



2023-24 Annual Report



Australian
Seed Bank
Partnership

Safeguarding Australia's flora, through a
national network of germplasm collections

Contents

The Australian Seed Bank Partnership recognises First Nations Peoples throughout Australia, including their continuing connection to Country. We pay our respects to Elders past and present.

The Partnership recognise that these connections to Country include the people, plants, animals, land, water and sky. As we continue to work across Australia to support long-term conservation of Australia's rich and endemic flora, we will strive to build and maintain honest and trusting relationships with First Nations Peoples.

Published by: CHABG Inc., GPO Box 1777
Canberra, ACT, 2601, AUSTRALIA
October 2024

Prepared by: Bradley Desmond and
Kathy Eyles, with thanks to the Partnership
for their contributions.

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Cover: *Telopea truncata* and *Orites revolutus* flowering
on the edge of the Great Western Tiers, Tasmania
(Image: James Wood).

This page: Collectors gathering *Spinifex sericeus* along
the east coast of Tasmania (Image: Lorraine Perrins).



Letter from the Chair

The Australian Seed Bank Partnership (the Partnership) is delighted to present our annual report, which highlights our achievements over the past year. The Partnership is governed by The Council of the Heads of Australian Botanic Gardens Inc. (CHABG), and, under the strategic guidance of its National Steering Committee, functions as CHABG's principal conservation program.

This has been a year of consolidation for the Partnership since the release of our Strategic Plan last year, with significant progress against across our conservation, research and knowledge sharing outcomes (see Year in Review).

The Partnership continued to focus on securing threatened species through ongoing and new projects. Key projects that have wrapped up this year showcase the diversity of conservation activities and engagement that has been enabled by the Partnership.

The Rare Bloom project partnership with WWF-Australia and Airwick Botanica, has been a flagship recovery project following the 2019-20 bushfires. Originally targeting conservation action for 120 wildflower species from fire-affected areas, additional funding support expanded the number of target species and impact. This impressive recovery effort has improved conservation outcomes for 183 species and involved eight partners across seven states and territories, and extensive community engagement. We are sincerely grateful to our funding partners for their generous support and shared passion for native flora conservation.

On a smaller scale, the Seeds of Hope Project has enabled an exciting collaboration on country with Indigenous rangers to improve the trajectory of an endangered *Conostylis*. Over 1,000 plants were located during field surveys and 800 seeds collected, creating opportunities for cultural knowledge exchange and sharing, as well as a foundation for ongoing collaboration.

We are building knowledge by bringing together collection data to help understand what is held and identify priorities for conservation and research. The National Myrtle Rust Survey is helping inform where further collecting effort is needed to support conservation research and urgent recovery of affected species. The launch of the upgraded Australian Virtual Seed Bank collaboration with the Atlas of Living Australia is linking our Partner's collection data in a trusted digital platform.

The success of the Partnership is in equal measures about our plant conservation outcomes, and the dedicated people that guide and drive these efforts.





On behalf of the Council, I extend our thanks to Dr David Merritt and all the members of the ASBP National Steering Committee, whose advice helps us to realise our strategic outcomes. Special thanks to Bradley Desmond who has been exceptional managing the Secretariat through a period of change as we farewelled Amelia Martyn-Yenson and welcomed Kathy Eyles as our new National Coordinator. I thank my colleagues for their continued commitment and engagement, particularly my predecessor Denise Ora for her inspired leadership of CHABG over the past two and half years. We warmly welcome our new Council members, Simon Duffy, Botanic Gardens of Sydney, and Chris Russell, Royal Botanic Gardens Victoria to the Council and congratulate them on their respective appointments.

Please read on to celebrate the achievements of our Partners and join with us to grow the program and impact of our critical work safeguarding Australia's native flora.

Michael Harvey

Chair, Council of Heads of Australian Botanic Gardens Inc.

The endangered *Grevillea murex* was a target species under the Partnership's Rare Bloom Project (Image: Andrew Crawford).

Our organisation

Our vision

A future where Australia's native plant diversity is valued, understood and conserved for the benefit of all.



Our strategic focus

To deliver a national effort that contributes to the conservation of Australia's native plant diversity through collaborative and sustainable seed and germplasm collecting, banking, research and knowledge sharing



Our services

The Australian Seed Bank Partnership (ASBP) is a national collaboration of seed banks and flora-focused organisations delivering strategic conservation actions for Australia's native seed. Our dedicated Partners and Associates undertake widespread collecting and complex research to support *ex situ* seed conservation, as well as seed science that underpins these efforts.

Our main areas of service include:

Germplasm collection and storage

Our native flora face an uncertain future due to the impacts of a rapidly changing climate, biological invasions, land clearing and severe weather events. *Ex situ* seed banking is an essential tool for the safe and efficient storage of wild plant genetic material. This cost-effective method for maintaining genetically diverse and representative collections allows a network of seed banks to strategically store, conserve and research our diverse Australian flora.



Knowledge sharing

Our national network of experts contribute to the development of policies, programs, research and on-ground projects that seek to improve biodiversity outcomes. We do this by sharing our knowledge and expertise, highlighting good news stories and updating national guidelines and standards. We continuously strive to improve our plant conservation data and make it openly available through the Australian Seed Bank Online platform.



Science and research

Our seed science endeavours are critical to understanding the biology and ecology of the seeds we collect and for developing specific methodologies for germinating and storing seed. Our research into the evolution and adaptability of native species informs restoration projects across the country.



Using our collections

The seeds we secure are always collected for a reason beyond a life in the bank. Collections are used for growing on and planting out at both *in situ* and *ex situ* locations. These plants play an important part in translocation or restoration projects to bolster wild populations and ecosystem management. Germinants from germination trials are also used for seed production areas or living collections in botanic gardens to help educate the public about our work.



Our outcome areas

Four outcome areas will guide the evolution of the Partnership into its next decade.



Outcome 1 Growing our collections, research and restoration contributions

The Partnership will increase the representation of native species and their genetic diversity across our collections. We will focus on increasing the representation of the Australian flora, and the collection and storage of maternal lines to better understand the genetic diversity within species in *ex situ* collections, particularly those secured during our earlier work. This information will inform the prioritisation of future collecting programs, translocations, restoration and research, particularly for threatened species. The Partnership will continue to be at the international forefront of *ex situ* conservation science by supporting and undertaking research into germplasm storage, seed biology and ecology, and informing the management and use of collections to contribute substantially to the global discourse on plant conservation, propagation and use in translocations and ecosystem restoration. The use of Australia's seed collections will continue to increase as further research and restoration opportunities are created through Partner projects and collaborations with governments, First Nations Peoples and land managers across the continent and throughout the region.



Outcome 2 Growing our investments in our facilities and people

Growing investments in seed bank facilities and people is crucial to ensuring Australia's seed banks grow their capacity and capabilities to address increasing threats to biodiversity and increasing demand for the use of collections. This will be done in line with international gene banking standards, scientific advances in germplasm conservation and international standards for ecosystem restoration. We will continue to invest in training opportunities through collaborations with universities, academic institutions and conservation organisations to equip the next generation of conservation scientists and practitioners with the necessary skills and expertise. We will work with governments, business and the philanthropic community to secure these strategic investments. We will ensure these investments continue to grow in line with conservation needs, providing greater future capacity and capability to respond to threats, restore native habitats and secure better biodiversity outcomes for Australia.



Outcome 3 Improving engagement and partnerships with Australia's First Nations Peoples

The ASBP recognises First Nations Peoples throughout Australia, including their continuing connection to Country. We pay our respects to Elders past and present. Our facilities are located on many different lands throughout Australia, and we undertake collecting, research, translocations and restoration activities across many more. The Partnership is therefore committed to Reconciliation with Australia's First Nations Peoples. Over the coming years, we will build on our existing collaborations with Indigenous groups to support best practice conservation in line with cultural expectations. We will seek to learn together and improve our understanding and approaches to working on Country for better biodiversity outcomes. We will also strive to secure funding that supports co-development and co-delivery of seed conservation projects on Country, and share any benefits realised through these collaborative efforts, including knowledge and expertise, to complement the work of Traditional Custodians in conserving flora on Country.

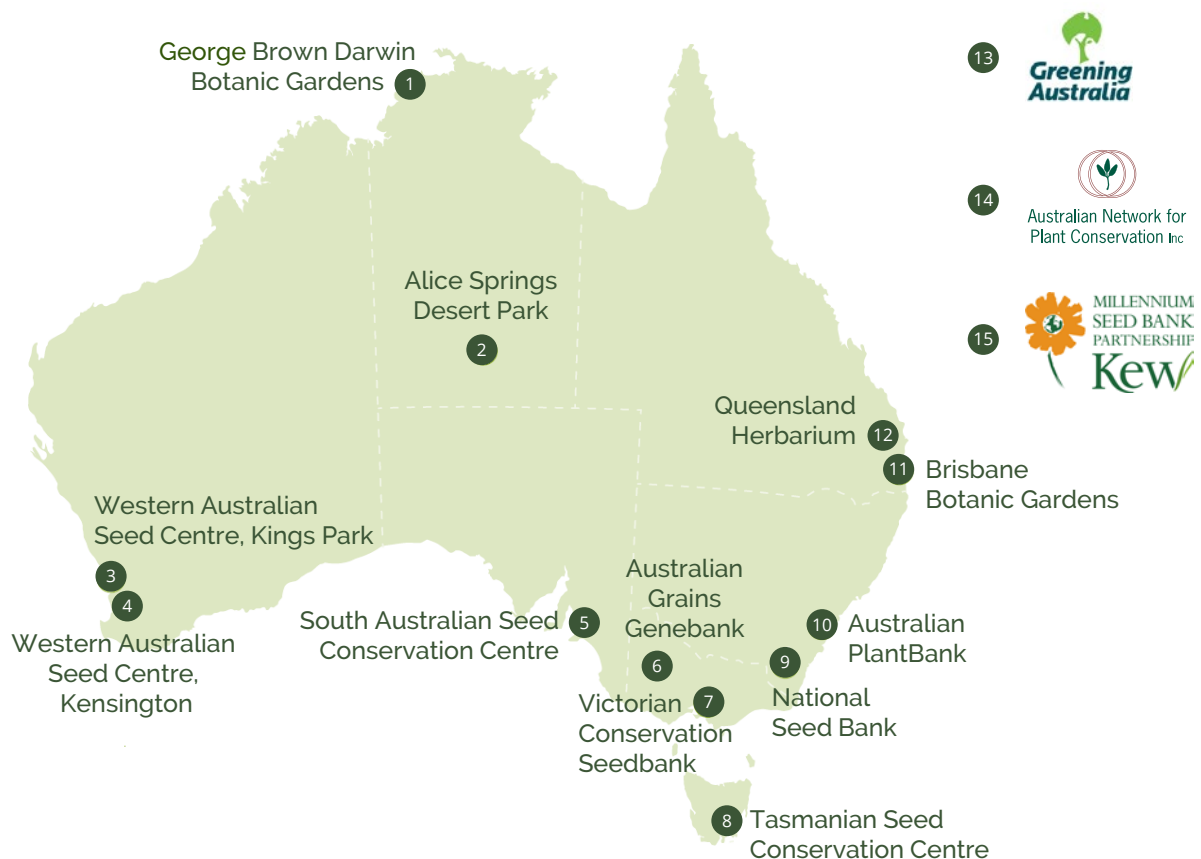


Outcome 4 Developing and sharing knowledge

We will continue to support the implementation of better conservation strategies, policies and programs at the local, national and international levels by working with governments, industry and the community. We will share our knowledge and data with environmental decision-makers and on-ground practitioners. The Partnership will continue to provide open access to seed and germination data across our Partnership collections online through the Australian Virtual Seed Bank. We will advocate for best practice germplasm conservation by encouraging awareness and use of the guidelines for *Plant germplasm conservation in Australia* (3rd edition) (Martyn Yenson et al. 2021, published by the Australian Network for Plant Conservation (ANPC)), and we will build capacity across the sector by actively sharing our knowledge with the global seed banking and conservation community to enable transformation of the sector.

