

THE 13TH AUSTRALASIAN PLANT CONSERVATION CONFERENCE

"Seeds to recovery"

Monday 4 - Wednesday 6 April 2022
ONLINE



Australian Network for
Plant Conservation Inc

ONLINE PROGRAM

MONDAY 4 APRIL 2022

8:55	Online welcome and housekeeping
9:00	Welcome to Country - Aunty Edna Stewart, Wiradjuri elder
9:10	Official opening and welcome Cr Ashley Edwards, AlburyCity Mr Justin Clancy, MP, NSW Member for Albury Sussan Ley, MP, Federal member for Farrer and Minister for the Environment
9:30	President's address and housekeeping

ANPC PRESIDENT'S ADDRESS

Welcome to the Australian Network for Plant Conservation (ANPC)'s 13th Australasian Plant Conservation Conference 2022.

The ANPC has been promoting and working for plant conservation in Australia for more than 30 years since its inception as a not-for-profit non-government organisation in 1991, as highlighted in the latest two '30 year celebration' issues of our quarterly bulletin Australasian Plant Conservation (APC). Our mission continues to be "To promote and develop plant conservation in Australia" and we achieve this by providing a range of forums for the exchange of information and ideas to connect plant conservation scientists, practitioners and policy makers. APC and the ANPC News Newsletter disseminate plant-related research, activities, projects and other information to a broad audience. We also hold plant conservation workshops (on line and face to face) and promote an ecological focus in on-ground conservation, rehabilitation and management of remnant vegetation, threatened plants and ecological communities. Over the past four years, the ANPC has co-ordinated three best practice guidelines to provide information on how to do translocation of threatened species, ex situ germplasm conservation as well as seed collection and use. We have also produced the draft Healthy Seeds Roadmap, a strategic plan to improve native seed supply for ecological restoration in NSW. You will hear more about all of these documents during the conference.

The Australasian Plant Conservation Conference (APCC) is our flagship biennial conference bringing together researchers, government agencies, land holders, NRM and NGO groups, practitioners and policy makers from around Australia to focus on a key topic for plant conservation. COVID-19 has delayed this conference, but we are pleased to be able to proceed with the hybrid in person/online version this year.

The theme for the APCC13 conference is "Seeds to recovery" which has a strong focus on both understanding the impacts of megafires such as the 2019/2020 bushfires on Australian plants and vegetation and also building capacity to better manage fire regimes to ensure ongoing plant conservation. We also highlight the important role seeds play in plant recovery, including after fire.

The 4 session themes for this conference are:

- Bushfire Recovery.
- Seeds and more: Natural regeneration, revegetation and specialist propagation techniques.
- Conservation of threatened species and communities.
- Engaging people with conservation and restoration.

And we also have workshops highlighting:

- Meeting restoration goals in the UN Decade on ecosystem restoration.
- Selecting species and provenances: a showcase of tools, templates and approaches.

The 2019/2020 megafires were a stark reminder that fire regimes are changing due to both a warming climate and a highly modified landscape. These two elements, climate change and clearing and fragmentation of habitat are the major threats to plant conservation in Australia and elsewhere. Most of our Australian ecosystems are impacted by fire at some time, and many of the plant species in these ecosystems have effective strategies for recovering after a fire, in particular soil and canopy seed banks. Changes to the timing of fire, how often fires occur, how severe fires are and the extent of any refugia from fire are all factors that affect the ability of plants to maintain viable populations under a regime of repeated fires. While extensive and often severe, the 2019/2020 fires also burnt over many areas that were still recovering from another previous fire event, while both biotic (weeds, pest animals, pathogens) and abiotic (drought, erosion) factors also affected the ability of plants to recovery after the 2019/2020 fires. While it is still early in the recovery of Australian vegetation after these megafires, this conference gives us a chance to look at just how well the recovery is going, think about what we have learnt and what we need to do better, while also reflecting on how best to engage people in plant conservation across government, private industry and the public.

