

APCC14

14th Australasian Plant
Conservation Conference

Toowoomba, Queensland

13-17 Oct 2024

From little things...

Conference Program



Australian Network for
Plant Conservation Inc

Sunday 13 October 2024

- 4:00 PM Early Registration @ Oaks Toowoomba Hotel
- 5:00 PM – **WELCOME RECEPTION @ Oaks Toowoomba Hotel**
- 7:00 PM Sponsored by **University of Queensland, Centre for Biodiversity and Conservation Science**
- Stand up drinks and canapes



Centre for Biodiversity and
Conservation Science

Monday 14 October 2024

VENUE Oaks Toowoomba Hotel

- 8:00 AM Registration @ Oaks Toowoomba Hotel
- 8:40 AM Welcome to Conference, Housekeeping
- 8:50 AM Welcome to Country
- 9:00 AM Welcome to Toowoomba Region
- 9:10 AM **OPENING ADDRESS – "Reflections on threatened plant conservation in Australia since the 1970s"**

- Prof Caroline Gross** – President, Australian Network for Plant Conservation
- Shannon Bauwens** – Bunya People's Aboriginal Corporation
- Geoffrey McDonald** – Toowoomba Regional Council Mayor
- Natalie Hick** – Company Manager, Southern Queensland Landscapes
- Prof Stephen Hopper** – University of Western Australia

Navigating Natural Disasters

CHAIR – Dr Caroline Gross

- 9:40 AM **PLENARY – [Un]natural disasters: impacts and responses for threatened plant species in protected Wet Tropics World Heritage rainforests**
- 10:05 AM *Healthy Resilient Country through Rightfire*
- 10:20 AM *Reviving endangered grassy balds in the Bunya Mountains*
- 10:35 AM **Questions**
- 10:45 AM **MORNING TEA**

Prof Darren Crayn – Australian Tropical Herbarium, James Cook University

Paul Dawson – Bunya People's Aboriginal Corporation

Jennifer Firn – Queensland University of Technology
Sponsored by **Bunya People's Aboriginal Corporation**



Break 10:45-11:15am



Monday 14 October 2024

Living on the Edge

CHAIR - Dr Kathryn Eyles

11:15 AM	PLENARY – A Path Forward for Cycad Conservation in Australia	Dr James Clugston - Western Sydney University
11:40 AM	The outcomes of several cycad translocations in Central Queensland	Alicia Wain - Queensland Herbarium
11:55 AM	<i>How are Australia's threatened and near threatened plants faring? What we know from the latest release of the Threatened Species Index</i>	Dr Sarah McGrath - The University of Queensland
12:10 PM	<i>Implementing the Common Assessment Method: Gold-standard threatened flora assessments for Queensland</i>	Teghan Collingwood - Queensland Herbarium and Biodiversity Science
12:25 PM	<i>Saving a pea: practical conservation horticulture techniques lead to a successful translocation of endangered Small Purple Pea Swainsona recta</i>	Tom North - Australian National Botanic Gardens
12:40 PM	<i>Three decades of monitoring the endangered daisy, Olearia flocktoniae - lessons from a pioneer species</i>	Prof Caroline Gross - University of New England
12:55 PM	<i>Back from the brink - the story of Recovering Goldilocks (Antrophyum austroqueenlandicum), a critically endangered rainforest fern</i>	Dr Jo Green - Tweed Landcare
1:10 PM	Questions	
1:20 PM	LUNCH	