Our Partners

The Partnership is an alliance of organisations including at least one conservation seed bank in every Australian state and territory, as well as state environment agencies and non-government organisations including the ANPC, Greening Australia and the Millennium Seed Bank Partnership of the Royal Botanic Gardens, Kew. Our links across conservation and restoration seed banks, governments and the plant conservation sector allows for strategic national collaborations, enabling our goals to be achieved on a countrywide scale.



Our Partners are located across the country and work together to safeguard Australian plants.

Partner organisations of the Australian Seed Bank Partnership

1. George Brown Darwin Botanic Gardens – Parks and Wildlife Commission of the Northern Territory (GBDBG)

2. Alice Springs Desert Park – Parks and Wildlife Commission of the Northern Territory (ASDP)

3. The Western Australian Seed Centre, Kings Park – Botanic Gardens and Parks Authority (BGPA)

4. The Western Australian Seed Centre, Kensington – Department of Biodiversity, Conservation and Attractions (DBCA)

5. South Australian Seed Conservation Centre – Botanic Gardens and State Herbarium, South Australia (BGSH)

6. Australian Grains Genebank – Agriculture Victoria Research Division, Department of Jobs, Precincts and Regions (AGG)

7. The Victorian Conservation Seedbank – Royal Botanic Gardens Victoria (RBGV)

8. Tasmanian Seed Conservation Centre – Royal Tasmanian Botanical Gardens (RTBG)

9. National Seed Bank – Australian National Botanic Gardens, Parks Australia (ANBG)

10. The Australian PlantBank – Australian Botanic Gardens, Mount Annan, Botanic Gardens of Sydney (BGoS)

11. Brisbane Botanic Gardens Seed Bank – Brisbane City Council (BBG)

12. The Queensland Herbarium – Department of Environment and Science, Queensland (DESQ)

13. Greening Australia (GA)

14. Australian Network for Plant Conservation (ANPC)

15. Millennium Seed Bank Partnership – Royal Botanic Gardens, Kew, UK (MSBP)



Dedicated to a better Brisbane





Associate organisations of the Australian Seed Bank Partnership

The Partnership delivers across a diverse range of operational and theoretical areas in collaboration with like-minded individuals, organisations and institutions both within and external to Australia. These Associates support the Partnership to deliver on our objectives across seed collection and banking, applied research, restoration and translocation action and the development of guidelines, standards and scientific advice to governments, business, individuals and land managers. Our current Associates include:

- Atlas of Living Australia
- Australian Government Department of Climate Change, Energy, the Environment and Water
- Botanic Gardens of Australia and New Zealand Inc.
- Centre for Australian National Biodiversity Research
- Environs Kimberley
- Plant Health Australia
- CSIRO
- Society for Ecological Restoration Australasia

A list of the organisations that supported the Partnership this year can be found in our 'Acknowledgements' section.

Boronia rivularis in flower at Cooloolo National Park
(Image: Jason Halford).

Our history

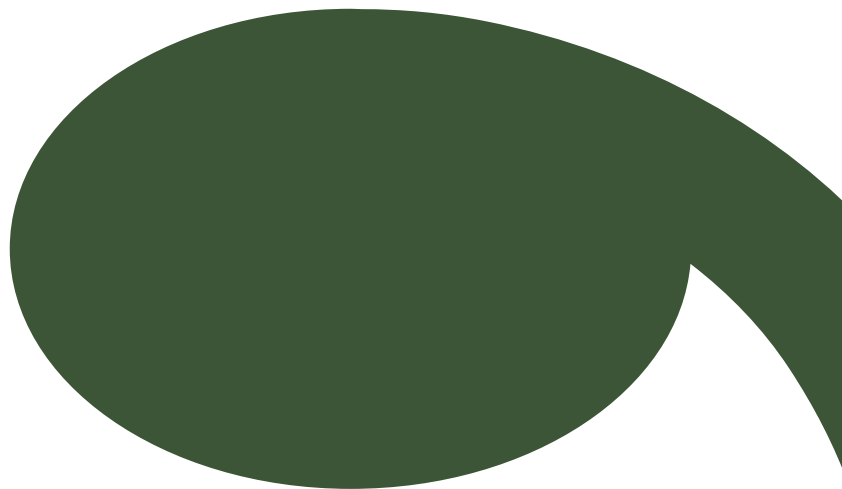
The drive to bank Australian seed for conservation began well before the year 2000, though efforts increased significantly with the start of the Millennium Seed Bank Project supported by the Royal Botanic Gardens, Kew. This international project aimed to safeguard 24,000 global plant species from extinction by 2010, in line with the targets of the Global Strategy for Plant Conservation (GSPC). Australia's contribution to this effort was significant, supported greatly by the establishment of the Australian Seed Conservation and Research Network (AuSCAR). AuSCAR provided Australian seed banks with the opportunity to collaborate more effectively at the multi-jurisdictional level, providing more strategic species targeting for conservation and research across several states.

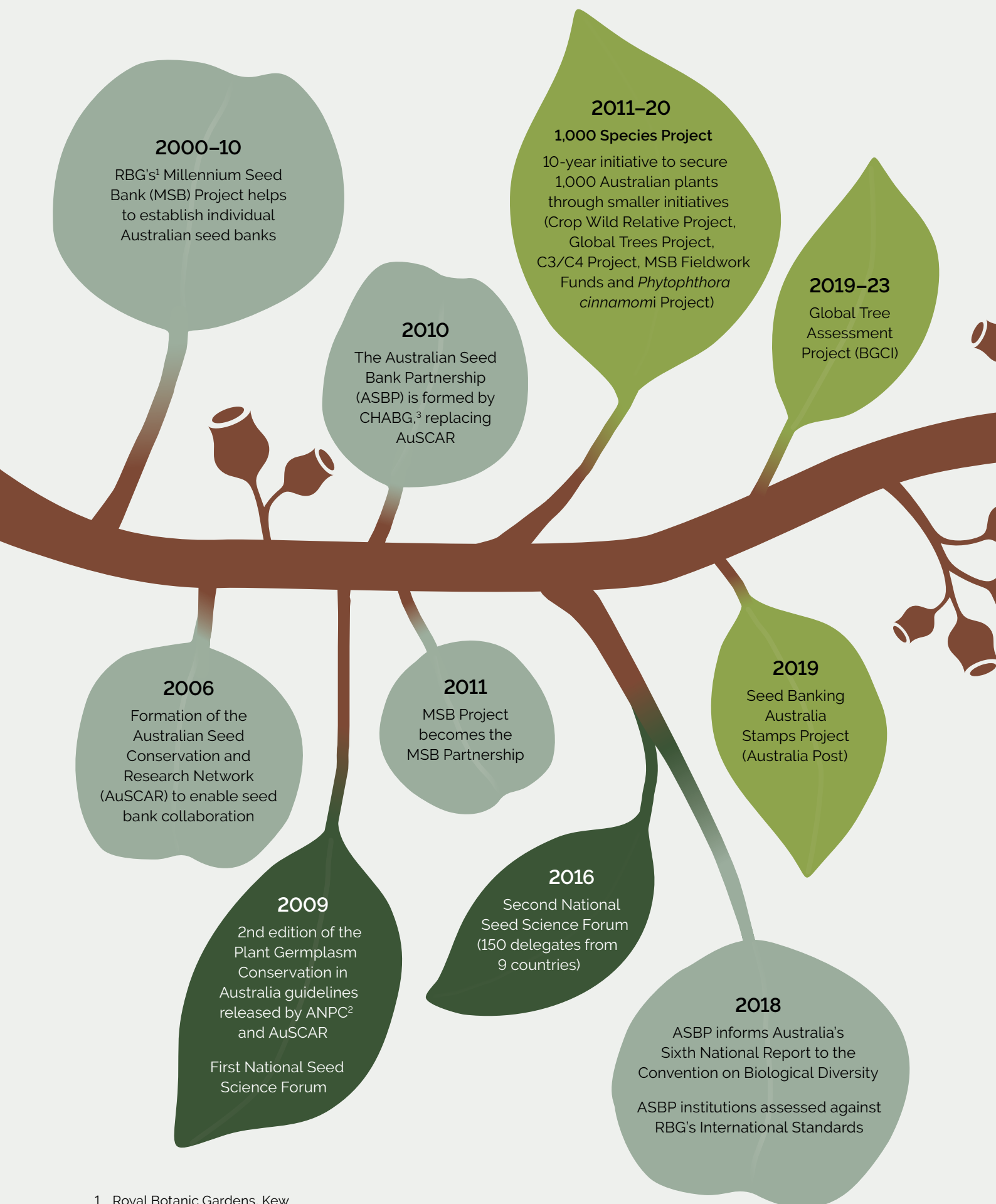
Building on the success of AuSCAR, the Council of Heads of Australian Botanic Gardens formally established the Australian Seed Bank Partnership (the Partnership) in 2010. The Partnership was the first countrywide alliance of seed banks and other organisations delivering collaborative seed collecting, banking, research and knowledge sharing. In our first decade, the Partnership embarked on the '1,000 Species Project', which aimed to secure previously unbanked Australian flora through funded initiatives for threatened species, priority tree and grass species, plants impacted by *Phytophthora cinnamomi*, and crop wild relatives. These combined efforts enabled the Partnership to secure over 1,400 species, contributing to the second decade of targets of the GSPC.

Since the 2019–20 summer bushfires, the Partnership has worked tirelessly to deliver emergency post-bushfire seed collecting and research through six projects. This work focused on the plants identified by the Wildlife and Threatened Species Bushfire Recovery Expert Panel as requiring urgent management intervention; regional priority plants; Myrtle Rust-impacted species; culturally significant flora; and threatened species listed under national, state and territory environmental legislation.

More recently, the sharing of knowledge, research and data has been a focus for the Partnership through the preparation of our Australian Virtual Seed Bank portal, our Collections Review Project and the publication of findings from our 2021 Australian Seed Science Conference. See the 'Year in review' section for more information.

The following pages illustrate the main seed banking achievements since the year 2000. We welcome you to join us as together we write the next chapter in Australian seed banking.

