

President's Report 2020

Given at the Annual General Meeting on 11 November 2020



Australian Network for
Plant Conservation Inc



Image by Christine Fernance

I am very proud to say that 2020, our 29th year, has been a highly successful year for the ANPC and our role as Australia's non-government key plant conservation organisation.

The conservation of Australia's plants, animals and natural habitats was on everyone's minds after 2019/20 bushfires that burnt an unprecedented area of eastern Australia. That was shortly followed by COVID-19 restricting movement and face to face communication.

The 2019/20 bushfires have sadly had a huge impact on our unique plants and ecological communities. Much of the Australian flora has evolved to cope with fire, recovering by re-sprouting or seed germination. However, some plants are sensitive to fire, while others are affected when fires are too frequent or severe, or where fire is combined with drought stress or other threats to post-fire recovery (such as feral animals, weeds and pathogens). Successful recovery after the fires may be a long process and requires effective management of on ground threats, while some species may need further intervention where populations have been lost or are in marked decline due to the impacts of these fires. We are only just beginning this recovery journey.

In 2020, COVID-19 has unfortunately severely impacted our ability to hold face-to-face workshops and conferences which are one of our *raison d'être*. At the same time, it has also made us all more adept at on-line meetings and workshops and in 2021 we are planning some virtual and small-scale local events. The ANPC has also fortunately received significant project and grant funding this year to keep us extremely active in the plant conservation sphere, as well as financially viable, and the pandemic has fortunately had little effect on our staffing hours and abilities to undertake these projects, as most staff work remotely so can continue with their work in a safe manner.

PROJECTS

This year we have been very busy implementing the Healthy Seeds project, led by Project Manager Martin Driver, and funded by the NSW Environmental Trust, which commenced in September 2019 and is running for 18 months. This project aims to deliver an evidence-based Roadmap to secure a reliable, genetically appropriate, native seed supply in NSW for restoration. A consortium of partners from across the native seed and ecological restoration sectors is overseeing the project including Greening Australia, CSIRO, NSW Royal Botanic Gardens and Domain Trust, NSW Department of Planning, Industry and Environment, the Australian Association of Bush Regenerators, the Australian Seed Bank Partnership, and the Society for Ecological Restoration Australasia, and we thank them for their time and efforts. The project has also forged close links with the federally funded bushfire recovery Project Phoenix where there are overlaps in objectives and outputs. A Draft Healthy Seeds Summary Roadmap is currently in preparation and an early Draft Roadmap paper has been compiled for first stage editing. These will be available for the next Consortium meeting in early December for review and discussion before further consultation is undertaken. <https://www.anpc.asn.au/healthy-seeds/>

The first achievement of the Healthy Seeds project was the launch of The Australian Native Seed Survey Report on 31 March 2020 by the Threatened Species Commissioner Dr Sally Box. This ANPC report authored by Martin Driver, Dr Paul Gibson-Roy, Dr Linda Broadhurst and Dr Nola Hancock details the full results of a national survey capturing the behaviours and views of a wide range of native seed sector participants and which fed into the development of the Healthy Seeds project. Between October 2016 and April 2017, the ANPC undertook a survey of the Australian native seed sector, which reported dwindling seed supplies and a decline in expertise and training. Thanks to the authors for their enormous efforts to help understand this critical and complex part of plant restoration. <https://www.anpc.asn.au/news/anpcs-australian-native-seed-survey-report-released/>

An audit and investigation into past and current Seed Production Areas (SPAs) in NSW has also been undertaken by Murray Local Land Services. The audit investigated the availability of existing infrastructure (such as seed banks), and regional resources (such as local seed databases, vegetation guides and plant lists). It assessed whether the volume and species of seed grown in existing SPAs is sufficient and appropriate in different regions and undertook an investigation to explore barriers and opportunities in the seed and restoration sectors. Some of the key findings of the audit were that few actively managed SPAs were found, there is a current lack of sustained funding for seed banks, demand for seed is inconsistent and unpredictable due to funding variability, and there is poor understanding of licencing permits and conditions.

