

Sunday	
All day	Workshops
Evening	Welcome Function
Monday	
Morning	Keynote—Hon Eugenie Sage 1— <i>Conservation genetics, genomics and ecology</i>
Afternoon	2a— <i>The contribution of citizen science</i> 2b— <i>Conservation in response to environmental change</i> 3a—Aligning western sciences with Mātauranga Māori for better conservation outcomes 3b—Celebrating 250 years of advances in botanical science & conservation since Banks & Solander
Evening	Public lecture Dinner on your own
Tuesday	
Morning	Keynote—Melanie Mark-Shadboldt
	Concurrent
	4a—Decoding the green: combating plant blindness 4b—Ecological restoration 4c—Recovery of threatened plants: success stories?
	5—Recent progress in taxonomy and phylogeny of Australasian plants, I
Afternoon	6—Recovery of threatened plants: success stories? 8—Poster session NZPCN AGM Nancy T. Burbidge Medal presentation and address—Barry Conn
	7—Recent progress in taxonomy and phylogeny of Australasian plants, II
	ASBS AGM
Evening	Book launch, cash bar & canapes Conference dinner
Wednesday	
All day	Field trips
Evening	ECR—Informal social networking evening, drinks and dinner (RSVP required)
Thursday	
Morning	Keynote—Kevin Thiele
	Concurrent
	9—Hybridization: an ongoing dilemma for conservation 11—What is the fossil evidence for extinction, adaptation and diversification in the assembly of the floras of the SW Pacific?
	10—Australasian biogeography The Decadal Plan and the future of taxonomy in Australasia 12—Phylogenomics
Afternoon	Wrap up—student awards; final announcements Australasian Virtual Herbarium (AVH) informal meeting (all welcome)
Evening	Public panel discussion

CONFERENCE PROGRAMME

Our conference sessions are:

Monday

- Conservation genetics, genomics and ecology (Session 1)
- The contribution of citizen science (Session 2a)
- Conservation in response to environmental change (Session 2b)
- Aligning western science with Mātauranga Māori for better conservation outcomes (Session 3a)
- Celebrating 250 years of advances in botanical science & conservation since Banks & Solander (Session 3b)

Tuesday

- Decoding the green: Combating plant blindness (Session 4a)
- Ecological restoration (Session 4b)
- Recovery of threatened plants: success stories? (Session 4c & 6)
- Recent progress in taxonomy and phylogeny of Australasian plants (Session 5 & 7)
- Poster session (Session 8)

Thursday

- Hybridization: an ongoing dilemma for conservation (Session 9)
- Australasian Biogeography (Session 10a)
- The Decadal Plan and the future of taxonomy in Australasia (Session 10b)
- What is the fossil evidence for extinction, adaptation and diversification in the assembly of the floras of the SW Pacific? (Session 11)
- Phylogenomics (Session 12)

The Silent Auction

On Monday and Tuesday 25-26 November the Silent Auction will be running in OCEANIA! The silent auction is a fundraiser that the NZPCN has carried out successfully at our conferences since 2013. The auction will be silent, allowing some level of mystery as to whom you may be bidding against when you wish to win a must-have item. It's a fun and exciting way to support your societies!

The funds raised from the auction will be split 50/50 between our two societies and used to bolster the allocated research funds of each society. The NZPCN will split its share of the funds raised between the 'David Given Scholarship' and the 'John Sawyer Plant Conservation Fund'. The ASBS will use the funds raised to bolster its Scientific Research Awards, which currently include the 'Hansjörg Eichler Scientific Research Fund' and the 'Marlies Eichler Postdoctoral Fellowship'.

We would like to thank the people and organisations that donated items to our silent auction this year. List?

Please contact Matt Ward with any queries (mattdavidward@gmail.com), and happy bidding!