Break 1:20-2:20pm

Living on the Edge

CHAIR - Dr David Coates

2:20 PM	PLENARY – Local communities helping rare plants	Dr Carol Booth - Stanthorpe Rare Wildflower Consortium
2:45 PM	<i>Conservation genetics - an indispensable tool providing multiple practical solutions across multiple scenarios</i>	Prof Maurizio Rossetto - Botanic Gardens of Sydney
3:00 PM	<i>Representative genetic diversity in quality conservation germplasm collections</i>	Dr Marlien van der Merwe - Botanic Gardens of Sydney
3:15 PM	<i>Using Landscape Genomics to uncover genetic patterns in Banksia marginata: Implications for Restoration Strategies</i>	Saphira Bloom-Quinn - Botanic Gardens of Sydney
3:30 PM	<i>Conservation genomics of Eucalyptus camaldulensis in the Hunter Catchment in support of genetically informed seed sourcing</i>	Dr Patrick Fahey - Queensland Herbarium and Biodiversity Science
3:45 PM	<i>Scattered trees influence on understorey flora in grassy eucalypt woodlands depending on tree size and species</i>	Corinne Schlienzauer - Queensland University of Technology
4:00 PM	Questions	
4:10 PM	AFTERNOON TEA	



Monday 14 October 2024

Break 4:10-4:40pm

Poster Session 4:40-5:50pm

Targeted ecological and genetic research for enhancing translocation of rare species in urban areas

Dr Joao Filipe - Edith Cowan University

Seeding Success: Community collaboration for plant conservation

Dr Kathryn Eyles - Australian Seed Bank Partnership

The value and challenges of small reserves in achieving conservation outcomes - the case of the Austral cornflower at Cambooya

Dr Kate Reardon-Smith - University of Southern Queensland

Restoring grasslands in Southwest Queensland

Christine Crafter - Southern Queensland Landscapes

Biocultural restoration of the Smooth Davidson's Plum (*Davidsonia johnsonii*): improving genetics and incorporating cultural knowledge to recover the Smooth Davidson's Plum

Di Brown - New South Wales Department of Climate Change, Energy, the Environment and Water

Pushing the Envelope: Does Range Size Limit Eucalypt Tolerance to Warming?

Bree Laugier - Hawkesbury Institute for the Environment, Western Sydney University

How old is that rainforest tree?

Denise Bond - Macadamia Conservation Trust

Austral Toadflax - Now you see me, now you don't!

Sandy Roberston - Faunabytes Ecological Services

In the aftermath of Myrtle Rust (*Austropuccinia psidii*), plant recruitment composition and density in wet sclerophyll forests

Jarrod Carlson - Queensland University of Technology

Genetic Tools for germplasm conservation: a case study of landrace black rice in Australia

Truong Duc Nguyen - Southern Cross University

An Eco-cultural Study of Culturally Significant Species on Wangkumara Country

Mirriya Ebswort - Western Sydney University
Bursary provided by the **Australian Flora Foundation**



Tuesday 15 October 2024

VENUE Oaks Toowoomba Hotel

8:00 AM Registration @ Oaks Toowoomba Hotel

8:30 AM Welcome and Housekeeping

Prof Caroline Gross - President, Australian Network for Plant Conservation

8:40 AM **KEYNOTE ADDRESS – Learning from Country**

Oliver Costello - Jagun Alliance



Tuesday 15 October 2024

Northern Connections

CHAIR - Paul Donatiu

9:10 AM	PLENARY – Saving Queensland's Rarest Plant Species	Paul Donatiu – ANPC/Queensland Threatened Plant Network, and Dr Jen Silcock – University of Queensland
9:35 AM	<i>Advancing threatened species prioritisation in Queensland</i>	Dr Jane McDonald – QLD Department of Environment, Science and Innovation, Threatened Species Operations
9:50 AM	<i>Gamilaraay People's Food Sovereignty</i>	Paul Spearim – Queensland Conservation Council
10:05 AM	<i>Translocating threatened species in Queensland: Macadamia case study</i>	Denise Bond – Macadamia Conservation Trust
10:20 AM	<i>The 'lawnification' of Australia's eastern grassy woodlands: the past, current and likely future spread of an invasive perennial grass, Bothriochloa pertusa</i>	Dr Gabrielle Lebbink – University of Queensland Bursary provided by the Australian Flora Foundation
10:35 AM	Questions	
10:45 AM	MORNING TEA	