13th Australasian Plant Conservation Conference

'Seeds to recovery'

ANPC PRESIDENT'S ADDRESS CONTINUED

On behalf of the ANPC I'd like to thank the major conference partners who have helped make this event possible: in particular the New South Wales Government and the Australian National Botanical Gardens as our Gold partners, Greening Australia as our Silver partner, the Australian Institute of Botanical Science as a Speaker partner; Murray Local Land Services and the North East Catchment Management Authority for supporting the Field Trips; and the Australian Flora Foundation for supporting the Conference Dinner. These organisations have recognised the value of supporting the ANPC in facilitating communication and networking amongst scientists, land managers, community groups, government and industry for improved plant conservation in Australia.

I would also like to thank the efforts of the conference organising committee: Rachael Orr, Ros Walls and Nerilee Kerslake of Albury City Council; Damian Wrigley from the Australian Seed Bank Partnership; Jodi Price from Charles Sturt University; Jim Begley of Goulburn Broken CMA; Judy Kirk of Landcare - Corowa District; Natasha Lappin of Murray Local Land Services; Phillip Falcke of North East CMA; Lucy Commander of the University of Western Australia; Singarayer Florentine from Federation University and ANPC Committee member; Martin Driver, Jo Lynch, Amelia Martyn Yenson and Christine Fernance (ANPC Staff). In addition, thanks to Robert Hawes the ANPC Office Volunteer for all his work supporting the conference.

The ANPC is a membership-based organisation with a diverse range of members including scientists, land managers, State and Commonwealth Departments, industry, the volunteer conservation movement and the broader community. Membership fees are an essential part of our financial base, and members and member-organisations are the lifeblood of our network. If you are not already a member, we would like to encourage you to join for 2022.

Tony Auld
President
Australian Network for Plant Conservation Inc.

11:10-13:10

THEME 1: BUSHFIRE RECOVERY

- 9:40 **Professor Rachael Gallagher**
Hawkesbury Institute for the Environment, Western Sydney University
KEYNOTE - Mega-challenges for Australian plant diversity: fires, threats and restoring diversity at scale
- 10:10 **Dr Richard Davies**
Nature Conservation Society of SA
Enhancing bushfire recovery of Kangaroo Island's rare and threatened, endemic flora on private land and roadsides
- 10:25 **Erika Roper**
NSW Department of Planning and Environment
It's grass! It's a twig! No, it's Superbum! Post-fire recovery of the threatened Superb Midge Orchid (*Genoplesium superbum*) in south-eastern NSW
- 10:40 Questions

10:50

BREAK

- 11:10 **Introductions from chair**
- 11:15 **Dr Jodi Price[online]**
Charles Sturt University
KEYNOTE – Management and restoration of temperate grasslands
- 11:45 **Amos Atkinson & Dr Nathan Wong**
Spirit Officer Djandak Dja Dja Wurrung Clans Corporation | Djandak Strategy and Planning
KEYNOTE - Self-determination and practice
- 12:15 **Laura Canackle**
NSW Department of Planning and Environment
The emotional rollercoaster of Bredbo Gentian conservation following fire.
- 12:30 **Bradley Desmond**
Australian Seed Bank Partnership
In case of fire: collaborate for conservation
- 12:45 **Dr Melinda Pickup**
Greening Australia
From the ashes: predicting the need for restoration in fire-affected landscapes
- 13:00 Questions

13:10

BREAK

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'Seeds to recovery'

14:00 -

WORKSHOP 1: MEETING AMBITIOUS RESTORATION GOALS IN THE UN DECADE ON ECOSYSTEM

RESTORATION: NATIONAL, STATE AND LOCAL SCALE

Facilitators: Damian Wrigley and Samantha Craigie

14:05

Dr Emma Ladouceur [online]

German Centre for Integrative Biodiversity Research Halle-Leipzig-Jena (iDiv)
The Global Restore Project: Knowledge Sharing for Shared Success

14:18

Dr Blair Parsons [online]

Greening Australia
Viewing ecological restoration through an impact lens to generate benefit in landscapes

14:35

Martin Driver

The Australian Network for Plant Conservation
A time for action

14:48

Dr Paul Gibson- Roy [online]