Programme

*Note: Student presenters are indicated with an * in the programme

Sunday 24 November – Workshops and Welcome Reception

All day public event - Wikipedia Edit-a-thon—endangered plant species

On Sunday 24 November, we will host a free public Wikipedia edit-a-thon on endangered plant species in Australasia in HINATORE from 9 am to 5 pm (<https://www.facebook.com/events/441187383159387/>). The leaders are experienced 'wikimedians' Mike Dickison & Siobhan Leachman. This is a free event, but registration is required: <https://www.eventbrite.co.nz/e/wikipedia-edit-a-thon-endangered-plant-species-registration-73770981993>

All day workshops - <https://systematics.ourplants.org/programme/workshops/>

Workshops 2 & 3: Botanising with iNaturalist - Wellington Botanic Garden Treehouse

Workshops 4 & 5: Plant identification – Otari Native Botanic Garden

Workshop 6: Basics of Illustration – Venue TBD

Workshop 7: Science Communication Skills for Botanists – GIANT SQUID, 169 Tory Street

Evening - Welcome Reception and after-hours viewing of Te Taiao / Nature exhibition

The Welcome Reception starts at 5pm until 8pm on Sunday 24 November in ICON. Around 6:30, the Te Taiao / Nature exhibition will be open to us for a private after-hours viewing until 8 pm. All drinks and food must remain in ICON and cannot be taken into the exhibition. Dinner will be on your own; see below under “Eating Out” for nearby restaurant suggestions.

Monday 25 November – Day 1 of talks

Morning - From 8:00 am – Registration

8:30 am – Mihi Whakatau

8:45 am – Welcome by ASBS and NZPCN Presidents

9:05 am – Opening keynote speaker: Eugenie Sage – **TITLE TBA**

Morning – Session 1: Conservation genetics, genomics and ecology.

- Dan Blanchon - Overlooked but not forgotten: Investigating lichen diversity within the Auckland Region
- Sue Gardiner - Vulnerable Australian rhododendrons – one or two species?
- Chrissen Gemmill - A case for taxonomy before conservation: New Caledonian Lauraceae and *Pittosporum*
- Juliet Wege - Within striking distance — a digital Flora to aid conservation of Australian triggerplants and allies (Stylidiaceae)
- *Zoe Lunniss - *Tupeia antarctica*: a precious parasite
- Peter Heenan - Taxonomic novelties, restoration opportunities and conservation of limestone ecosystems in eastern South Island
- David Orlovich - Using genomics tools to understand beech forests and their fungi

Afternoon – Session 2a: The contribution of citizen science & Session 2b: Conservation in response to environmental change.

- *Amelia-Grace Boxshall – FungiSight: Using social media to assist phylogenetic and chemical investigations of Australian yellow-staining *Agaricus*
- Jon Sullivan – Crowd-sourcing the discovery of new plant naturalisations in Canterbury using iNaturalist NZ
- Darren Crayn - Securing the future of Australia’s climate-threatened endemic tropical montane flora – an ex-situ conservation approach based on multidisciplinary science and multi-institutional partnerships.
- William Lee - Conservation and the ecological context for speciation in New Zealand
- Kate Roud - “Some Don’t Like It Hot” – Safeguarding the New Zealand Collection at Melbourne Gardens, Royal Botanic Gardens Victoria
- *Cara-Lisa Schloots - Variability in water regimes and vegetation within an alpine wetland complex in Central Otago, New Zealand
- *Taylor Davies-Colley - Investigating the decline of the threatened bladderwort *Utricularia australis* in New Zealand, and genetic evidence for a new Australian species *Utricularia* sp. ‘Choc-a-bloc’

Afternoon – Session 3a: Aligning western sciences with Mātauranga Māori for better conservation outcomes & Session 3b: Celebrating 250 years of advances in botanical science & conservation since Banks & Solander.

- Jessica Beever - Te Hokingamai ō Kaikōmako Manawatāwhi – The Restoration of *Pennantia baylisiana*
- Monica Gerth - Mātauranga guided biodiscovery of anti-*Phytophthora* compounds from New Zealand native plants
- Graeme Atkins - The importance of community education and engagement in the Raukumara Ranges
- *Helen Kennedy - Revising *Melichrus*; A deep dive into the past, present and future of the urn heaths.

- *Tim Collins - From a shipwreck to shipshape? Systematic botany of paper daisies in Australia from Banks and Solander to the present.
- Ewen Cameron - The vascular plants recorded and collected in New Zealand by Banks and Solander, 1769-1770.