Audit of Seed Production Areas in NSW Report



30 June 2020

Susan Logie

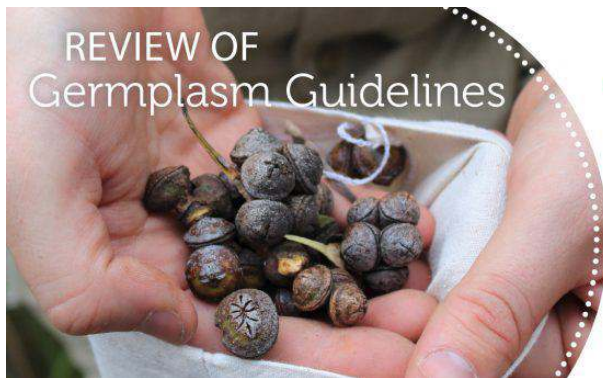
A long overdue update of the Florabank Guidelines for best practice native seed collection and use is currently underway, led by ANPC project manager, Dr Lucy Commander as part of the Healthy Seeds project. A reference group has been formed, and the new list of 15 modules developed. We expect the revised and updated Florabank Guidelines to be finalised and launched in 2021. A large number of experts across the seed sector have been consulted, and we appreciate their generous contributions. Florabank workshops and training are being planned to communicate the content, with format and time yet to be confirmed. A draft 'Model Systems for Native Seed' is also being developed as part of the Guidelines in consultation with the Healthy Seeds Consortium. This will be a model code of practice for the seed industry and will be distributed widely for feedback before being finalised. <https://www.anpc.asn.au/florabank/>



In 2020, we commenced a comprehensive review and update of the ANPC's Germplasm Guidelines with the support of The Ian Potter Foundation's Environment and Conservation grant, led by Dr Amelia Martyn Yenson. Our flagship publication 'Plant Germplasm Conservation in Australia - strategies and guidelines for developing, managing and utilising ex situ collections' remains the definitive Australian standard for management of ex situ (off site) collections of seeds, plant tissue and whole plants following publication of the 2nd edition in 2009. Since that time, research into the collection, curation and utilisation of ex situ collections has progressed significantly and we want to ensure the latest information is passed onto practitioners including scientists, conservation agencies, threatened species staff, regional botanic gardens, NRM bodies and conservation groups and land managers. We have brought together leading experts in seed banking, living collections, tissue culture and cryopreservation research and practice from across Australia and New Zealand to review and rewrite the Guidelines.

By continuing to incorporate updated scientific knowledge in our publications we are ensuring that Australia's conservation sector has the necessary skills and knowledge to support ex situ collections of common and threatened species. A steering committee has been established and more than fifty

scientists, seedbank staff, horticulturists and botanic gardens staff have been consulted from across Australia and New Zealand to ensure that the Guidelines are underpinned by the latest scientific findings. Contributions towards draft chapters and case studies are going well. To date, 12 out of 15 chapters and 38 out of 50 case studies have been received. Drafts will be circulated in late 2020 for review. We are on track to complete the review by mid-2021 with an online launch at Australasian Seed Science Conference in September 2021. Online training materials for the Germplasm Guidelines will then be developed. <https://www.anpc.asn.au/germplasm-guidelines-review/>



I am pleased to announce that the ANPC received funding this year from San Diego Zoo Global (SDZG), with encouragement from the US Center for Plant Conservation. The grant will focus on preventing plant decline and extinction and reducing the impacts of future fires in eastern Australia. Narrow-range endemics and priority threatened plant species most sensitive to having recovery disrupted by repeated fires will be identified under this four-year project. Field inspections will quantify recovery and identify threats that need amelioration. Seed and/or vegetative germplasm will be collected and established at state and regional botanic gardens where appropriate. These plant conservation actions align with the recommendations of the Federal Threatened Species Scientific Committee for Post-fire Recovery to: 1) Prevent extinction and limit decline of native species and ecosystems affected by the 2019-20 fires, and 2) Reduce impacts from future fires. <https://www.anpc.asn.au/prevent-rare-plant-extinction-and-reduce-impacts-of-future-fires/>

Our new Fire and Rust project, funded by the Threatened Species Recovery Hub, aims to determine the susceptibility and impact of Myrtle Rust on Myrtaceae species regenerating after the bushfires. In cooperation with the Department of Agriculture & Fisheries Queensland and the NSW Department of Primary Industries, locations across fire affected regions in NSW and Queensland (including reserves in the Gondwana Rainforests of Australia World Heritage area) are being targeted with general surveys to capture data across a range of sites and species. Short term impact assessment plots have been established at selected sites and data recorded on disease progression/species decline rates. The project will identify the species showing