Break 10:45-11:15am

Concurrent Workshops - Session 1 11:15am-1:05pm

WORKSHOP 1 – How to undertake threatened flora surveys	Paul Donatiu – Queensland Threatened Plant Network, and Dr Jen Silcock – University of Queensland
WORKSHOP 2 – Ex-situ conservation through meta collections	Bob Makinson – Australian Network for Plant Conservation, and Brandan Espe – James Cook University
WORKSHOP 3 – Emerging evidence needs for environmental markets and mandatory climate and nature reporting	Jayne Thorpe and Christine Crafter – Southern Queensland Landscapes
1:05 PM	LUNCH



Break 1:05-2:00pm

Northern Connections

CHAIR - Dr Jen Silcock

2:00 PM	PLENARY – The Tropical Indigenous Ethnobotany Centre: Saving ancient biocultural knowledge to help provide solutions for current issues	Gerry Turpin – Queensland Herbarium, Department of Environment, Science and Innovation
2:25 PM	<i>Can Australian universities moonlight as botanic gardens?</i>	Brandan Espe – James Cook University
2:40 PM	<i>Harnessing iNaturalist for effective plant conservation in Queensland: insights and applications from Citizen Science</i>	Michael Tervo
2:55 PM	<i>Communities in Action</i>	Jessica Lovegrove-Walsh – Friends of Parks Queensland Incorporated
3:10 PM	<i>Where boundaries boost biodiversity and build stronger communities</i>	Kym Sparshott – Leaf Tail Environmental, and Robert Prestipino – Vital Places Pty Ltd



Tuesday 15 October 2024

Living on the Edge

3:25 PM	<i>Living on the edge, threatened plants and OCBIL theory</i>	Prof Stephen Hopper - University of Western Australia
3:40 PM	<i>Molecular ecology of endemic shrubs in isolated OCBIL populations</i>	Peter Pemberton - University of New England Bursary provided by the Queensland Government
3:55 PM	Questions	
4:05 PM	AFTERNOON TEA	



Break 4:05-4:35pm

Fighting Feral Pathogens

CHAIR - Jayne Thorpe

4:35 PM	PLENARY – Holistic Health of Bunya Mountains' Rainforests: <i>Phytophthora Multivora</i> and the dynamics of cultural connections to place	Paul Dawson and Adrian Bauwens - Bunya Peoples' Aboriginal Corporation
5:00 PM	<i>Phytophthora in urban tree planting stock: are we managing the risk to the urban forest and natural ecosystems?</i>	Dr Matthew Laurence - Botanic Gardens of Sydney
5:15 PM	<i>Rehabilitation of the Jarrah Forest in Western Australia</i>	Dr Lucy Commander - Alcoa
5:30 PM	Questions	
5:40 PM	END OF DAY	

Conference Dinner - from 7:00pm

VENUE Queensland Museum Cobb and Co

Sponsored by **Alcoa**

7:30 PM	DINNER SPEAKER – “Making smart plant conservation decisions”	Prof Hugh Possingham - University of Queensland
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Wednesday 16 October 2024

VENUE Oaks Toowoomba Hotel

- 8:00 AM Registration @ Oaks Toowoomba Hotel
- 8:50 AM Welcome and Housekeeping

Fighting Feral Pathogens

CHAIR – Angela Verner

- 9:00 AM **PLENARY – Myrtle rust in Queensland: current and future challenges in managing the impacts**
Dr Geoff Pegg – Department of Agriculture & Fisheries, Queensland
- 9:25 AM *Slow learners – What has Myrtle Rust taught Australia about biosecurity and an effective response to invasive environmental diseases?*
Bob Makinson – Australian Network for Plant Conservation Inc.
- 9:40 AM *Historic land use couples with host density to affect myrtle rust impacts in a wet sclerophyll forest community in South-East Queensland*
Dr Kristy Stevenson – Queensland University of Technology
- 9:55 AM *In vitro biotechnologies for Myrtaceae on the brink: progress and possibilities*
Dr Alice Hayward – The University of Queensland
- 10:10 AM *Unknown futures: A little known species of rainforest Rhodamnia at major risk of extinction*
Prof Rod Fensham (on behalf of Isabella Paxton) – The University of Queensland
- 10:25 AM **Questions**
- 10:35 AM **MORNING TEA**