Evening - Friends of Te Papa public lecture

We are delighted to be able to co-host this public lecture, together with the Friends of Te Papa and the Swedish Embassy of New Zealand, on Monday 25 November at 6:30 pm in SOUNDINGS THEATRE (<https://www.facebook.com/events/903852529980281/>). Dr Sverker Sorlin, who is Professor of Environmental History at the KTH Royal Institute of Technology, Stockholm, will present his talk on *Solander, Sparrman and the Anthropocene: Saving "the Environment" on a Planet made Unstable by Humans*. This is a paid event, and conference attendees get a discount! You can pay for a ticket on the day at the venue, or book your ticket in advance here: <https://www.friendsoftepapa.org.nz/event/solander-sparrman-and-the-anthropocene/>

Tuesday 26 November – Day 2 of talks

Morning - From 8:00 am – Registration

Morning - 8:50 – Opening keynote speaker: Melanie Mark-Shadboldt – **TITLE TBA**

Morning – Session 4a: Decoding the green: Combating plant blindness & Session 4b: Ecological Restoration & Session 4c Recovery of threatened plants: success stories?

Sverker Sorlin - Conservation without Nature – Environmental Governance in a World of Loss

Celia Wade-Brown – Biophilic Cities Network

Margaret Hanes - The Taste of Life: Informal science education made delicious

Kelly Shepherd – Forensic botany: an under-utilised tool for crime scene investigation due to plant blindness

Robyn Simcock - Healing the Tui Mine site, Te Aroha Maunga: terrestrial rehabilitation methods co-developed with matauranga maori principles challenge and enhance conventional rehabilitation methods

Melissa Hutchison - Planting a billion trees: the good, the bad, and the Hinewai of ecological restoration

Ashley Field - UneXtinct

Afternoon - Session 5: Recent progress in taxonomy and phylogeny of Australasian plants I

- *Duncan Nicol - The spatial patterns in a diverse endemic lineage
- *Patricio Saldivia - Systematics of the *Celmisia* group (Asteraceae, Astereae) with an emphasis on *Celmisia* subgenus *Lignosae*
- Rachael Fowler - Phylogenetic exploration of Emu bush (*Eremophila*, Scrophulariaceae), with a focus on the *Eremophila glabra* complex using ddRAD
- Andrew Thornhill - A dated molecular perspective of eucalypt evolution
- *Harvey Orel - Phylogeny and phylogeography of flat-peas (*Platylobium*, Fabaceae) in south-eastern Australia
- *Anne Thomas - Resolving the phylogeny of the New Zealand *Veronica* (Plantaginaceae) species radiation
- Kerry Ford - Genetic and morphological variation in *Trithuria inconspicua* (Hydatellaceae): a new subspecies and a hypothesis of apomixis arising from a predominantly selfing lineage.

Afternoon – Session 6: Recovery of threatened plants: success stories?

- Carlos Lehnebach - Exploring mycorrhizal fungal diversity across sympatric forest orchids in New Zealand
- Debra Wotton - Once in a lifetime: why is recruitment so rare in dryland floodplains?
- Fiona Thomson - Preserving our native Myrtaceae from Myrtle rust: A germplasm approach
- Karin van der Walt - Creating ex situ collections through biotechnology: Five case studies of threatened species conservation in New Zealand
- Philippa Crisp - What is the regional threat status of Wellington's indigenous plants?
- Paul Champion - *Juncus holoschoenus* var. *holoschoenus* and other septate rushes in New Zealand
- Sarah Beadel - Conservation and ecology of *Juncus holoschoenus* var. *holoschoenus* and other threatened plant species at Rangitaiki Wetland, Central North Island

Afternoon – Session 7: Recent progress in taxonomy and phylogeny of Australasian plants II

- Yumiko Baba - Cheeseman's hinau revisited
- *Nicholas Weigner - Promiscuous pitcher plants. A phylogenomic investigation of *Nepenthes* systematics and introgression.
- Juergen Kellerman - Transoceanic range expansion of *Ochetophila trinervis* (Rhamnaceae, tribe Colletieae) by avian dispersal
- Bill Barker - A new view of the annual eyebrights (*Euphrasia*: Orobanchaceae) in New Zealand
- Heidi Meudt - Taxonomic revision of native New Zealand forget-me-nots (*Myosotis*, Boraginaceae): An update
- Matt Buys - How alignments and gaps can influence tree topology