Photo by Geoff Pegg

susceptibility and the regeneration forms (re-shoots/seedlings) affected by Myrtle Rust. The effect of repeated infection on species recovery/survival will be determined for species highlighted in priority lists, including bush-fire affected threatened plants. Preliminary surveys suggest species not normally seen as susceptible in undisturbed sites are becoming infected and impacted by Myrtle Rust. The final report on this project will be out soon. <https://www.anpc.asn.au/fire-and-rust/>

The ANPC received a Biodiversity Conservation grant from the Ross Trust for two years from June 2020. The “Plants Going Places” grant will address the need to educate and inform both environmental scientists and practitioners on the translocation of threatened plants, for the benefit of Victoria’s threatened plant species. In 2021 or 2022, the project will present three, one-day plant translocation workshops in Melbourne, Ballarat and Bairnsdale. In addition, three video site tours will be produced with accompanying public podcasts, which will explore the stories of past and current translocation projects through the eyes of practitioners to investigate “What makes a translocation successful?”. The aim of the project is to build capacity to successfully undertake translocations in Victoria (especially critical to post-fire recovery), increase awareness of threatened plants, help tackle ‘plant blindness’, and give voice to those people who work in this underappreciated field. We appreciate the in-kind support being provided by the Royal Botanic Gardens Victoria, Federation University Australia and Greening Australia (Bairnsdale) for this project. <https://www.anpc.asn.au/plants-going-places/>

The ANPC was also part of two teams that were successful in obtaining funding from grants under the federal government’s Wildlife and Habitat Bushfire Recovery Program. The ANPC will firstly coordinate an Orchid Symposium, in collaboration with La Trobe University on their post-fire orchid project, planned to be held online in June 2021. Secondly, the ANPC will carry out project communications and publicity, in collaboration with the Australian Seed Bank Partnership, on their ‘Banking on seeds for bushfire recovery - Insuring against future loss’ project.

We finalised the Norman Wettenhall Foundation biodiversity conservation grant this year for Stage 2 of the Bringing Back the Banksias project. This project has funded a networking, coordinating and communications role at the ANPC between researchers and practitioners to improve the conservation status of Silver Banksia (*Banksia marginata*) throughout south-western NSW and across Victoria, where it has mostly disappeared from the landscape over agricultural areas. It has enabled further Silver Banksia collections to be sampled from relict populations or plants for analysis in conjunction with The Royal Botanic Gardens Sydney ‘Restore and Renew’ project. Genetic analysis is still to be completed and cross referenced with sub-samples from the previously completed Victorian projects. <https://www.anpc.asn.au/banksias/>



Photo by Jo Lynch



Photo by Noushka Reiter

Over the past 12 months, the ANPC has continued its collaboration with the Orchid Conservation Program at the Royal Botanic Gardens Victoria (RBGV) on two projects. The Saving the Threatened Audas Spider-orchid (*Caladenia audasii*) from extinction project funded by DELWP in 2017 has resulted in seed collection and propagation of seedlings, hand pollination of wild plants, plant surveys and pollinator baiting, and the construction of an exclusion fence to protect newly discovered plants from grazing kangaroos and rabbits. This project will finish in June 2021 with the re-introduction of 200 plants (postponed due to COVID-19). In 2018, DELWP also funded a similar project Saving the Brilliant Sun Orchid (*Thelymitra mackibbinii*) from extinction. Two herbivore exclusion fences have been constructed and plant and pollinator surveys have been undertaken. Community volunteers have been assisting with the surveys and will reintroduce 400 propagated seedlings in Winter 2021. https://www.anpc.asn.au/audas_spider-orchid/ and https://www.anpc.asn.au/brilliant_sun-orchid/

SUBMISSIONS

This year the ANPC made a submission in relation to the independent review of the Environment Protection and Conservation Act 1999 (EPBC Act). <https://www.anpc.asn.au/wp-content/uploads/2020/04/ANPC-EPBC-Act-review-comments-20-April-2020.pdf>