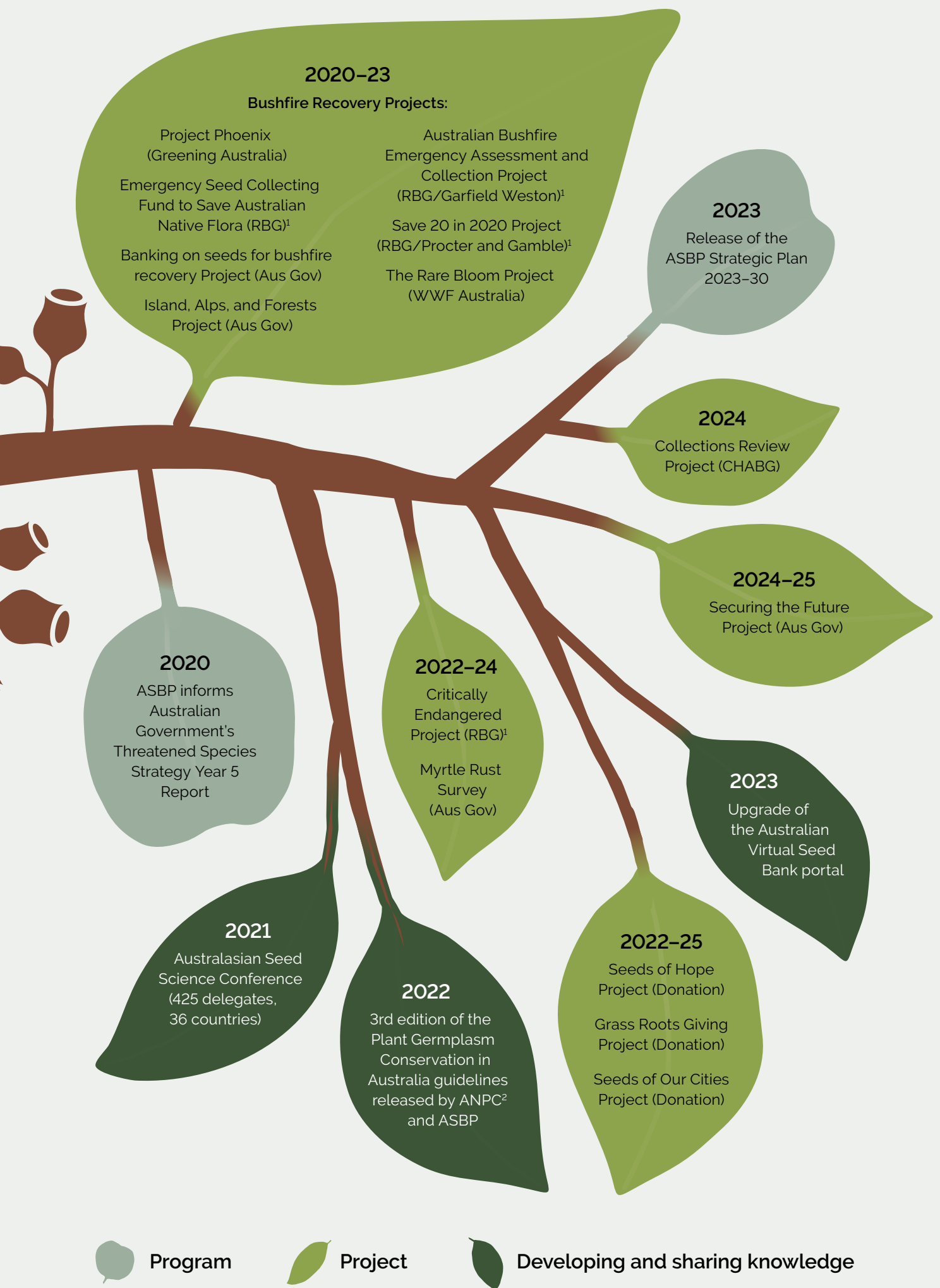




1 Royal Botanic Gardens, Kew

2 Australian Network for Plant Conservation

3 The Council of Heads of Australian Botanic Gardens



Our governance

The Council of Heads of Australian Botanic Gardens Incorporated (CHABG) draws on the expertise of senior executives from Australia's capital city botanic gardens, who guide the strategic direction of the Partnership's work, ensuring we address national plant conservation priorities and contribute to international conservation targets.

Members of the Management Committee of the Council at 30 June 2024

Mr Michael Harvey – Director, Botanic Gardens and State Herbarium, South Australia (Chair)

Mr Yann Gagnon – Director, Royal Tasmanian Botanical Gardens (CHABG Secretary)

Mr Dale Arvidsson – Curator, Brisbane Botanic Gardens

Mr Alan Barrett – Chief Executive Officer, Botanic Gardens and Parks Authority (Kings Park)

Mr Peter Byron – General Manager, Australian National Botanic Gardens

Mr Simon Duffy – Chief Executive, Botanic Gardens of Sydney

Mr Bryan Harty – Director, George Brown Darwin Botanic Gardens

Mr Chris Russell – Director and Chief Executive, Royal Botanic Gardens Victoria



Mr Michael Harvey



Mr Yann Gagnon



Mr Dale Arvidsson



Mr Alan Barrett



Mr Peter Byron



Mr Simon Duffy



Mr Bryan Harty



Mr Chris Russell

Other position holders

Mr Peter Byron – General Manager,
Australian National Botanic Gardens, Canberra
(CHABG Public Officer)

Dr Brett Summerell – Director Research and
Chief Botanist, Botanic Gardens of Sydney
(CHABG Treasurer)



Mr Peter Byron



Dr Brett Summerell

Australian Seed Bank Partnership Secretariat

The role of the National Coordinator is to provide strategic leadership and program management to oversee the implementation of the Partnership's business plan, policy and operations. The Assistant Coordinators support the coordination of national *ex situ* seed conservation programs, capacity building and research collaborations. The Secretariat work with the members of the Partnership to secure the necessary funds for operations and programs that will realise the business plan for the Partnership. These positions are generously supported by funding provided by the Director of National Parks, and are hosted at the Australian National Botanic Gardens, Canberra.

Dr Kathy Eyles – National Coordinator,
Australian Seed Bank Partnership

Mr Bradley Desmond – Assistant Coordinator,
Australian Seed Bank Partnership



Dr Kathy Eyles



Mr Bradley Desmond

National Steering Committee

The National Steering Committee brings together a team of leading experts from across the Partnership, who help guide the delivery of the Partnership's Strategic Plan and practical plant germplasm conservation programs and projects. These experts range from seed scientists, botanists, taxonomists and ecologists to horticulturalists and plant conservation ambassadors. At June 2023 the committee members were:

Australian Seed Bank Partnership	Dr Kathy Eyles, National Coordinator Mr Bradley Desmond, Assistant Coordinator
Millennium Seed Bank Partnership Royal Botanic Gardens, Kew, UK	Dr Aisyah Faruk, Conservation Partnership Coordinator (Europe and Oceania)
National Seed Bank Australian National Botanic Gardens, Parks Australia	Dr Thomas North, Curator Dr Gemma Hoyle, Seed Scientist
The Western Australian Seed Centre, Kings Park Botanic Gardens and Parks Authority	Dr David Merritt, Principal Research Scientist (Committee Chair) Ms Sue McDougall, Director of the WA Botanic Garden
South Australian Seed Conservation Centre Botanic Gardens and State Herbarium, South Australia	Mr Jerry Smith, Senior Scientific Officer
The Western Australian Seed Centre, Kensington Department of Biodiversity, Conservation and Attractions	Dr Andrew Crawford, Seed Bank Manager
The Australian PlantBank The Australian Botanic Garden, Mount Annan, Botanic Gardens of Sydney	Dr Nathan Emery, Manager of Seedbank and Conservation Collections
The Victorian Conservation Seedbank Royal Botanic Gardens Victoria	Dr Rebecca Miller, Research Scientist— Seed Science Dr Alastair Robinson, Manager Biodiversity Services
Tasmanian Seed Conservation Centre Royal Tasmanian Botanical Gardens	Mr James Wood, Seed Bank Manager

Year in review

Completed 2 seed projects

The **Rare Bloom Project** provided conservation support for **183 species** across **7 states and territories**

The **Seeds of Hope Project** worked to conserve an endangered *Conostylis*, locating **1,000 plants** and collecting **800 seeds**



Partnered with **First Nations groups**

Yamatji Indigenous rangers co-delivered the Seeds of Hope Project



Collection co-design with **Anangu** at Uluru-Kata Tjuta National Park for The Rare Bloom Project

Working with **Raukkan Indigenous rangers** to conserve a critically endangered *Spyridium* for the Securing the Future Project

Progressed 3 seed projects



The **Critically Endangered Project** will conserve **10 CE plants** in WA and Tas

Grass Roots Giving Project will conserve the endangered Midlands **Greenhood Orchid**



Securing the Future Project will conserve **10 Priority Plants** in the Threatened Species Action Plan



Continued the **Collections Review Project** to analyse all Partnership collections made over **20 years**

Published a **special issue** of the *Australian Journal of Botany* featuring **7 research papers** from the 2021 Australasian Seed Science Conference



Completed 2 knowledge development projects

Global Trees Assessment Project developed IUCN⁴ Red List assessments for **1,207 endemic Australian trees**



National Myrtle Rust Survey found **62%** of all Myrtaceae species and **87%** of EPBC⁵-listed Myrtaceae species have material in *ex situ* collections

\$10K raised for the **Seeds of Our Cities Appeal** supporting a future urban seed conservation project

Launched the upgraded **Australian Virtual Seed Bank** portal



⁴ International Union for Conservation of Nature

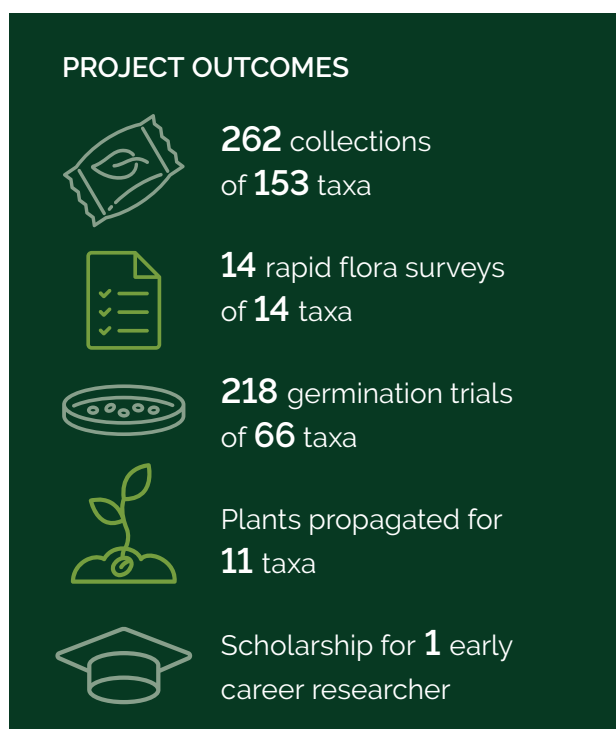
⁵ Environmental Protection and Biodiversity Conservation Act 1999

Outcome 1 Growing our collections, research and restoration contributions

The Partnership has worked over the past year to further *ex situ* conservation, plant science and species recovery across Australia. We have made progress on five projects that further our plant conservation goals. Join us as we explore these projects, outlining how collaboration has led to both local and nationwide outcomes.

Completed Partnership projects

The Rare Bloom Project™



The Rare Bloom Project™ was a three-year program delivered in partnership with the World Wildlife Fund (WWF) Australia in collaboration with Botanica by Airwick. It aims to improve conservation outcomes for 120 Australian native wildflowers from fire-affected areas through seed banking, germination research and restoration.