Restoration ecologist
Characteristics of the Australian seed sector that present challenges to meeting UN Decade restoration goals

14:58

David Carr [online]

Stringybark Ecological
Constraints in industry capacity in meeting UN Decade of Ecosystem Restoration goals

15:10

Damian Wrigley

Australian Seed Bank Partnership
The Australian Seed Bank Partnership – ex situ conservation as a tool for ecosystem restoration both locally and globally

15:25

Dr Libby Rumpff

The University of Melbourne
Using state-and-transition models to support woodland restoration and monitoring in the Goulburn Broken catchment

15:35

Open panel discussion, questions

16:00

END OF DAY 1

ONLINE PROGRAM

TUESDAY 5 APRIL 2022

8:55

Welcome and housekeeping

9:00 -

THEME 2: SEEDS AND MORE; NATURAL REGENERATION, REVEGETATION AND SPECIALIST PROPAGATION TECHNIQUES

9:00

Dr Mark Ooi

University of New South Wales
KEYNOTE - Seeds and plant species persistence under shifting fire regimes

9:30

Dr Karen Sommerville

Australian Institute of Botanical Science
Identifying and storing freezing-sensitive seeds

9:45

Dr Nathan Emery

Australian Institute of Botanical Science
A data framework for predicting seed germination under climate change using R

10:00

Dr Ganesha Liyanage

Australian Institute of Botanical Science
Understanding seed biology to inform *in situ* and *ex situ* conservation actions: a case study on *Geijera parviflora* [online]

10:15

Andie Guerin

Regent Honeyeater Project
There are giraffes in the seed orchard - again!

10:30

Questions

10:40

BREAK

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'Seeds to recovery'

THEME 2 CONTINUED

Chair: Dr Karen Sommerville

This session supported by [NSW Environmental Trust](#)

- 11:00 **Natasha Lappin & Jim Begley**
Murray Local Land Services & Goulburn Broken CMA
KEYNOTE - Native Seed Supply, Seedbanks and Seed Production
- 11:32 **Dr Lucy Commander [online]**
The University of Western Australia
Florabank Guidelines/Seed supply chain
- 11:42 **Ben Croxford [online]**
Nuts About Natives
Propagating recalcitrant and threatened species for rehabilitation
- 11:52 **Prof. Nicholas Williams**
University of Melbourne
Urban landscape plantings: an under appreciated opportunity for species conservation
- 12:02 **Leah Dann**
The University of Melbourne
Native Plant Restoration on Norfolk Island
- 12:12 **Ian Cranwell**
KG2
The National Native Nursery Network
- 12:22 **Ian Davidson**
Regeneration Solutions P/L
RAM vegetation condition assessment - a tool for land managers
- 12:32
Questions

12:40

BREAK

13:30 - 15:00 WORKSHOP 2: SELECTING SPECIES AND PROVENANCES: A SHOWCASE OF TOOLS, TEMPLATES AND APPROACHES

- 13:35 **Professor Maurizio Rossetto**
Australian institute of Botanical Science
A broadly applicable genomic workflow to support plant conservation and management
- 13:40 **Dr Jenna Wraith**
Atlas of Living Australia, CSIRO
Strengths and weaknesses of plant data in the Atlas of Living Australia
- 13:45 **Dr Jenna Wraith (on behalf of Rob Clemens)**
Atlas of Living Australia, CSIRO
Strengths and weaknesses of planning the EcoCommons platform to run species distribution models
- 13:50 **Carolena Helderman**
Goulburn Murray Landcare Network and Goulburn Broken Indigenous Seedbank
Revegetation Guide for the Goulburn Broken Catchment
- 13:55
Questions / discussion
- 14:20 **Dr Tim Collins**
NSW Department of Planning and Environment
Trees Near Me NSW
- 14:25 **Dr Melinda Pickup**
Greening Australia
Seeding resilience: restoration in a rapidly changing world
- 14:30 **Dr Peter Harrison [online]**
University of Tasmania
Provenancing using climate analogues: a program guide to climate-adjusted provenancing
- 14:35
Questions / discussions