In addition, in November 2020, I am attending a virtual workshop on the development of the Australian Government's new Threatened Species Strategy. The Threatened Species Commissioner, Dr Sally Box, is developing a new ten-year strategy to increase security and support recovery of Australia's threatened species and is seeking views on the draft framework of the new Strategy. This will provide us the opportunity to reflect on the current Threatened Species Strategy (2015-2020) as far as threatened plants are concerned, including opportunities for improvement, and to discuss possible prioritisation principles (how priority species and places might be selected for inclusion) under the new Strategy and what action areas should be the focus for the Australian Government and its partners. <http://www.environment.gov.au/biodiversity/threatened/publications/threatened-species-strategy>

ANPC committee members will soon be attending the on-line 2020 National Biosecurity Forum being held by the Department of Agriculture, Water and the Environment and the National Biosecurity Committee. It is an opportunity to discuss biosecurity challenges, achievements and future directions.

APCC13 CONFERENCE



Unfortunately, the 13th Australasian Plant Conservation Conference due to be held in April 2021 in Albury, has been postponed to April 2022 due to COVID-19. This has had some impacts on the Healthy Seeds project as presentations and the launch of the Florabank Guidelines had been planned for the conference. Instead, we are investigating holding virtual launches / presentations around that time, and to virtually seek feedback and stakeholder engagement with the sector across the country when we are further advanced on the Roadmap.

I would like to thank the conference organising committee for all their time and work to date on planning what will eventually be an exciting conference: Ros Walls and Jason Kimball (AlburyCity); Phil Falcke (North East CMA); Jim Begley (Goulburn Broken CMA); Jodi Price (Charles Sturt Uni); Damian Wrigley (ASBP); Sue Logie (Murray LLS); Singarayer Florentine (Federation Uni); Judy Kirk (Wooragee Landcare); and ANPC staff Martin Driver, Lucy Commander, Amelia Martyn Yenson, Christine Fernance and Jo Lynch. We will pick up from where we left off around April/May 2021. <https://www.anpc.asn.au/conferences/apcc13/>

WORKSHOPS AND OUTREACH

Unfortunately, the drought, then 2019/20 bushfires and then COVID-19 have affected our ability to undertake face-to-face workshops over the last year. A two-day workshop planned for April 2020 with germplasm experts for the Germplasm Guidelines review had to be postponed. A successful funding application from the Australian Academy of Science to hold a Fenner Conference on the Environment will provide additional funding for this workshop. The conference format and date will be confirmed in early 2021. Additionally, four in-person Germplasm workshops funded by the The Ian Potter Foundation grant can hopefully be held before June 2022 (a six-month extension has already been granted).

One COVID-19 friendly Native Plant ID, management and establishment workshop was held in October for Riverina LLS, for a maximum invited group of 20 graziers, Landcare staff and managers. Despite the continuing uncertainties we have had three early stage requests for

running Native Plant ID, Seed and management workshops in western NSW in 2021 (subject to all eventualities).

Because of COVID-19, delays in genetic analysis and now the postponement of the ANPC Conference, the final Bring Back the Banksias Project workshop presentation to communicate findings and implications that was originally proposed for 2020 was deferred. However, once the latest genetic results are written up by the various partners of the project, they will be published in Australasian Plant Conservation.

We were also collaborating with the Australian Seed Bank Partnership to plan the Australasian Seed Science Conference which was to be held in Canberra 5-9 April 2020. Unfortunately, three weeks out from the conference, it was postponed to September 2021 due to COVID-19. <https://seedscience2021.com.au/>

Australasian Plant Conservation (APC), ANPC's quarterly bulletin, has continued to publish high-quality articles relevant to a broad range of plant conservation practitioners and managers, under the editorship this year of Heidi Zimmer and assistant editors Nathan Emery and Selga Harrington. This year, APC has featured articles on pollination, plant responses to fire, seed biology, orchids, translocation, ex situ conservation, Myrtle Rust and more, including papers from university students. I sincerely thank Heidi, Nathan and Selga and volunteer proof-readers for their efforts over the past year in ensuring that APC continues to be a quality and well-respected publication communicating Australasian plant conservation issues. I also welcome Tom Le Breton who has taken on the role of compiling the Research Roundup for APC. Thank you also to the many authors who have contributed to these editions this year. <https://www.anpc.asn.au/apc/>