At its core, The Rare Bloom Project™ sought to undertake a nationwide program of seed collection, germination trials, propagation and reintroductions, as well as long-term seed banking, by leveraging partnerships with eight ASBP Partners spanning seven states and territories.

Supplementary funding was also raised for the project through the sale of species-themed art at a Sydney pop-up boutique titled 'The Rare Bloom Florist'. Funding raised supported a Student Research Scholarship aiming to advance our understanding of seed ageing. Additionally, Woolworths supported the project, providing activation funding for three threatened species, including the endangered Corunna Daisy, Bussell's Spider Orchid and Omeo Storksbill.



A planting day for *Olearia quercifolia* was held at the Australian Plant Bank for The Rare Bloom Project™ (Image: Nathan Emery).

Despite challenges from adverse weather conditions, germplasm availability issues and disruptions caused by the COVID-19 pandemic, we exceeded initial expectations. At the conclusion of the project in December 2023, the Partnership had provided conservation support for an impressive 183 species, making a substantial contribution to *ex situ* plant conservation in Australia.

The project's legacy endures as a model for collaborative conservation efforts. Beyond its outcomes, this project stands as a testament to the power of partnership, the importance of proactive conservation, and the collective responsibility we bear in safeguarding the rich tapestry of Australia's native plant heritage for generations to come.

We would like to acknowledge project funders from the WWF Australia, Botanica by Airwick and Woolworths group.

Spidey senses tingling in South Australia!

Pictured is the endangered Wimmera Spider-orchid (*Caladenia lowanensis*). This species was only previously known from a few populations in Victoria, but in 2021 our Partners at the South Australian Seed Conservation Centre visited Bordertown, South Australia, to look for additional populations as part of The Rare Bloom Project.

The team surveyed two farms with conservation agreements on their land and discovered new populations of this threatened orchid on both properties! Following their discovery, two collections totalling 1.41 million seeds were secured for long-term conservation. This is the first time the species has been collected in South Australia and is a significant achievement for the conservation of the species.



Wimmera Spider-orchid (Image: Daniel Duval).

Seeds of Hope Project

PROJECT OUTCOMES



6 collections



10 flora surveys



Engagement with 2
Indigenous ranger groups

In December 2022, the Partnership ran a Christmas appeal seeking community support to fund a seed banking project. Thanks to generous donations and matched funding from the Council of Heads of Australian Botanic Gardens, over \$5,000 was raised to secure seeds and study the endangered Small Flowered Conostylis (*Conostylis micrantha*).

This remarkable wildflower is found only across 35 km in the Geraldton Sandplains of Western Australia on the lands of the Yamatji Nation. Previously known from only 250 plants, it is listed as endangered due to impacts from habitat loss and invasive species. Responding to this conservation need, we partnered with the Western Australian Seed Centre, Kensington to establish the Seeds of Hope Project.



The Small Flowered Conostylis (*Conostylis micrantha*)
(Image: Andrew Crawford).

This project aimed to survey all known locations of the species to collect up-to-date information on the number of plants and their distribution; secure seed from all known populations to ensure a representative conservation collection is available for future recovery efforts; and work alongside Indigenous rangers on Country to share knowledge and build skills.

In an impressive effort, the West Australian Seed Centre team conducted comprehensive surveys across all ten known populations of *Conostylis micrantha*, locating over 1,000 plants in six of them. Seed collections were made from the six populations where plants were found, resulting in over 800 seeds being banked. Yamatji Indigenous rangers and rangers from the Northern Agricultural Catchment Council played a crucial role in the project surveys, also providing valuable opportunities for cultural exchange and knowledge sharing.

The Seeds of Hope Project brought targeted conservation action to the Small Flowered Conostylis for the first time in over 15 years. Despite the challenges around low flower and low seed production, we gathered valuable data and seeds, giving a big boost to conservation efforts for this endangered species.



Project survey crew helped to locate plants, resulting in seeds being collected at the WA Seed Centre
(Image: Andrew Crawford).

Ongoing Partnership projects

Three Partnership projects are ongoing, with project outcomes current as of 30 June 2024.

Critically Endangered Project

PROJECT OUTCOMES



25 collections
of **11** taxa



13 germination trials
of **8** taxa



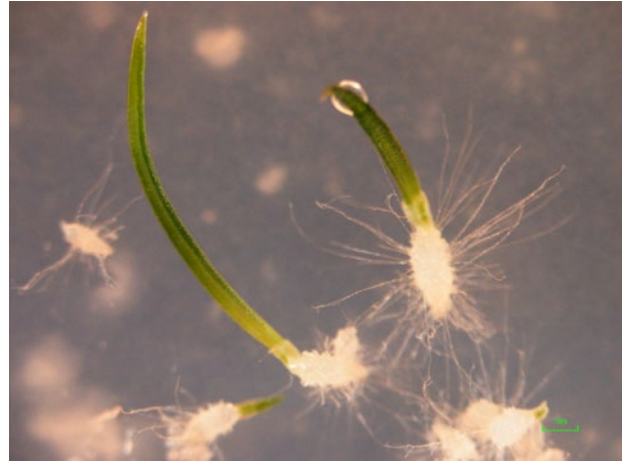
3 restoration activities
for **3** taxa

In September 2022, the Royal Botanic Gardens, Kew, provided a grant to allow the Partnership to contribute towards the recovery and overall conservation of ten critically endangered Australian plant species in Western Australia and Tasmania. This includes plants listed as threatened nationally or under state environmental legislation.

Funded until the end of 2024, the project aims to undertake:

- pre-collection field surveys
- seed collection activities for species not currently banked, or to improve genetic representation of previously banked collections
- recovery and restoration activities such as development of germination protocols, developing seed production areas or translocations.

Substantial progress has been made under this project to date, with the majority of seed collections and germination experiments complete. Our Partners at the Western Australian Seed Centre, Kings Park have completed germination trials for three orchids – *Caladenia elegans*, *Caladenia viridescens* and *Pterostylis sinuata*.



Caladenia elegans and *Caladenia viridescens* germinating (Images: Belinda Davis).

These species rely on a specialised symbiotic relationship with mycorrhizal fungi in order to germinate and survive. Crucial information was documented about baseline viability and fungal efficacy for each species. Importantly, this project allowed the first successful germination of *P. sinuata*, as a greater diversity of fungus samples were collected across the distribution of the species, allowing for the discovery of an appropriate symbiont and development of a successful germination protocol.

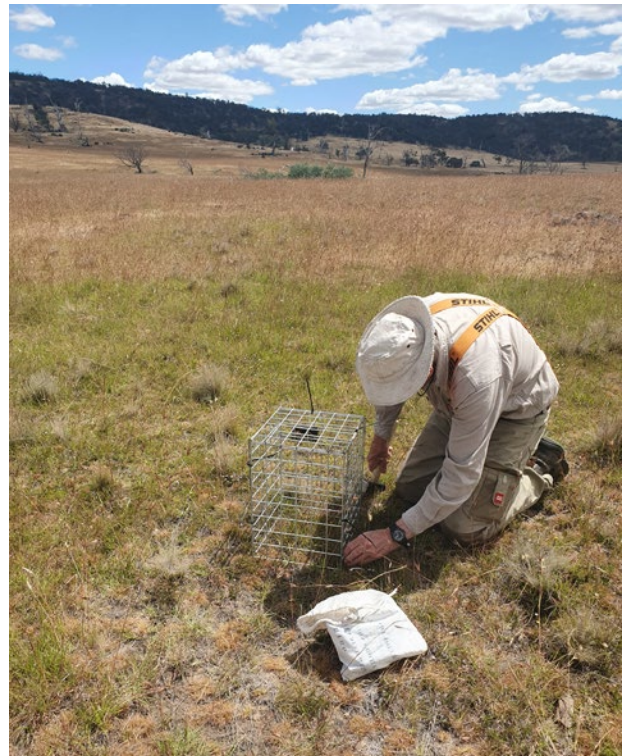
Grass Roots Giving Project

In June 2023, the Partnership ran an additional appeal seeking community support to fund a grassland conservation project. Over \$5,500 was raised thanks to public donations, including generous contributions from Wild Country Fund and the Council of Heads of Australian Botanic Gardens. This funding will help the Tasmanian Seed Conservation Centre to conserve the critically endangered Midlands Greenhood Orchid (*Pterostylis commutata*) under our [Grass Roots Giving Project](#).

This grassland orchid is endemic to the Tasmanian Midlands and is found in low numbers across severely fragmented sub-populations. It is threatened by altered fire regimes, grazing and slashing, and weed invasion. In 2022–23 a new sub-population was located within the significant native grasslands at Kingston Farm, a property which is managed for both wool production and biodiversity conservation with the support of M.J. Bale and the Midlands Conservation Partnership. This sub-population is now the largest known for the species and has provided a crucial opportunity to collect and bank precious seed.

Our Grass Roots Giving Project will enable us to continue work with the landowner to improve conservation efforts for this imperilled orchid. Funded until mid-2025, the project aims to:

- cage and hand-pollinate the orchids to protect them and encourage seed production
- secure seed to improve the diversity of banked collections and enable future translocation efforts
- secure collections of the symbiotic mycorrhizal fungi partner that helps the orchid to grow and survive
- germinate the orchid using seed and fungus collections.



Midlands Greenhood Orchid in flower and being caged to reduce herbivory (Images: Belinda Davis).

Securing the Future Project

PROJECT OUTCOMES



5 collections
of **5** taxa



2 germination trials
of **2** taxa



Seed imagery captured
for **2** taxa



Flora survey
of **1** taxa



Soil seed bank research
for **1** taxa

Our Securing the Future project will prevent extinction and improve the trajectory of ten priority plant species from the Threatened Species Action Plan. The project will deliver a comprehensive program of seed collecting, germination trials, propagation, reintroductions, research and long-term seed banking of native flora from South Australia, Victoria and Western Australia.

This work will improve the representation and genetic diversity of collections in Australian seed banks, with seeds and data available for research and restoration. The project will also support public awareness of action to conserve priority plant species.

Funded until mid-2025, the project aims to complete:

- seed collection and habitat survey for the Arckaringa Daisy (*Olearia arckaringensis*)
- a wholistic seed collection-to-translocation project (including habitat survey and improvement) for the Woods Well Spyridium (*Spyridium fontis-woodii*) in collaboration with First Nations and community rangers

- genetic research into the Forked Spyridium (*Spyridium furculentum*), to understand the diversity in existing seed collections
- seed collection and germination trials for the Stiff Groundsel (*Senecio behrianus*)
- seed collection, germination, translocation, seedling imagery and soil seed bank research for Foote's Grevillea (*Grevillea calliantha*)
- a collection, propagation and seed production project for the Tangled Wattle (*Acacia volubilis*) including research into genetic lineages, tissue culture and cryopreservation protocols
- seed collection and seedling imagery of the Giant Andersonia (*Andersonia axilliflora*)
- seed collection, germination, seedling imagery and translocation of the Narrow-leaved Eremophila (*Eremophila subangustifolia*)
- seed collection and seedling imagery of the Small-flowered Snottygobble (*Persoonia micranthera*)
- seed collection, germination and seedling imagery of Wongan Eriostemon (*Philotheca wonganensis*).

We acknowledge the support provided for this project by the Australian Government's Saving Native Species Program. Funding was provided under the Priority Species Grant that aimed to improve outcomes for priority plants from the Threatened Species Action Plan.