15:00

DAY 2 ENDS

13th Australasian Plant Conservation Conference 'Seeds to recovery'

ONLINE PROGRAM

WEDNESDAY 6 APRIL 2022

8:55 Welcome and housekeeping

9:00 -

THEME 3: CONSERVATION/THREATENED SPECIES AND COMMUNITIES

- 9:00 **Dr Nathan Emery**
Australian Institute of Botanical Science
KEYNOTE - Combining *ex situ* and *in situ* research to achieve conservation outcomes of threatened species and communities

Supported by the [Australian Institute of Botanical Science](#), [Royal Botanic Gardens and Domain Trust](#).
- 9:30 **Stephanie Chen**
UNSW Sydney/Australian Institute of Botanical Science
Opportunities in the genomic era for conserving myrtle rust impacted species
- 9:45 **Dr Gemma Hoyle**
National Seed Bank, Australian National Botanic Gardens
Management of *ex situ* seed collections: threatened grassy ecosystems
- 10:00 **Kathryn Scobie**
Australian National Botanic Gardens
Tackling plant conservation within a botanic garden
- 10:15 **Dr Peter Cuneo**
Australian Institute of Botanical Science
Going for the gold standard? Lessons learnt from threatened plant translocations in western Sydney
- 10:30 Questions

10:40

BREAK

11:00 -

THEME 3: CONSERVATION/THREATENED SPECIES AND COMMUNITIES

- 11:05 **Dr Zoe-Joy Newby**
Australian Institute of Botanical Science
KEYNOTE – Orchid conservation at the Australian Institute of Botanical Science: current challenges and achievements
- 11:35 **Jerry Smith**
Hills and Fleurieu Landscape Board
Conservation of *Prasophyllum murfettii* (Fleurieu Leek orchid), a critically endangered orchid from the Threatened Ecological Community - Swamps of the Fleurieu Peninsula in South Australia [online]
- 11:50 **Dr Samantha Yap**
Research Centre for Ecosystem Resilience (ReCER)
Conservation genomic research reveals the impact of the 2019-2020 bushfire on a critically endangered rainforest species *Eidothea hardeniana* and guides species recovery
- 12:05 **Dr Amelia Martyn Yenson [video]**
Australian Network for Plant Conservation
Ex situ collections for conservation and translocation of Australian native plants
- 12:20 **Dr David Bush**
CSIRO
Australian native tree species for carbon capture and bioenergy production: species and provenance testing reveals sustainable opportunities for threatened species in economic revegetation
- 12:35 Questions

12:50

BREAK

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13:40 -

THEME 4: ENGAGING PEOPLE WITH CONSERVATION/RESTORATION

- 13:40 **GUEST SPEAKER: Jonica Newby (Celebrity Speakers)**
Science reporter, author, speaker, TV presenter and director. Jonica will talk about her latest book *Beyond Climate Grief*
- 14:40 **Chantelle Doyle**
University of New South Wales
KEYNOTE - It's more them than you; why do people get involved and stay involved in conservation projects?
- 15:10 **Dr Christine Allen**
Threatened Species Conservancy
Surprises in the re-growth
- 15:25 **John Delpratt**
The University of Melbourne
Restoring diverse native grassland in south-west Victoria by direct seeding - a success story.
- 15:40 Questions
- 15:55 Housekeeping | Conference Close

16:10

DAY 3 ENDS

VIEW POSTERS AT: [HTTPS://WWW.ANPC.ASN.AU/CONFERENCES/APCC13/APCC13-POSTERS/](https://www.anpc.asn.au/conferences/apcc13/apcc13-posters/)