Afternoon – Session 8: Poster session

- *Jennifer Alderton-Moss - Conservation efforts to protect New Zealand native orchid species
- *Francis Nge - Biogeography of *Pomaderris* (Rhamnaceae) across the ditch: multiple dispersal events from Australia to New Zealand (poster presentation)
- *Raees Khan - Game of cones: evolutionary trends and taxonomic significance of female cones in Podocarpaceae
- *Sophie Newmarch - Origins of polyploidy and diversification in *Libertia* (Iridaceae)
- *Seoljong Kim - A population-genomic and taxonomic study of *Eucalyptus argophloia* and *E. bosistoana*
- Alexander Schmidt-Lebuhn - The unexpected taxonomic outcomes of assembling a biocontrol test list
- Lara Shepherd - Molecular support for the recognition of *Schoenus caespitans* Petrie
- Peter Beveridge - Taxonomic revision of the leafy liverworts *Cheilolejeunea* in New Zealand
- Todd McLay - hyRAD for population genomics and identification of cryptic species

Afternoon – NZPCN AGM and ASBS AGM

Afternoon – Nancy T. Burbidge Medal Presentation and Address (all welcome) – Barry Conn – Is Paradise Lost? Or not yet discovered?

Evening – Book launch: *Seeds of New Zealand Monocotyledons* – by Colin Webb, published by Manuka Press (all welcome)

You are cordially invited to attend the official launch of the publication *Seeds of New Zealand Monocotyledons* at 6:15pm on Tuesday 26 November in OCEANIA. The book launch will be opened by Manaaki Whenua - Landcare Research and Manuka Press, followed by a cash bar and canapés. This is a great opportunity for pre-dinner socialising and networking prior to the conference dinner!

This second volume of the "Seed Atlas" provides more than 700 illustrations, representing all the seed types in the monocotyledon plant group, as well as descriptions and keys to aid identification. This follows on from the first volume that covered the gymnosperms and dicotyledons, released in 2001. See www.manukapress.co.nz for ordering details.

Evening – Conference dinner & kapa haka (ticket required)

The conference dinner will be held on Te Papa's RONGOMARAEROA (TE MARAE), with a programme starting at 7:15 pm. Rongomaraeroa is an authentic, contemporary, and inclusive marae (communal meeting place) on Level 4, with stunning views over Wellington's harbour. The dinner will include a choice of two starters, a choice of two mains (as well as catering to dietary requests), dessert and tea/coffee, and table wine, and there will be a cash bar. The programme on the night will include a 20 minute kapa haka performance by members of the Ngā Karere Māori Club in full regalia, who will perform a variety of songs.

For those with tickets to the conference dinner who are also attending the book launch, we will leave OCEANIA together at 7:10 pm to walk up to RONGOMARAEROA. For those coming to the conference dinner who are not attending the book launch, please make sure you are at the museum's main entrance by 7:10 pm.

Wednesday 27 November – Field trips

All day - <https://systematics.ourplants.org/programme/field-trips/>

Evening - Informal social networking event – Otherwise dinner on your own

All early career researchers, students, young (and young-at heart!) attendees are welcome to come to an informal social networking evening involving sampling some of Wellington's beers and eating dinner together. Our plan is the following:

- 6:00 pm – meet at Panhead (1 Tory St) for a pre-dinner drink
- 6:45 pm – leave Panhead and head to Mac's Brewery (4 Taranaki St) for 7:00 pm dinner
- 8:15 pm – after dinner drink at venue TBC.

Attendees are responsible for their own drink and food costs incurred. Please RSVP by 26th October by contacting Todd McLay Todd.Mclay@csiro.au to register your interest. The above itinerary may be adjusted depending on numbers. We will endeavour to include everyone who wants to join in, even if you missed the RSVP date, but we may have to cap the numbers by 'first come, first served'.

Thursday 28 November – Day 3 of talks

Morning - From 8:00 am – Registration

Morning – Opening keynote speaker: Kevin Thiele – Breaking through the barriers – taxonomy and systematics in the Anthropocene

Morning - Session 9: Hybridization: an ongoing dilemma for conservation

- *Francis Nge - Hybridisation and deep reticulate evolution of an Australian plant genus – *Adenanthos* (Proteaceae)
- *Chapa Manawaduge - Taxonomy, genetics and conservation of threatened native olives (*Notelaea* spp.) in Australia
- Lars Nauheimer - Insights into the reticulate evolution of the sun orchids (*Thelymitra*, Orchidaceae): resolving parental lineages using target capture and haplotype phasing
- Peter Lockhart - Hybridization and diversity of New Zealand alpine *Ranunculus*