Jet-setting seeds

The Woods Well Spyridium (*Spyridium fontis-woodii*) is a critically endangered plant that's been on a journey around the world. Endemic to a small area in South Australia, this plant's habitat was historically cleared for agriculture. Recognising the importance of this unique species way back in 2006, the South Australian Seed Conservation Centre (SASSC) collected 1,200 seeds from over 30 plants, ensuring a broad genetic representation for *ex situ* conservation. These seeds then embarked on an international adventure, travelling to the Millenium Seed Bank in the UK for safekeeping against future threats.

Formally described in 2012, the Woods Well Spyridium was nationally listed in 2021 and became one of the 30 priority plants in the

Threatened Species Action Plan in 2023.

By this time, the wild population had dwindled to fewer than ten plants, significantly reducing the opportunities to collect from a diverse gene pool.

Our Securing the Future Project has provided new momentum to conserve this globe-trotting species. This, paired with the foresight of the SASSC, meant that genetically diverse seed was available for restoration. To date, 250 seeds have been repatriated from the UK and are being germinated for planting into a seed orchard at the Adelaide Botanic Gardens. Once established, this seed orchard will facilitate future seed collection and banking, ensuring this plant can continue its adventures for generations to come.



Woods Well Spyridium and seed, its seed beginning to germinate (Images: South Australian Seed Conservation Centre).

Outcome 2 Growing our investments in our facilities and people

Investment in our people and facilities is crucial to the continuation of the Partnership, and we are committed to equipping the next generation of conservation scientists and practitioners with the necessary skills and expertise. This increased future capacity and capability will allow us to respond better to threats, restore native habitats and secure better biodiversity outcomes for Australia. Learn about how we have worked towards this goal below.

Australian Seed Bank Partnership Implementation Plan

The *Australian Seed Bank Partnership Strategic Plan 2023–30* is the central planning document that sets the strategic focus for our organisation under four main outcomes. This plan outlines our direction towards 2030, providing external collaborators and potential funders with information about what we hope to achieve.

To guide our internal focus and set a path to increased capacity, this year we also developed an internal ASBP Implementation Plan. This plan provides metrics for our National Steering Committee to track our progress, guide our development and suggest recommendations for the betterment of our Partnership. To measure our progress we have also completed an internal baseline audit of our staff, facilities and collaborations to track how we are progressing over time.

Collections Review Project

The Partnership's Collections Review Project aims to examine seed and other germplasm collections that have been secured in Australia's conservation seed banks between 2000 and 2020. The project will enable the Partnership to better understand and prioritise future collecting and research at the national and sub-national levels, leading to more targeted investment in staff and facilities; local, regional and national collecting priorities; and leading-edge biological and ecological research. This project will also help to shape our priorities in line with our new Strategic Plan over the next seven years.

Following an open and competitive expression of interest process, Dr Nathan Emery from the Australian PlantBank was selected to lead the data analysis components of the project. Dr Emery has worked closely with the Partnership over the course of this project to consolidate datasets from Partner facilities and undertake statistical analysis to assist in the review of collections.

The review will culminate in a journal article that illustrates the representativeness, functionality and value of Partnership germplasm collections. The project will enable the Partnership to identify gaps in our collections while also highlight areas for improvement in the capacity of Partnership staff and facilities. Once complete, recommendations will be made to our governing council where more targeted investment is required. This project is expected to be completed by early 2025.



Collection of *Spinifex sericeus* with herbarium specimen and some partly extracted seed (Image: Lorraine Perrins).

Outcome 3 Improving engagement and partnerships with Australia's First Nations Peoples

The Partnership is committed to Reconciliation with Australia's First Nations Peoples and our aim is to support best practice conservation in line with cultural expectations. We also strive to support co-development and co-delivery of seed conservation projects on Country, and share any benefits of these collaborative efforts with Traditional Custodians. While we recognise more work is required to progress our aspirations under this outcome, this year we made initial progress through the work discussed below.

Securing the Future Project

In the early stages of our Securing the Future Project, the South Australian Seed Conservation Centre (SASSC) completed conservation work for the critically endangered Woods Well Spyridium (*Spyridium fontis-woodii*) alongside First Nations people. This has involved surveys of known and predicted habitat with Raukkan Indigenous rangers.

Spyridium germinants from SASSC will also be provided to Raukkan native plant nursery later in the project to grow-on, before being used for translocations at Messent Conservation Park.

Members of Raukkan Nursery searching for Woods Well Spyridium at Mount Sandy, South Australia
(Image: Dan Duval).



Seeds of Hope Project

As was explored under Outcome 1, the Seeds of Hope Project marked the first significant conservation action for the Small Flowered Conostylis in 15 years. Found on the lands of the Yamatji Nation, it was imperative to the project that First Nations people co-deliver and benefit from conservation action of the species. Yamatji Indigenous rangers and rangers from the Northern Agricultural Catchment Council played a crucial role in field surveys under the project. Their participation not only helped locate more plants, but also provided opportunities for two-way-learning, where cultural and Western knowledge was shared and skills were built. This collaboration also laid the groundwork for further conservation collaborations in the future.



Yamatji ranger Dion Harris marking the location of a *C. micrantha* plant (Image: Andrew Crawford).

The Rare Bloom Project™

As part of The Rare Bloom Project™, staff from the National Seed Bank in Canberra travelled to Uluru-Kata Tjuta National Park in May 2023 to meet with Anangu (the Traditional Custodians of the park) and discuss collecting seeds from Country. From these meetings they began building relationships with Aangu to learn their plant conservation aspirations, the plants of cultural significance, and how to conduct seed collection in a respectful way. These discussions provided the opportunity to co-design a plant conservation project with cultural knowledge and the desires of First Nations people at its core. To learn more about the outcomes of this work, please read the National Seed Bank's story in the 'Partner highlights' section (page 31).



Regina Reid and Leigh Murray collecting mistletoe in Uluru-Kata Tjuta National Park, September 2023 (Image: Liv Schmidt).

Outcome 4 Developing and sharing knowledge

Key to our aims is the sharing of our knowledge and data to support environmental decision-makers and on-ground practitioners to implement conservation strategies, policies and programs. To increase awareness of the work of seed banks, the Partnership also works across various communication platforms. Publicising our achievements is crucial for increasing stakeholder engagement, generating support and sourcing donations that allow our work to continue. In the past 12 months, the Partnership has again been working to develop and share knowledge about germplasm conservation, and we are excited to share the progress.

Australian Journal of Botany Special Issue

Our special issue of the *Australian Journal of Botany* was released in September 2023, featuring important research from the 2021 Australasian Seed Science Conference. This issue shares knowledge about current and emerging directions in seed science and conservation. Including an introductory synthesis paper and seven research papers, this open access resource will allow the community to utilise current research on topics such as seed recruitment and germination under extreme environmental conditions, maternal line collections, the seed microbiome, germination of cloud forest species and the longevity of rainforest species in conservation seed banks.

The Partnership is also proud to support the publication of a paper collating novel and emerging seed science research from early to middle career researchers, which was a highlight of the conference proceedings.

We thank the authors, conference scientific committee and Dr Mark Ooi, the editor-in-chief of the *Australian Journal of Botany*, for publishing these articles to ensure active research was documented and shared with the conservation community. You can find the [Special Issue here](#).

Global Tree Assessment

The [Global Tree Assessment](#) is a project by Botanic Gardens Conservation International (BGCI) that aims to assess the conservation status of every known tree species globally. It will provide prioritisation information to inform conservation action for trees, so that no tree species need become extinct.

As Australia is rich in biodiversity, with more than 24,000 plant taxa and one of the highest levels of endemic tree species worldwide, it is imperative we understand the conservation status of every single tree species. This information can help with the allocation of research and conservation resources nationally. While some Australian endemic tree species have already been assessed under state, territory and national endangered species legislation, there remains many tree species that have not yet received a conservation assessment of any kind.

With funding from BGCI, and support from the International Union for Conservation of Nature (IUCN) Tree Specialist Group and many botanists and taxonomists from around Australia, this CHABG-led project aimed to increase the number of conservation assessments of Australian endemic tree species, contributing to the Global Tree Assessment. At the completion of the project in December 2023, 1,207 red list assessments were completed.

We would like to acknowledge the work of Dr Kelli Gowland in coordinating this project, as well as the many Australian botanists who contributed their time and expertise.

International Translocation Conference

Hosted in Fremantle from 13 to 15 November 2023, the 3rd International Translocation Conference explored a wide range of themes related to conservation translocations. With accelerated loss of biodiversity across the globe, the conference highlighted the importance of this tool to improve the recovery of threatened species.

Bradley Desmond from the Partnership Secretariat presented at the 'Beyond the Guidelines: designing resilient, persistent plant translocations on use of collections for plant conservation translocations' workshop, discussing the limitations and small-scale successes under Partnership programs. You can [watch the talk here](#).



Myrtle Rust Survey

Myrtle Rust, a highly invasive plant disease caused by the introduced fungal pathogen *Austropuccinia psidii*, poses a serious and urgent threat to Australia's native biodiversity. Myrtle Rust affects plant species in the family Myrtaceae, which includes iconic Australian species such as Paperbarks, Tea-trees, Eucalypts, Guavas and Lilly Pillies. These are key and often dominant species in many Australian ecosystems. To date, the fungus has proved capable of infecting around 400 native species and this number is expected to grow. Serious declines towards extinction are underway in some species, and broader ecological consequences are expected.

In late 2022, funding from the Australian Government's Department of Climate Change, Energy, the Environment and Water supported CHABG and Botanic Gardens Australia and New Zealand to develop a national living collections stocktake of Myrtle Rust-susceptible plant species. The stocktake was performed through a [survey](#) that ascertained which species are held in collections across seed banks, botanic gardens, arboreta and their nurseries.

Myrtle Rust infection on *Rhodamnia maideniana* flowers
(Image: Craig Stehn).



Responses were received from 26 organisations, including at least one in every Australian state/territory, as well as institutions in New Zealand and the United Kingdom that hold Australian Myrtaceae accessions. Data was analysed and a report was produced that found:

- 19 of 26 (73 per cent) organisations are actively monitoring for Myrtle Rust, and 12 (46 per cent) have reported previous observations of the disease
- 11 of 26 (42 per cent) organisations are part of the International Plant Sentinel Network
- 10 of 26 (38 per cent) organisations are funded to add additional species to their collections
- 1,899 of 3,072 (62 per cent) of accepted Myrtaceae species in the Australian Plant Census are secured in *ex situ* collections
- 158 of 182 (87 per cent) of Myrtaceae species listed under the EPBC Act are secured in *ex situ* collections, including the four priority Myrtaceae species listed in the Threatened Species Action Plan
- 45 of 49 (92 per cent) priority species in the Myrtle Rust National Action Plan are secured in *ex situ* collections
- 12 of 49 (24 per cent) priority species in the Myrtle Rust National Action Plan have less than ten accessions secured
- accessions of six Myrtaceae species were acquired due to a suspected tolerance to Myrtle Rust.

The results were shared with government, business and the philanthropic sector to inform strategic planning and management of Myrtaceae collections, to support further research and to assist in the prioritisation of future resources.

