturally occurring population in eastern hill country, will be ready for planting this year into at least two new populations. While this plant is commonly planted in the Wairarapa, the source is genetic material from outside our region .

NZPCN Council Member Profile – Marley Ford

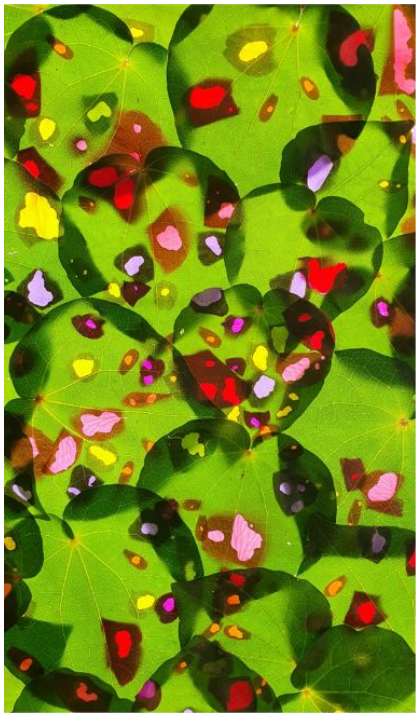
Marley Ford (mfecobotany@gmail.com)

Marley pondering Pannariaceae taxonomy in the coastal forests of Maunganui Bluff, Northland.

Kia ora! I'm an ecologist, botanist, mycologist, lichenologist and full time nature nerd committed to exploring Aotearoa and its vast diversity. I grew up in the wild western Far North, the land instilled in me a love for wild places. Once I realised there were rare plants on my local mountains and coast I was hooked. My interests lie in the underappreciated flora and novel landscapes, I feel at home in an Elvin cloud forest dripping in bryophytes and lichens. I recently completed a MSC in mycorrhizal communities of ramarama (*Lophomyrtus bullata*) with previous studies in ecology and lichenology. I'm a curator of and an avid contributor to iNaturalist NZ, a council member of the Auckland Botanical Society as well as a persistent article contributor, and a curator of NZPCN's lichen content. I am now working as a contractor for a range of organisations focused on ecology and botany.

Botanically themed greeting cards available

Kate McAlpine (DOC weed ecologist) makes art from native plant material:

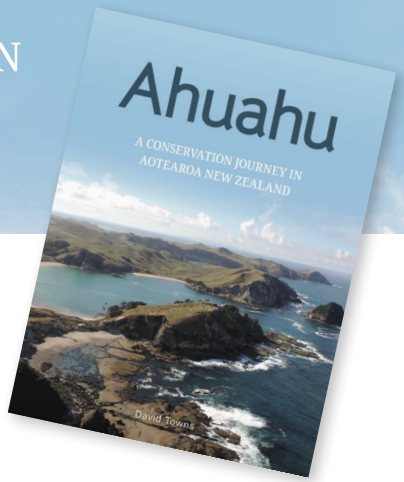


Kate has turned eleven of her native plant designs into greeting cards. If you'd like to order some, go to https://plantart.nz to see designs and prices or email katemcalpine@xtra.co.nz.

$0.40 from every card sold goes to the NZ Plant Conservation Network.

Ahuahu

A CONSERVATION JOURNEY IN AOTEAROA NEW ZEALAND



Ahuahu
A conservation journey in Aotearoa New Zealand

David Towns

Aotearoa New Zealand is renowned among biologists worldwide for spectacular ecological restoration work over the last 50 years, through advances in pest eradication and native species translocation. This book documents the development of these world-leading technologies. It uses examples from throughout the country, but has a special focus on one island group – the Mercury Islands off Coromandel, of which Ahuahu (Great Mercury Island) is the largest.

The story is told through the eyes of pioneer conservation biologist David Towns, who was there from the start. It is a story of triumphs and setbacks, of opportunity and innovation, of teamwork and emerging bicultural collaboration. Today, all seven islands of the Mercury group are free of mammalian pests, providing a haven to native plants and animals. *Ahuahu* is the story of how that was made possible.

Features

- Focuses on the biological and social aspects of restoration: shows how environmental problems can be resolved and demonstrates that people can make a positive difference.
- Hundreds of photos (of plants, animals, people, landscapes) including satellite images; 7 maps; 33 line drawings.
- Aimed at interested lay readers and those professionally involved in conservation projects, and at tertiary level students.

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UPCOMING EVENTS

If you have events or news that you would like publicised via this newsletter please email the Network (info@nzpcn.org.nz), prior to the published copy deadline, with details of meetings, field trips or other events taking place during the following month or later. The deadline for copy for the following month's *Trilepidea* is at the top of the front page of each issue.

If you intend to participate in one of the advertised botanical society meetings or field trips please check with the relevant society beforehand to confirm that the published details still stand.

Rotorua Botanical Society

Field Trip: Saturday 18 March to Kaharoa for a gully crawl. **Meet:** Rotorua carpark at 8.15am or at the end of Kapukapu Road (shelter) at 9.00am. **Grade:** Medium-hard.	**Leader:** Paul Robbins, email pjrobbins87@gmail.com, ph. 022 506 3299.
Field Trip: Saturday 25 March to Mt. Tarawera (Combined with Forest and Bird). **Meet:** DOC Ashpit Road campground , Lake Rerewhakaaitu at 7.45am. **Grade:** Medium-hard.	**Leader:** Paul Cashmore, email pcashmore@doc.govt.nz, ph. 07 349 7432 (wk) or 027 205 1922.

Wellington Botanical Society

Field Trip: Saturday 4 March to Korokoro Stream**. Meet:** Cornish Street carpark near the estuary at 9.30am.	**Contact:** Frances Forsyth, email francesmjforsyth@gmail.com, ph. 021 072 5210 or Kate Jordan, email kateljordan@gmail.com, ph. 027 899 0018.
Meeting: Monday 20 March at 7.30pm. **Speaker**: Matt McGlone, Research Associate at Manaaki Whenua-Landcare Research. **Topic**: Why monitoring is hard and why we must do better: the case of the NZ Biodiversity Assessment Framework.	**Venue**: Victoria University, Wellington, Lecture Theatre M101, ground floor Murphy Building, west side of Kelburn Parade.

Nelson Botanical Society

Field Trip/Meeting: Please refer to the website: https://www.nelsonbotanicalsociety.org/trips-meetings for details.

Canterbury Botanical Society

Field Trip: Saturday 4 March – Details to be advised.	
Meeting: Monday 6 March at 7.30pm. **Speaker**: Robb Eastman-Densem, post-graduate student at University of Canterbury. **Topic**: It's complicated: A brief overview of the taxonomy of the New Zealand *Brachyglottis rotundifolia* species complex (Senecioneae).	**Venue**: St Albans Community Centre,1049 Colombo Street, Christchurch.

Botanical Society of Otago

Meeting: Wednesday 8 March at 5.20pm. **Speaker:** Teresa Konlechner. **Topic:** Sand dunes of the Otago Coast.	**Venue:** Main seminar room, Manaaki Whenua Landcare Research, 764 Cumberland Street, Dunedin
Field Trip: Saturday 25 March to Rock and Pillar Range. **Meet:** Botany Department carpark (464 Great King Street North) at 8.00am.	**Contact:** John Barkla**,** email mjbarkla@xtra.co.nz, ph. 027 326 7917.