Break 10:35-11:05am

Navigating Natural Disasters

CHAIR – Dr Kate Reardon-Smith

- 11:05 AM **PLENARY – Assessing the impacts of mega fires on Australian plant species**
Prof Tony Auld – University of New South Wales
- 11:30 AM **SPECIAL GUEST SPEAKER – how to get more people interested in native plants and their conservation including more kids studying botany**
Costa Georgiadis
Sponsored by **Toowoomba Regional Council**
- 12:05 PM **Questions**
- 12:15 PM **LUNCH**



Break 12:15-1:15pm



Wednesday 16 October 2024

Concurrent Workshops - Session 2 1:15-3:15pm

WORKSHOP 1 – Harnessing the power of citizen science for plant conservation

Note that attendees of this session are encouraged to bring their laptops and any photographic devices they use for plant observations

Workshop Leads:

Michael Tervo, and
Paul Donatiu – Queensland Threatened Plant Network, and
Richie Southerton – Australian Network for Plant Conservation

WORKSHOP 2 – How to raise political and community awareness of threatened plants and the actions required to save them

Workshop Leads:

Jaana Dielenberg and **Prof Hugh Possingham** – Biodiversity Council



3:15 PM

AFTERNOON TEA

Break 3:15-3:45pm

Navigating Natural Disasters

CHAIR – Dr Kate Reardon-Smith

3:45 PM

Coexistence of rainforest and wet sclerophyll forest: lesson from the 2019 fires

Prof Rod Fensham – The University of Queensland/Queensland Herbarium

4:00 PM

Wetland wildfire: Post-wildfire inundation is critical to maintaining a water-couch (*Paspalum distichum*) marsh wetland community

Dr David Mackay – University of New England

4:15 PM

Questions

4:25 PM

Conference wrap up; where to from here; next conference; housekeeping

Dr Caroline Gross – President, Australian Network for Plant Conservation

5:00 PM

CLOSE OF CONFERENCE

Thursday 17 October 2024

Field Trips

FIELD TRIP 1 – Wildflowers of the Granite Belt with Stanthorpe Rare Wildflower Consortium

FIELD TRIP 2 – Bunya Mountains Experience with Bunya Peoples' Aboriginal Corporation (BPAC) and Darling Downs Grasslands

FIELD TRIP 3 – Gummingurru Aboriginal historical site and Peacehaven Botanic Park



****Please read our phytosanitation guidelines here****

Please give them careful thought before and after you travel. The ANPC is a strong advocate for strong national and domestic plant biosecurity. We work to prevent the spread and exchange between locations of all plant diseases and pests. This 2024 conference will be held on the edge of the east Australian Myrtle Rust zone. You could easily pick up spores on your clothing or gear, even in Toowoomba. On field trips, we will also be visiting sites sensitive to species of *Phytophthora* root diseases, and places potentially containing these pathogens, and we must avoid spreading lineages of this and other soil-borne diseases. We seek your cooperation and commitment in ARRIVING CLEAN and LEAVING CLEAN. What to bring: A hat, sunscreen, appropriate footwear, water bottle, insect repellent, a jacket (the weather can change unexpectedly). All field trips include transport, lunch and snacks. Please BYO water bottle to reduce plastic waste.



FIELD TRIP 1 - Wildflowers of the Granite Belt with Stanthorpe Rare Wildflower Consortium (8am to 5:30pm)

Depart Toowoomba at 8am for a 2hr 10min bus trip (180km) to Girraween National Park located on the Granite Belt near the Qld/NSW border and south of Toowoomba. Girraween, meaning 'place of flowers', is a park of massive granite outcrops, tors and precariously balanced boulders with spectacular wildflower displays in spring. Golden wattles, yellow, red and purple pea flowers, dainty orchids and flannel flowers grow amid forests of red-gum, stringybark and blackbutt.