Seeds of Our Cities Appeal

From 16 May to 30 June 2024, the Partnership ran the [Seeds of Our Cities Appeal](#), which aimed to raise funds for an urban bushland seed banking project and educate our audience on the importance of this habitat. Urban remnant

vegetation plays a crucial role in our cities, serving as pockets of biodiversity that offer numerous benefits to both humans and wildlife. These patches of native vegetation are often the last remnants of once extensive ecosystems, providing critical habitat for many rare plant and animal species. Urban bushland also contributes to the overall health and wellbeing of communities, acting as lungs for our cities, reducing urban heat and providing opportunities for recreation, education and connection to nature. Conserving these green spaces is essential for maintaining biodiversity and sustainable cities for the future.

The appeal utilised social media and a dedicated appeals webpage to provide information to our audience about these habitats. The appeal raised total of \$10,000 from 33 donations, including co-contributions from the [Wild Country Environmental Fund](#) and investment by the [Council of Heads of Botanic Gardens](#). In addition to the funds raised, the appeal also achieved a reach of 178,473 people and resulted in 38 per cent increase in our Instagram followers. This successful education and donation campaign will now fund a priority urban flora conservation project. The outcomes of this project will be communicated to our audience in the coming years.



Seeds of our Cities appeal (Image: Bradley Desmond).

Social media

During the 2023–24 financial year, the Partnership invested in improving our social media presence by sharing weekly Partner stories, seed science knowledge and our [Seeds of Our Cities Appeal](#). Across Facebook and Instagram, 198 posts and stories were shared reaching nearly 380,000 people. Across our platforms we saw an increase in followers (+9 per cent on X, +2 per cent on Facebook and +47 per cent on Instagram), with our most [popular post](#) relating to work done under Project Phoenix to conserve the Delicate Bittercress (*Cardimine tryssa*) in Tasmania.

Publications

Apart from the many research publications developed by our Partners, the Partnership has prepared articles and papers to promote awareness of our work at the project and national levels. These can be viewed following the links below:

- *Australian Journal of Botany*:
 - [Volume 71\(7\)](#): Special Issue: Australasian Seed Science Conference 2021
- *Plants, People, Planet*:
 - [Vol 6\(1\)](#): Ex situ germplasm collections of exceptional species are a vital part of the conservation of Australia's national plant treasures.
- *FronDS* newsletter:
 - [April 2024 Issue 106](#): The Rare Bloom Project
- *Australasian Plant Conservation*—the bulletin of the Australian Network for Plant Conservation
 - Issue 32(1): 'Island, Alps and Forests' Project: A multi-regional approach to bushfire recovery
 - Issue 32(2): The hustle to save Bussell's
 - Issue 32(3): Fighting Myrtle Rust with *ex situ* collections data
 - Issue 32(4): Now you see me: Identifying seed bank collecting targets.



Delicate Bittercress (*Cardimine tryssa*)
(Image: Royal Tasmanian Botanic Gardens).

Upgrade of the Australian Virtual Seed Bank

Since 2012, the Atlas of Living Australia (ALA) hosted the Australian Seed Bank Online, a central portal for seed banking data from the Partnership. In 2022, the Partnership embarked on a project to upgrade the portal to ensure it meets industry and accessibility standards, and to provide seed collection and germination data to support research and conservation management of Australia's native flora.

Through 2022–23 a Partnership working group formed to aid ALA in the redevelopment of the portal, providing feedback on key upgrades and testing functionality. The newly rebranded [Australian Virtual Seed Bank](#) portal was officially launched on 23 October 2023 through a [webinar](#) attended by over 70 people. This open access online resource is a virtual seed bank for seed collectors, researchers, students and government agencies to examine the status of various *ex situ* collections across Australia.

We wish to acknowledge the efforts of the ALA, the Partnership working group and all Partners for provision of their data for this project.

Partner highlights

Learn about our Partners' highlights for this financial year.

Australian PlantBank

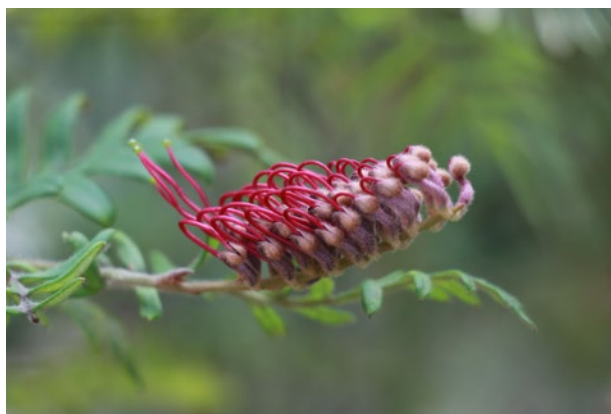
This year marked a strategic shift in the PlantBank team's approach to seed collection for threatened flora. In collaboration with the NSW Department of Climate Change, Energy, the Environment, and Water 'Saving our Species' program, we focused on collecting and maintaining separate maternal seed lines of some of the most threatened flora in New South Wales. The goal of this maternal seed collection strategy was to support existing and forthcoming genetic data, enhance the overall quality and representativeness of collections, and improve the utility of these collections in conservation projects such as translocation or population reinforcement.

Implementing this strategy necessitated reducing the number of annual target species but increasing the number of populations collected per species. Over the past year, we prioritised collecting seeds from several endangered and

critically endangered *Grevillea* species. Despite the persistent La Niña conditions over spring and summer, we successfully collected seeds from more than 450 maternal lines across ten *Grevillea* species, including the endangered *Grevillea mollis*, a new addition to our seed bank collection. Approximately 8,000 seeds across the priority species were processed and placed in long-term conservation storage at PlantBank, representing the largest conservation collections made for many of these species. For species lacking supporting genetic data, we collected and stored leaf samples from every maternal plant from which seeds were collected. This was done under the guidance of colleagues at the Research Centre for Ecosystem Resilience at the Botanic Gardens of Sydney. Once the genetic data becomes available, our seed maternal lines can be linked and assessed to determine the diversity captured in these collections.



Seedbank curator Graeme Errington placing mesh bags over fruiting branches of the critically endangered *Grevillea iaspicula* (Wee Jasper Grevillea) (Image: Nathan Emery).



Inflorescence of the critically endangered *Grevillea caleyi* (Caley's Grevillea) (Image: Katherine Thomson).

To ensure efficient processing and testing of seed collections with multiple maternal lines (some exceeding 30 lines), we took a small percentage of seeds from each line and pooled them into a 'curation collection'. Viability testing was conducted on the curation collections to provide an average seed viability across maternal lines.

The team has also commenced further seed testing on four *Grevillea* species with larger seed collections to develop germination protocols and determine the seed germination response to current and future temperatures. An optimised germination protocol will then be applied to the remaining species with fewer seeds to assess its broader applicability.

National Seed Bank

The National Seed Bank (NSB) at the Australian National Botanic Gardens (ANBG) conducted a successful seed collection trip to Uluru-Kata Tjuta National Park (UKTNP) in late September 2023 as part of the Partnership's Rare Bloom Project.

In preparing for and planning this fieldwork, NSB staff focused on developing relationships and consulting closely with Aangu Traditional Owners from the park. We were given permission to collect and work alongside 12 Aangu Mala Rangers to learn about the species on their Country, while helping to train them in conservation seed banking methods.

Collecting culturally important species meant that NSB staff were able to build a productive two-way relationship that was beneficial to both parties. Over ten days we made 28 seed collections from 27 taxa. This included securing the first collections of Mistletoe to be banked in Australia. Mistletoe has been a relatively understudied group despite being fundamental to ecosystem function across most Australian landscapes. At UKTNP, with the help of Mala Rangers, we managed to collect four different mistletoe species including *Lysiana exocarpi*, *Amyema preissii*, *A. maidenii* and *A. sanguinea*. Having these species in the bank gives us the opportunity to develop collecting and

processing protocols and begin to undertake the necessary research to determine their storage and germination requirements.

Since this on-Country work, additional connections have been made. In February 2024, four of the Mala Rangers travelled to the ANBG and Booderee National Park to learn more about *ex situ* plant conservation techniques. Collaborating with the Mala Rangers on their Country has been a major highlight of The Rare Bloom Project, and the beginning of what we hope will be an ongoing, mutually beneficial relationship facilitating further plant conservation and research at UKTNP.



Uluru-Kata Tjuta National Park in bloom (Image: Leigh Murray).



Charmaine Paddy seed sorting at Uluru-Kata Tjuta National Park, September 2023 (Image: Liv Schmidt).

South Australian Seed Conservation Centre

In 2023–24, the South Australian Seed Conservation Centre (SASCC) continued to expand their work, being involved in over 25 projects with over 20 partners and capturing 151 seed collections for 117 species. This includes collections for four critically endangered, 13 endangered and six vulnerable species listed under national environmental legislation.

We began a new project with the Foundation for Australia's Most Endangered to work on high-priority South Australian species. Seed was collected for six species and is being used to propagate plants to establish insurance populations. This includes in-vitro symbiotic germination of endangered orchids such as the Lowly Greenhood (*Pterostylis despectans*) and Bayonet Spider-orchid (*Caladenia gladiolata*).

This year SASCC was also able to undertake surveys and monitoring of the Lax Leek Orchid (*Prasophyllum laxum*), a critically endangered species that is also one to the 30 priority plants listed in the Australian Government's *Threatened Species Action Plan 2022–2032*. This species had not been recorded since 2018; however, the team were able to assess the only known population, finding 11 plants and recording ecological habitat

information. Work was completed to protect the area from grazing, and a subsequent visit undertaken to collect seed. This work will allow future projects to propagate the species.

The SASCC also received funding from the Limestone Coast Landscape Board Grassroot Grants to work on three species at risk of immediate extinction in South Australia, such as *Phebalium calcicola*, known from only five remaining wild plants. During 2023–24 the team was able to collect seed and grow these plants for further translocations. This funding also allowed the team to undertake targeted surveys for *Olearia suffruticosa*, growing the numbers of known plants from 30 to over 100 plants. Germplasm was collected from all these populations and has been propagated to be used for translocation to establish viable insurance populations.



Lowly Greenhood seedlings grown using in-vitro symbiotic germination at the SASCC (Image: Jerry Smith).



Dr Jenny Guerin with the first ever collection of *Prasophyllum laxum* seed. This will be used to undertake in-vitro symbiotic germination to establish insurance populations (Image: Jerry Smith).

Tasmanian Seed Conservation Centre

This summer, the Tasmanian Seed Conservation Centre aimed to survey Tasmania's central plateau, with a focus around the Second Lagoon area. A trip in December 2023 found good numbers of a rare endemic *Ranunculus jugosus*, a sizeable population of *Carex* sp. Algonkian Rivulet, and a new population of *Senecio extensus*. While not listed at the federal level, this Fireweed is considered endangered in Victoria, and within Tasmania it was only known from a single location. This new population consists of around 150 plants, which doubles the known number of plants in Tasmania. This unexpected discovery allowed the collection of over 20,000 seeds in March 2024. Additionally, we were able to collect 16,000 seeds of *Carex* sp. Algonkian Rivulet. This year's survey data will also aid future attempts at collecting rare Buttercups like *Ranunculus collicola* that were missed due to bad timing and poor weather conditions

Victorian Conservation Seedbank

This year, the Victorian Conservation Seedbank (VCS) secured a further 30 seed collections from 26 species from throughout Victoria, while the cryobank added a further six collections from five fern species. A major highlight for the VCS this year was the number of meaningful collaborative projects we have had with other ASBP Partners and external organisations to achieve conservation outcomes.