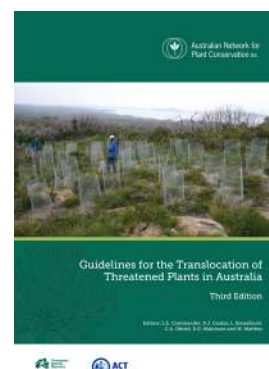
Our outreach efforts continue to expand through social media with the regular sharing of news and events in plant conservation via Twitter, Facebook, Instagram and LinkedIn. Our monthly email newsletter ANPC News continues to reach at least 630 subscribers. The new ANPC website was expanded to include post-fire resource webpages. <https://www.anpc.asn.au/plants-and-fire-2020/> and <https://www.anpc.asn.au/bushfire-2019-2020-resource-page-2/>

Drs Lucy Commander and Heidi Zimmer wrote a highly topical article on the impacts of the fires on plants for The Conversation. <https://theconversation.com/yes-native-plants-can-flourish-after-bushfire-but-theres-only-so-much-hardship-they-can-take-129748>.

Lucy also presented on the Translocation Guidelines in a video produced by the Threatened Species Recovery Hub. <https://www.youtube.com/watch?v=Rfgse5qKdy4&feature=youtu.be> and was interviewed on translocation and seeds for STEAM Powered. <https://www.youtube.com/watch?v=wYl8799VOXM&feature=youtu.be>

Committee member Dr Paul Gibson-Roy participated in two radio conversations related to the Seed Survey Report: <https://www.anpc.asn.au/uncategorized/dr-paul-gibson-roy-talks-about-seed-supply-for-restoration-projects/> and <https://eastsidefm.org/podcast/farming-wildflowers-the-future-of-resoration-and-native-seed/>.

In 2020, we continued distributing the 3rd edition of the ANPC's 'Guidelines for Translocation of Threatened Plants in Australia' which was released in 2018 – 7 hard copies and 8 downloads. It already has 15 citations in the literature, and is essential reading for all those involved in translocation projects both in Australia and elsewhere, to remain at the cutting edge of this important technique used in the fight against plant extinctions. <https://www.anpc.asn.au/translocation/>



STAFFING

Many thanks to all our staff who work above and beyond the call of duty for the ANPC. Their dedication, advice and support make my role and the work of the Committee much more effective and ensures that the ANPC continues to function as a highly respected conservation organisation. I look forward to seeing the results of their excellent work in 2021. Fortunately, COVID-19 didn't affect our staff too much this year, as they were either easily able to, or were already working remotely.

Martin Driver has continued this year in his capacity as the Healthy Seeds Project Manager coordinating and managing the Healthy Seeds project, developing the Roadmap and overseeing the SPA audit and investigation reports and Florabank Guidelines update. He has also been consulting and liaising with stakeholders, Consortium members, other experts (scientists and practitioners) and community representatives from a range of organisations.



Dr Lucy Commander has led the review of the Florabank Guidelines, assisted Martin in the development of the Roadmap and is working on the draft 'Model Systems for Native Seed'. She will also be involved with the coordination of the online Orchid Symposium in June 2021 and the three threatened plant translocation workshops in Victoria (probably in 2022).

Both Martin and Lucy have also been engaged on a pro-rata basis by Greening Australia through the ANPC, to assist with liaison and the implementation of their federally funded bushfire recovery Project Phoenix, on issues that are related but not directly aligned to either Healthy Seeds or Florabank outputs. Lucy has started writing a desktop review of published reports on the Australia Seed Sector. GA's consultant market economist is also currently reviewing the 'Model Systems for Native Seed' for the seed market and providing input to elements of the Florabank Guidelines that align with Project Phoenix.

In February, Dr Amelia Martyn Yenson joined us in the role of Project Manager for the Germplasm Guidelines review. With a background in seed research at the Royal Botanic Gardens and Domain Trust, she has elicited strong support for the revision from the ex situ conservation community. Amelia is also starting to plan how to best promote and implement the Guidelines once they are published, with a 2-day expert workshop and online learning tools, and has assisted with the review of the draft FloraBank Guidelines.



In June 2020, Christine Fernance started in the exciting new position of ANPC Communications Manager. Christine has a background in Marine Science and Management and is currently completing a Master of Science Communication at ANU. She has hit the ground running with managing all the ANPC's social media, ANPC News e-newsletter, project promotions, and recently drafting an ANPC Communications Strategy.