Arrive at 10.10am and meet volunteers from the Stanthorpe Rare Wildflower Consortium at the Day Use area, where there are shelter sheds and a toilet, a short distance from the National Park Visitor Centre. They will take you on a guided botanical walk along the Junction Track (5.2km return) to view the many wildflowers there including *Allocasuarina rupicola* (Near Threatened) and *Phebalium whitei* (Vulnerable). Lunch will be in the Park during the walk. Return to the Visitor Centre by 3pm for the bus trip back to Toowoomba.

Local wildflower books will be for sale including the Consortium's Wildflowers of the Granite Belt for \$5 which has photos of 280 of the most common local species.

The Junction Track is a Grade 3 walking track, suitable for most ages and fitness levels. Some walking experience is recommended. Grade 3 Tracks may have short steep hill sections, a rough surface and many steps.



FIELD TRIP 2 - The plants of the Bunya Mountains and Darling Downs grasslands. (8am to 5pm)

Depart Toowoomba at 8am for a 2 hr bus trip to the Bunya Mountains, which rise over 1000 metres above the plains, harbour ancient rainforests and Bunya Pines (*Araucaria bidwillii*), and have been a gathering place for people for millennia. Experience the Bunya Mountains with the Bunya Peoples' Aboriginal Corporation (BPAC) and discuss the Bunya Pine's significance, and hear about traditional land management practices in the grasslands using fire. Walk to the Bush Uni, yarn about "Connection to Country", "Why are our Elders important?" and "Why should we honour our Ancestors?"

Then take a rainforest walk with BPAC Rangers who will discuss some of the ways they have existed with nature and how plants were used in daily life.

On the way home, we will visit a remnant of the vast grasslands that once covered the Darling Downs. Growing on fertile clay soils, these grasslands have been extensively cropped and only 1% of their original extent remains. They harbour a diversity of plant life with over 300 plant species recorded including many that are rare and threatened. We will hope for a glimpse of Australia's only native thistle the Vulnerable Austral Cornflower (*Rhaphonticum austral*) and discuss the myriad issues facing these tiny grassland remnants and how research and management is contributing to their conservation.

The walk to the Bush Uni walk is approx. 10-20 Minutes each way. Distance-1km return. Access is along a formed earthen track with few obstacles and a modified surface. Sections may be muddy or have loose surfaces at times. Moderate slope descending and ascending. Suitable for most ages and fitness levels.



FIELD TRIP 3 - Gummingurru Aboriginal historical site and Peacehaven Botanic Park (8.30am to 1:30pm)

Tour Peacehaven Botanic Park and hear from Paul Carmody about the significance of the area to local First Nations People. Friends of Peacehaven Botanic Park will also have their local native plant nursery open for browsing. The park is set in the leafy suburb of Highfields, 15 minutes drive north of the Toowoomba CBD and includes a diverse collection of Australian native flora and other attractive botanic specimens, including rare and endangered plants. Many of the plants in the grounds are labelled for visitor information.

Directly to the west is Gummingurru where Paul will continue to take us on a guided site tour to learn about the stone arrangement cultural complex located there. He will describe and discuss the site's significance including subjects such as: skin and kinship; lore and law; obligation, roles, and responsibility; belief systems; and conservation. Traditional land management practices, plant use (medicinal, tucker and cultural) and the eco-systems will then be explored. We will see the progress of three demonstration gardens established to showcase species from different culturally important ecosystems including endangered semi-evergreen vine thicket.



APCC14 Partner Messages

The **Australian Flora Foundation** is a registered Charity that raises money to fund research into the Australian native flora. It funds an annual granting round.

Membership is invited and costs \$33 per year.
Web page: www.aff.org.au



At **Alcoa**, we mine bauxite and transform it into alumina and then aluminium – an important ingredient in everyday life and the green energy future. With more than 60 years' experience in Australia, our unwavering commitment to mine site rehabilitation is driven by research and continuous improvement.



The **Stanthorpe Rare Wildflower Consortium** was formed in 2004 by a group of local plant enthusiasts, landholders, Landcare and conservation organisations. It aims to promote the diversity of plants on the Granite Belt and to work for the better protection and management of threatened species and their associated vegetation communities.