Collection highlights included securing a seed collection of the nationally listed *Gentiana baeuerlenii*. This species was previously only known from Namadgi National Park, Australian Capital Territory, and near Bombala, New South Wales. It was recorded for the first time in Victoria in 2023 and, through collaboration with Parks Victoria rangers at Wilsons Promontory, seed was secured within two months of its discovery.



Seedbank volunteers collecting *Carex* sp. Algonkian Rivulet from the Second Lagoon (Image: Lorraine Perrins).

Similarly, through partnership with the NSB and staff at CSIRO, we were able to secure seed of the Daisy Fleabane, *Erigeron conyzoides*, an endangered alpine species that has eluded our previous collection efforts. The cryobank added two populations of the endangered *Lastreopsis hispidus* (Bristly Shield-fern) and now has five populations banked for this species that are sampled from across most of its Victorian distribution.

A particular highlight was the opportunity to work with Windamara's Budj Bim Rangers and staff from the Gunditj Mirring Traditional Owners Aboriginal Corporation (TOAC) for the collection of Manna Gum (*Eucalyptus viminalis*) seeds on Gunditjmarra Country. Staff from the Royal Botanic Gardens Victoria (RBGV) Seedbank, Science and Horticulture teams worked with rangers and Traditional Owners over two days to collect seed from populations distributed across four Indigenous Protected Areas. These seed collections will be held for long-term conservation of Manna Gum diversity by the VCS. We are excited by the strengthening of the relationship between RBGV and Gunditj Mirring TOAC, and that this work will be expanded over the next year with more time on Country working

together to collect seeds from additional Manna Gum populations. This project is being undertaken as part of the Victorian Koala Management Strategy, supported by the Biodiversity Division at the Victorian Department of Energy, Environment and Climate Action.

Western Australian Seed Centre, Kensington

Grevillea calliantha is a critically endangered plant known only from six locations in Western Australia, with less than 25 plants remaining in the wild. With plant numbers continuing to decline, urgent action is needed to save the species from extinction. Since 1998, several translocations have been established, which currently number more than 200 plants across three locations. Further translocations are planned, but until recently the amount of wild collected seed held in the Western Australian Seed Centre, Kensington has limited this goal. In response to this desperate need for seed, a seed production area (SPA) was established in 2022 with the aim of producing sufficient seed to facilitate future translocations. The SPA used a mix of plants propagated from both seed and cuttings.



The group making Manna Gum seed collections on Gunditjmarra Country (Image: Rebecca Miller).

In the 18 months since its establishment, the SPA has produced 2,200 seeds in total. While this amount might appear small, the amount of wild seed collected thus far for this species over a 30-year period totals just 1,400 seeds. Many plants in the SPA are yet to reach reproductive maturity and it is expected that seed yields will improve in the coming years. There are also future plans to use the seed obtained from the SPA to establish a new translocation, to further reduce this species' risk of extinction.



Western Australian Seed Centre, Kings Park

As is the case across much of the country, Western Australia is by no means immune to the contemporary challenges of climate change, biosecurity, water security and invasive species. In stark contrast to recent wet conditions experienced along much of the east coast, Perth has recently emerged from one of its warmest and driest summers on record. The pressures these weather patterns have placed on natural areas, streetscapes, public parklands and private gardens throughout the Swan Coastal Plain and Darling Range are apparent, and the effects alarming.



Flower and seed of *Grevillea calliantha*
(Images: Andrew Crawford).



Vegetation pocket on Yanneymooning Hill (Image: Matthew Stray).



Collectors identifying plants in Wheatbelt (Image: Chelsea Payne).

As part of the future directions identified for the Western Australian Botanic Garden, the need to adapt and shore up the development of climate- and landscape-resilient collections remains a key priority. A variety of new and existing spaces within Kings Park and Botanic Garden, many of which are publicly accessible, are evolving into trial beds or resilient landscapes, offering opportunities to grow and assess species for their landscape suitability and display potential over the longer term. While much of seed and cutting material brought to Kings Park as part of ongoing field collecting programs is stored and maintained securely for conservation and research purposes, a portion can be utilised for such trials.

This year, staff from the Western Australian Seed Centre, Kings Park planned a field collecting trip for Western Australia's Wheatbelt region with the aim to target potentially 'resilient' species without a conservation listing. As part of the process, target species were identified with a goal to target species or genera with little or no representation within existing collections.

In November 2023, the team undertook a six-day trip between the many conspicuous granite outcrops which act as important microhabitats for a range of plants and animals within the vastly cleared Wheatbelt region. They visited Charles Gardner, Boolanelling, Chiddarcooping and Geeraning nature reserves to place mesh bags over immature fruit, then in January 2024 a three-day follow-up trip allowed the team to retrieve the material. Approximately 40 collections were made for a number of species, including *Acacia anfractuosa*, *Acacia rossei*, *Eucalyptus crucis* ssp. *lanceolata*, *Grevillea paradoxa*, *Hakea preissii* and *Kunzea pulchella*.

Visitors to Kings Park and Botanic Garden can expect to see some of these, along with many more similarly resilient species, which are sure to feature more regularly within gardens and landscapes of the future.

Looking to the future

The Partnership will continue to focus on priority plant conservation and research activities that are shaping the future of threatened species recovery and ecosystem restoration across Australia.

This work has never been more important as Australia sets ambitious national targets to implement the Kunming-Montreal Global Biodiversity Framework, ahead of the sixteenth Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) in October. Complementary actions for plant conservation will be adopted at the COP in the revised Global Strategy for Plant Conservation.

The valuable collections, trusted knowledge and research programs of our Partners mean the Partnership is well-positioned to contribute to these global and national strategies. The outcomes of the Collections Review will help to guide our future collection and research priorities and where we need to invest to realise the conservation purpose of our seed banks.

A key challenge in Australia is raising awareness about the value of conserving our unique and diverse plants and communities and the global importance of this task. Australia has the highest percentage of endemic plant species, with 85% of our plants occurring nowhere else on Earth.

As well as expanding our social media reach, a new monthly 'PlantChat' lunchtime webinar series will connect biodiversity policymakers, program managers, data specialists, and conservation practitioners, with emerging issues for plant conservation and the critical science and threatened species recovery work being undertaken by our network.

An important pathway to generate community support for plant conservation is to grow our partnerships with First Nations Peoples, land managers and local communities. These exciting collaborations are creating opportunities for shared learning about plants and place, building new relationships, as well as local care and passion for native plants.

Volunteers collecting *Xerochrysum palustre* seed from the shores of Lake King William, Tasmania
(Image: James Wood).



Financial Report Review

The Council of Heads of Australian Botanic Gardens
Incorporated

For the year ended 30 June 2024

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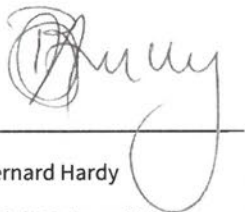
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Reviewer's Independence Declaration

The Council of Heads of Australian Botanic Gardens Incorporated For the year ended 30 June 2024

I declare that, to the best of my knowledge and belief, during the year ended 30 June 2024, there have been:

1. no contraventions of the independence requirements as set out in *Associations Incorporation Act (ACT) 1991*; and
2. no contraventions of any applicable code of professional conduct in relation to the review.



Bernard Hardy

Unit G10 Quayside
50 Eastlake Parade
Kingston ACT 2604

Dated: 30 July 2024

Committee's Report

The Council of Heads of Australian Botanic Gardens Incorporated

For the year ended 30 June 2024

Committee's Report

Your committee members submit the financial report of The Council of Heads of Australian Botanic Gardens Incorporated for the financial year ended 30 June 2024.

Committee Members

The names of committee members throughout the year and at the date of this report are:

Committee Member	Date Started	Position
Dale Arvidsson	18/03/2015	Ordinary Member
Alan Barrett	18/10/2018	Ordinary Member
Yann Gagnon	24/11/2022	Secretary
Brett Summerell	09/09/2013	Treasurer
Michael Harvey	05/07/2021	Chairperson
Denise Ora	19/11/2020	Ordinary Member
David Harland	01/09/2023	Ordinary Member
Rebecca Pirzl	30/10/2023	Ordinary Member
Peter Byron	19/03/2024	Ordinary Member
Chris Russell	20/06/2024	Ordinary Member
Simon Duffy	03/06/2024	Ordinary Member
Bryan Harty	01/07/2013	Ordinary Member

Meetings of Committee Members

During the financial year, a number of committee meetings were held. Attendances by each of committee member during the year were as follows:

Committee Members Name	Number Eligible to Attend	Number Attended
Dale Arvidsson	5	5
Alan Barrett	5	4
Yann Gagnon	5	5
Brett Summerell	5	5
Michael Harvey	5	5
Denise Ora	2	2
David Harland	3	0
Rebecca Pirzl	3	1
Peter Byron	2	2
Chris Russell	1	1
Simon Duffy	1	1
Bryan Harty	5	5

Principal Activities

The Council of Heads of Australian Botanic Gardens Incorporated is a not-for-profit Association established for the purpose of supporting:

- the protection, conservation and enhancement of Australian plants and their ecosystems.

- the provision of information and education.
- undertaking research about plants and plant communities.

Significant Changes

No significant change in the nature of these activities occurred during the year.

Operating Result

The profit after providing for income tax for the financial year amounted to \$7,476.34.

Going Concern

This financial report has been prepared on a going concern basis which contemplates continuity of normal business activities and the realisation of assets and settlement of liabilities in the ordinary course of business. The ability of the association to continue to operate as a going concern is dependent upon the ability of the association to generate sufficient cashflows from operations to meet its liabilities. The members of the association believe that the going concern assumption is appropriate.

Signed in accordance with a resolution of the Members of the Committee on:



Michael Harvey (Chairperson)

Dated: 25/10/2024



Brett Summerell (Treasurer)

Dated: 25/10/24

Income and Expenditure Statement

The Council of Heads of Australian Botanic Gardens Incorporated For the year ended 30 June 2024

	2024	2023
Income		
Contributions	26,000	20,500
Donations	4,624	3,106
Grants Received	391,091	-
Total Income	421,715	23,606
Gross Surplus	421,715	23,606
Other Income		
Interest Income	1,039	-
Total Other Income	1,039	-
Expenditure		
Accounting Fees	6,558	2,575
General expenses	10,253	13,980
Grant Payments	386,050	-
Insurance	2,934	2,014
Interest Paid	438	-
Printing & Stationery	-	682
Project Payments	9,045	-
Total Expenditure	415,278	19,251
Current Year Surplus/ (Deficit) Before Income Tax Adjustments	7,476	4,355
Current Year Surplus/(Deficit) Before Income Tax	7,476	4,355
Net Current Year Surplus After Income Tax	7,476	4,355

The accompanying notes form part of these financial statements. These statements should be read in conjunction with the attached compilation report.