Morning - Session 10a: Australasian Biogeography & Session 10b: The Decadal Plan and the future of taxonomy in Australasia

- Peter Jobson - The biogeography of central Australian flora
- Rob Smissen - Was harakeke introduced to Norfolk Island by Polynesians?
- *Lalita Simpson - Spatio-temporal evolution of Asian and Australasian *Bulbophyllum* (Orchidaceae)
- *Luke Liddell - Whole genome duplication in *Veronica* and *Coprosma*: support for a several-fold increase in biome-shifting among high ploidy lineages
- KC Burns - Evolution in Isolation: The search for an island syndrome in plants
- Jennifer Tate - Species Aotearoa
- David Cantrill - Genomics for Australian Plants: an update on the GAP consortium project

Afternoon – Session 11: What is the fossil evidence for extinction, adaptation and diversification in the assembly of the floras of the SW Pacific?

- Herve Sauquet - Integrating fossil flowers in angiosperm macroevolutionary analyses
- Andrew Rozefelds - Palissy – absolutely incomprehensible or surprisingly interpretable: a new morphological model and phylogenetic insights
- Daphne Lee - Fossil flowers from the Foulden and Hindon Konservat-Lagerstätte deposits: insights into Miocene biodiversity, ecology and pollination in Zealandia
- John Conran - *Zealandia fructus*: angiosperm diaspores in the New Zealand fossil record and their implications for paleoecology
- *Matt Vanner - Cenozoic fossil wood: new evidence for diversification and extinction of forest trees in the New Zealand region
- *Kia Matley - Southeast Australian palaeofloras of the late Pleistocene, and their implications for glacial palaeoclimate reconstructions

Afternoon – Session 12: Phylogenomics

- *Patrick Fahey - The phylogeography of *Eucalyptus behriana* (Bull mallee): a story of many signals
- *Weixuan Ning - Phylogenomic analysis of New Zealand polyploid *Azorella* (Apiaceae)

- Todd McLay - Investigating polyploidy in Malvaceae using target sequence capture
- Alexander Schmidt-Lebuhn - A broadly sampled phylogenomic dataset resolves major clades of Australian Gnaphalieae (Asteraceae)
- Katharina Nargar - Evolution of Australia's terrestrial orchid diversity in space and time: phylogenomic insights from tribe Diurideae
- Richard Winkworth - Chloroplast genome evolution in New Zealand mycoheterotrophic Orchidaceae

Afternoon - Awards & Wrap up

Afternoon - Informal meeting regarding Australasian Virtual Herbarium (all invited – Darren Crayn leading)

Evening – Panel Discussion: The Politics of Collecting—from Banks and Solander to Today

A panel discussion not to be missed on Thursday 28 November at 6:30 pm in SOUNDINGS THEATRE!

<https://www.tepapa.govt.nz/visit/whats-on/events/panel-talk-politics-collecting-banks-and-solander-today>

During the Endeavour's first voyage to Aotearoa, Joseph Banks and Daniel Solander collected plant specimens – some of which are in Te Papa's collections.

This panel discussion will feature two of our members, Leon Perrie and Peter de Lange, who together with Priscilla Wehi, Hēmi Whaanga and Tom Roa, will discuss the changing motivations for collecting specimens for museums, botanic gardens and seed banks, from Banks & Solander to today. How do these practices contribute to current research and the pressing conservation issues we face? This event is part of Te Papa's *Tuia 250* programme, acknowledging 250 years since the first onshore meetings between Māori and Europeans.

Note: this is a paid event, and conference attendees get a discount! You can pay for a ticket on the day at the venue, or book your ticket in advance here: <https://www.tepapastore.co.nz/products/panel-talk-the-politics-of-collecting-from-banks-and-solander-to-today>

Dinner on your own

Saturday 30 November – Sunday 1 December - Botany for Botanical Artists

All day, two full days

Venue: Leonard Cockayne Centre at Otari Native Botanic Garden and Wilton's Bush Reserve (Otari)

Leader: Tanya Scharaschkin

Website: <https://systematics.ourplants.org/programme/botany-for-botanical-artists/>

Contact Eleanor Burton for more details: Eleanor.Burton@wcc.govt.nz