Website: www.granitebeltwildflowers.com.au
Email: gbwildflowers@gmail.com
Address: PO Box 863, Stanthorpe. Qld. 4380



The **Queensland Government** is committed to delivery of the Threatened Species Program 2020–2040 and it's vision that "Queenslanders support threatened species to prosper in self-sustaining populations, now and into the future. The Program goal of 'Queenslanders value threatened species and contribute to their recovery' aims to involve more partners and stewards in threatened species recovery, through partnerships and community of practices, building on existing capacity and capability in the community, and enhancing awareness and education about threatened species. The **Queensland Threatened Plant Network** is a key initiative contributing to the Queensland Government's Threatened Species Program goals.



The **University of Queensland's Centre for Biodiversity and Conservation Science** (CBCS) is a world-leading solution-oriented research centre for biodiversity conservation. The centre works in partnership with scientists, governments, non-governmental organisations, and industry to solve the most important conservation problems around the world.



Centre for Biodiversity and Conservation Science



Organising Committee

Bob Makinson - Australian Network for Plant Conservation

Daniel McKinnon - Australian Network for Plant Conservation

Jayne Thorpe - Stablish Pty Ltd

Jennifer Silcock - Centre for Biodiversity and Conservation Science, University of Queensland

Jo Lynch - Australian Network for Plant Conservation

Kate Reardon-Smith - University of Southern Queensland

Mike Gregory - QLD Department of Environment, Science and Innovation

Paul Donatiu - Australian Network for Plant Conservation & Queensland Threatened Plant Network

Richie Southerton - Australian Network for Plant Conservation

Volunteer Office Support - ANPC

Robert Hawes - ANPC Bookkeeper

Thankyou to our conference organising partners:



Australian Network for
Plant Conservation Inc



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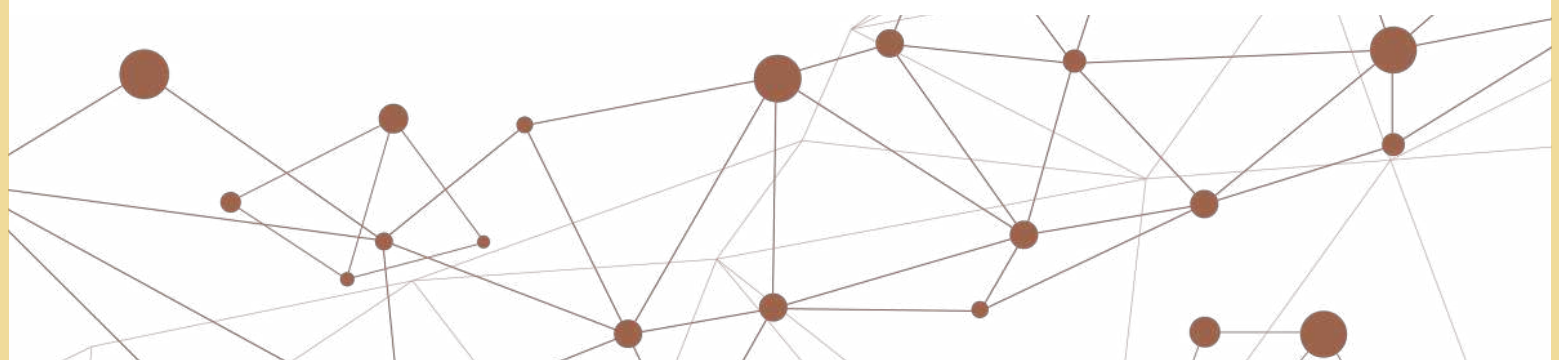
UniSQ

Queensland Threatened Plant Network



Queensland
Government

A joint initiative of the Australian Network for Plant Conservation
and the Queensland Government Threatened Species Program





APCC14 Partners

The APCC14 Organising Committee would like to thank our partners for their generous support and contributions towards this event:

Gold



Queensland Government

Speakers



Field Trips



Workshops



Conference Dinner



Welcome Reception



Centre for Biodiversity and Conservation Science

Trade Stall



Prize Donation



Conference Bags



Native Plants Queensland