- Dr Susan Hoebee**
La Trobe University
Remote, rare and ravaged: harnessing genomics and working with community to restore resilience in East Gippsland's threatened flora
- Katherine Horsfall**
University of Melbourne
Urban wildflower meadows - making native understorey restoration accessible and affordable in cities and towns. A case study from Melbourne, Australia
- Dr Megan Hirst**
Royal Botanic Gardens Victoria
The Victorian Conservation Seedbank: Victoria's primary facility for the conservation of threatened plants. [online]
- Emma Dalziell**
University of Western Australia / Kings Park Science - DBCA WA
Predicting seed lifespan for the improved curation of conservation seed banks [online]
- Katelyn Caldwell**
Landcare NSW Inc.
Landcare Led Bushfire Recovery Program In NSW- Supporting the recovery of wildlife and their habitat
- Amy Buckner**
National Seed Bank, Australian National Botanic Gardens
Response to Fire Cues: Germination and Emergence of Australian Alpine Seed
- Keira Turner**
Greater Sydney Landcare
Creating Canopies - planting 100,000 trees in Greater Sydney by 2022
Demonstrations from workshop 2 presenters

13th Australasian Plant Conservation Conference 'Seeds to recovery'

ORGANISING COMMITTEE

Rachael Orr – Albury City Council

Ros Walls - Albury City Council

Nerilee Kerslake - Albury City Council

Tony Auld - ANPC President (Chair)

Martin Driver - ANPC Staff

Jo Lynch - ANPC Staff

Amelia Martyn Yenson - ANPC Staff

Christine Fernance - ANPC Staff

Damian Wrigley – Australian Seed Bank Partnership

Jodi Price -Charles Sturt University

Singarayer Florentine - Federation University and ANPC Committee member

Jim Begley - Goulburn Broken CMA

Judy Kirk - Landcare - Corowa District

Natasha Lappin - Murray Local Land Services

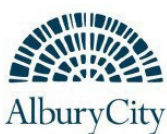
Phillip Falcke – North East CMA

Lucy Commander – The University of Western Australia

VOLUNTEERS FROM THE AUSTRALIAN NETWORK FOR PLANT CONSERVATION INC.

Robert Hawes - ANPC Office Volunteer

Thank you to our conference organising partners:



13th Australasian Plant Conservation Conference 'Seeds to recovery'

APCC13 PARTNERS

THE APCC13 ORGANISING COMMITTEE WOULD LIKE TO THANK OUR PARTNERS FOR THEIR SUPPORT AND GENEROUS CONTRIBUTIONS TOWARDS THIS EVENT:



AUSTRALIAN NATIONAL
BOTANIC GARDENS

GOLD



SILVER



SPEAKER



Local Land
Services

FIELD TRIPS

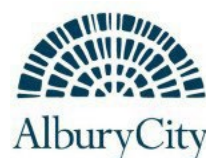


NORTH EAST
CATCHMENT
MANAGEMENT
AUTHORITY



CONFERENCE DINNER

BILLSON'S
BEECHWORTH
ESTD 1865



WELCOME RECEPTION & EARLY REGISTRATION MIXER



CATERING

13th Australasian Plant Conservation Conference 'Seeds to recovery'

APCC13 PARTNER MESSAGES



Greening Australia is committed to restoring Australia's diverse landscapes and protecting biodiversity in ways that benefit communities, economies, and nature.

With projects spanning the breadth of the country we apply a science-led, collaborative approach to deliver nature-based solutions addressing the twin crises of climate change and biodiversity loss.

Project Phoenix, a national strategic initiative to strengthen Australia's native seed and plant sector is a great example of our collective approach, collaborating to produce a range of resources including the first ever Strategy for the Australian Native Seed Sector.

PROJECT PHOENIX

THE STRATEGY FOR THE AUSTRALIAN NATIVE SEED SECTOR IS NOW LIVE.

greeningaustralia.org.au/projectphoenix/Implementing-the-ten-year-strategy/

A STRATEGY FOR THE AUSTRALIAN NATIVE SEED SECTOR

The graphic features the Project Phoenix logo (a stylized orange and yellow swirl) and a preview of the report cover. The cover has a yellow and orange background with a globe and the text "A STRATEGY FOR THE AUSTRALIAN NATIVE SEED SECTOR".

The ANPC has led the recent revision of the Translocation, Florabank and Germplasm Guidelines.

All 3 guidelines are free to download.

For access and to find out how these can help your work head to:

<https://www.anpc.asn.au/>