Our Business Manager, Jo Lynch, has continued her excellent work in the office with successful applications for numerous grants, along with project and budget management. Sincere thanks to our office volunteer Robert Hawes, who has helped enormously with various administrative and financial tasks this year, especially in the absence of a Treasurer. Unfortunately, no one nominated for Treasurer at the last AGM. Via advertising in social media and through an ACT volunteer organisation, retired accountant John Grunberg nominated for the position in May this year, but subsequently had to resign due to health reasons.



I am grateful to all the Committee members for their tremendous support over the year. They all have significant commitments outside the ANPC, and it is often challenging to devote the time required to be active committee members. The involvement in the committee by all members is a clear demonstration of their dedication to the ANPC and its goals in improving plant conservation.



Photo by Christine Fernance

I would especially like to thank Dr Cathy Offord and Chantelle Doyle who are leaving the committee this year, as well as Melissa Millar who is stepping down as Secretary after serving her limit of four years, but is re-standing as an Ordinary Member. I sincerely thank them for their time and support during their respective tenures.

FUNDING

Our financial situation will be reported on in detail separately at the AGM but some of our key sources of income this year have included:

- NSW Environmental Trust Healthy Seeds project.
- The Ian Potter Foundation Environment and Conservation grant for the review of the Germplasm Guidelines.
- Greening Australia's Project Phoenix
- The Ross Trust Biodiversity Conservation grant 'Plants Going Places' project
- San Diego Zoo Global project to 'Prevent Rare Plant Extinction and Reduce Impacts of Future Fires in eastern Australia'
- NESP Threatened Species Recovery Hub 'Fire and Rust' project.
- Biodiversity On-ground Action 2017 - Community & Volunteer Action Grant (Victoria) for "Saving the threatened Audas Spider-orchid (*Caladenia audasii*) from extinction".
- Biodiversity On-ground Action 2018 - Community & Volunteer Action Grant (Victoria) for "Saving the Brilliant Sun Orchid (*Thelymitra mackibbinii*) from extinction".
- Memberships and donations.

I would like to thank all the ANPC staff, as well as committee members, for their efforts in seeking funding and grants – while not every application is successful, we rely heavily on their efforts to continue to seek funding to support our key activities.



Photo by Christine Fernance

The hosting of the ANPC by the Australian National Botanic Gardens remains a crucial support for us, and a major contribution by the ANBG to the national effort for plant conservation. This includes provision of office space, computers, phones, electricity, furniture, and a printer. I would like to sincerely thank the Gardens for this support, and look forward to continuing this close relationship into the future.

THE COMING YEAR

2021 will be a very busy year for the ANPC undertaking the following activities:

- Finalising the Healthy Seeds Project including producing the Roadmap and Florabank Guidelines.
- Finalising the review and launching the 3rd edition of the Germplasm Guidelines.
- Undertaking the two bushfire related projects.
- Producing three online plant translocation videos in Victoria.
- Planning the three translocation workshops in Victoria.
- Coordinating an online Orchid Symposium for June.
- Planning the two-day Germplasm expert workshop for the Australian Academy of Science Fenner Conference on the Environment grant.
- Planning the 13th Australasian Plant Conservation Conference for April 2022.
- Seeking additional funding for further projects and workshops.
- Finalising the two orchid projects with RBGV.

I have really enjoyed my time as President over the last year. It was good to see how well ANPC works when dealing with emerging conservation issues such as the impacts of the 2019/20 bushfires and ongoing issues like the global biodiversity extinction crisis. I think that shows the ongoing strength of the organisation and the value for people and communities to stay connected and share knowledge to overcome challenges. It has been a pleasure and a privilege to work with all of you and for an organisation that does so much for plant conservation in Australia. With ongoing recovery and restoration after the 2019/20 fires and 2021 ushering in the UN Decade of Ecosystem Restoration, I see a continuing important future for the ANPC in plant conservation across Australia and the region more broadly.



A handwritten signature in black ink, which appears to read 'Tony Auld'. The signature is written in a cursive, flowing style.

Dr Tony Auld
President
Australian Network for Plant Conservation Inc.
4 November 2020