Assets and Liabilities Statement

The Council of Heads of Australian Botanic Gardens Incorporated As at 30 June 2024

	NOTES	30 JUNE 2024	30 JUNE 2023
Assets			
Current Assets			
Cash and Cash Equivalents	2	313,563	484,869
Trade and Other Receivables	3	2,200	1,100
GST Receivable		18,301	-
Total Current Assets		334,064	485,969
Non-Current Assets			
Term Deposits		100,000	-
Total Non-Current Assets		100,000	-
Total Assets		434,064	485,969
Liabilities			
Current Liabilities			
Bank Overdraft		-	200
GST Payable		-	40,081
Total Current Liabilities		-	40,281
Other Current Liabilities			
Accrued Expenses		-	3,950
Total Other Current Liabilities		-	3,950
Non-Current Liabilities			
Other Non-Current Liabilities			
Projects		365,203	379,253
Total Other Non-Current Liabilities		365,203	379,253
Total Non-Current Liabilities		365,203	379,253
Total Liabilities		365,203	423,485
Net Assets		68,861	62,484
Member's Funds			
Capital Reserve		68,861	62,484
Total Member's Funds		68,861	62,484

The accompanying notes form part of these financial statements. These statements should be read in conjunction with the attached compilation report.

Notes to the Financial Statements

The Council of Heads of Australian Botanic Gardens Incorporated For the year ended 30 June 2024

1. Summary of Significant Accounting Policies

The financial statements are special purpose financial statements prepared in order to satisfy the financial reporting requirements of the ACT Associations Incorporation Act 1991. The committee has determined that the association is not a reporting entity.

The financial statements have been prepared on an accruals basis and are based on historic costs and do not take into account changing money values or, except where stated specifically, current valuations of non-current assets.

The following significant accounting policies, which are consistent with the previous period unless stated otherwise, have been adopted in the preparation of these financial statements.

Property, Plant and Equipment (PPE)

Leasehold improvements and office equipment are carried at cost less, where applicable, any accumulated depreciation.

The depreciable amount of all PPE is depreciated over the useful lives of the assets to the association commencing from the time the asset is held ready for use.

Leasehold improvements are amortised over the shorter of either the unexpired period of the lease or the estimated useful lives of the improvements.

Impairment of Assets

At the end of each reporting period, the committee reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have been impaired. If such an indication exists, an impairment test is carried out on the asset by comparing the recoverable amount of the asset, being the higher of the asset's fair value less costs to sell and value in use, to the asset's carrying amount. Any excess of the asset's carrying amount over its recoverable amount is recognised in the income and expenditure statement.

Provisions

Provisions are recognised when the association has a legal or constructive obligation, as a result of past events, for which it is probable that an outflow of economic benefits will result and that outflow can be reliably measured. Provisions are measured at the best estimate of the amounts required to settle the obligation at the end of the reporting period.

Cash on Hand

Cash on hand includes cash on hand, deposits held at call with banks, and other short-term highly liquid investments with original maturities of three months or less.

Accounts Receivable and Other Debtors

Accounts receivable and other debtors include amounts due from members as well as amounts receivable from donors. Receivables expected to be collected within 12 months of the end of the reporting period are classified as current assets. All other receivables are classified as non-current assets.

Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of GST, except where the amount of GST incurred is not recoverable from the Australian Taxation Office (ATO). Receivables and payables are stated inclusive of the amount of GST

These notes should be read in conjunction with the attached compilation report.

receivable or payable. The net amount of GST recoverable from, or payable to, the ATO is included with other receivables or payables in the assets and liabilities statement.

Financial Assets

Investments in financial assets are initially recognised at cost, which includes transaction costs, and are subsequently measured at fair value, which is equivalent to their market bid price at the end of the reporting period. Movements in fair value are recognised through an equity reserve.

Accounts Payable and Other Payables

Accounts payable and other payables represent the liability outstanding at the end of the reporting period for goods and services received by the association during the reporting period that remain unpaid. The balance is recognised as a current liability with the amounts normally paid within 30 days of recognition of the liability.

2024

2. Cash on Hand

Westpac 224159 Project Management	262,463
Westpac 224167 Administration	44,044
Westpac 642852 Public Fund	7,056
Total Cash on Hand	313,563

2024

3. Trade and Other Receivables

Trade Receivables	
Other Debtors	2,200
Total Trade Receivables	2,200
Total Trade and Other Receivables	2,200

These notes should be read in conjunction with the attached compilation report.

True and Fair Position

The Council of Heads of Australian Botanic Gardens Incorporated For the year ended 30 June 2024

Annual Statements Give True and Fair View of Financial Position and Performance of the Association

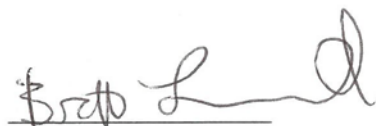
We, Michael Harvey, and Brett Summerell, being members of the committee of The Council of Heads of Australian Botanic Gardens Incorporated, certify that –

The statements attached to this certificate give a true and fair view of the financial position and performance of The Council of Heads of Australian Botanic Gardens Incorporated during and at the end of the financial year of the association ending on 30 June 2024.

A handwritten signature in black ink, appearing to read 'Michael Harvey', is written over a horizontal line. The signature is enclosed within a hand-drawn oval.

Michael Harvey (Chairperson)

Dated: 25/10/2024

A handwritten signature in black ink, appearing to read 'Brett Summerell', is written over a horizontal line.

Brett Summerell (Treasurer)

Dated: 25/10/24

Review Report

The Council of Heads of Australian Botanic Gardens Incorporated For the year ended 30 June 2024

Report on the Financial Report

We have reviewed the accompanying financial report, being a special purpose financial report, of The Council of Heads of Australian Botanic Gardens Incorporated which comprises the committee's report, the assets and liabilities statement as at 30 June 2024, the income and expenditure statement for the year then ended, notes comprising a summary of significant accounting policies and other explanatory information, and the certification by members of the committee on the annual statements giving a true and fair view of the financial position and performance of the association.

Committee's Responsibility for the Financial Report

The Council of Heads of Australian Botanic Gardens Incorporated is responsible for the preparation and fair presentation of the financial report, and has determined that the basis of preparation described in Note 1 is appropriate to meet the requirements of the *Australian Charities and Not-for-profits Commission Act 2012* (ACNC Act) and is appropriate to meet the needs of the members. The committee's responsibility also includes such internal control that the committee determines is necessary to enable the preparation and fair presentation of a financial report that is free from material misstatement, whether due to fraud or error.

Reviewer's Responsibility

Our responsibility is to express a conclusion on the financial report based on our review. We conducted our review in accordance with Auditing Standard on Review Engagements ASRE 2415 *Review of a Financial Report: Company Limited by Guarantee or an Entity Reporting under the ACNC Act or Other Applicable Legislation or Regulation*, in order to state whether, on the basis of the procedures described, anything has come to our attention that causes us to believe that the financial report does not satisfy the requirements of Division 60 of the ACNC Act including: giving a true and fair view of the registered entity's financial position as at 30 June 2024 and its performance for the year ended on that date; and complying with the Australian Accounting Standards and the *Australian Charities and Not-for-profits Commission Regulation 2013* (ACNC Regulation). ASRE 2415 requires that we comply with the ethical requirements relevant to the review of the financial report.

A review of a financial report consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

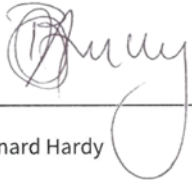
Conclusion

Based on our review, which is not an audit, nothing has come to our attention that causes us to believe that the financial report of The Council of Heads of Australian Botanic Gardens Incorporated does not satisfy the requirements of Division 60 of the *Australian Charities and Not-for-profits Commission Act 2012* including:

- (a) giving a true and fair view of the registered entity's financial position as at 30 June 2024 and of its financial performance and cash flows for the year ended on that date; and
- (b) complying with Australian Accounting Standards to the extent described in Note 1, and Division 60 of the *Australian Charities and Not-for-profits Commission Regulation 2013*.

Basis of Accounting

Without modifying our opinion, we draw attention to Note 1 to the financial statements, which describes the basis of accounting. The financial report has been prepared to assist The Council of Heads of Australian Botanic Gardens Incorporated to meet the requirements of the ACNC Act. As a result, the financial report may not be suitable for another purpose.

A handwritten signature in dark ink, appearing to read 'Bernard Hardy', is positioned above a horizontal line.

Bernard Hardy

Unit G10 Quayside
50 Eastlake Parade
Kingston ACT 2604

Dated: 30 July 2024

Certificate By Members of the Committee

The Council of Heads of Australian Botanic Gardens Incorporated
For the year ended 30 June 2024

I, Michael Harvey, c/o Australian National Botanic Gardens, Clunies Ross Street, ACTON ACT 2601 certify that:

1. I attended the annual general meeting of the association held on 25 October 2024.
2. The financial statements for the year ended 30 June 2024 were submitted to the members of the association at its annual general meeting.

A handwritten signature in black ink, appearing to read 'M Harvey', written over a horizontal line.

Michael Harvey (Chairperson)

Dated: 25/10/2024

Acknowledgements

The Australian Seed Bank Partnership would like to thank all of our supporters.

The financial support we receive through grants, philanthropy and public donations makes a significant contribution to conserving Australia's native plant diversity. A special thank you to all the organisations and individuals who provided funding and donated to the Partnership this year.

Our Partner and Associate organisations also provide crucial in-kind contributions that make what we do possible. The time, effort and expertise that is provided by Partner organisations for the love of native plants makes a tangible difference in what we can achieve.

Our work benefits greatly from the invaluable dedication and skills of volunteers who join us in the field and in seed banks to secure and process the seeds we collect. Their generous contributions ensure our native plants are provided with the best chance to survive in an uncertain future, and allow our seed scientists to focus their time on solving complex challenges with seed dormancy and germination.

Anyone in Australia or around the world can help us in our mission to conserve Australia's native plant diversity. Please contact us if you have an interest in supporting our work into the future.

Organisation/individual	Support provided
Australian Government Department of Climate Change, Energy, the Environment and Water	<ul style="list-style-type: none">• Funding for the Securing the Future Project through the Australian Government's Saving Native Species Program• Funding to support the implementation of the Myrtle Rust Survey
Wild Country Environmental Fund	Co-funding to support the Grass Roots Giving and Seeds of Our Cities projects
WWF Australia and Botanica by Airwick	Funding for The Rare Bloom Project™
Woolworths Group	Additional funding to support activations for The Rare Bloom Project™
Royal Botanic Gardens, Kew	Provision of funding for the Critically Endangered Project
Botanic Gardens Conservation International	Funding for the Global Tree Assessment Project
Director of National Parks	Hosting the Partnership Secretariat
Hogan Lovells	Pro bono legal services
Anna Moreing and Shiree DeSilva	Volunteers with the Partnership Secretariat

Get involved

Check out our website
to learn more about
our initiatives



Partner with us to
conserve Australian
native plants

Donate to support our efforts



Connect with us on social media
to follow our journey



Helichrysum pumilum flowering on
the slopes of Celtic Hill, Southwest
National Park (Image: James Wood).

Your donations will make a difference

People like you enable the Partnership to secure plant species for generations to come. With your help we can find and collect our native flora, and invest in world-leading science to unlock their germination secrets. Our nationwide network of seed banks can then safely store these precious genetic parcels of hope until they are needed for the restoration of Australia's landscapes.

Your donation will support the work of the Partnership. Our governing body ([the Council of Heads of Australian Botanic Gardens](#)) and National Steering Committee oversee the management of donations, so you can rest assured that your gift will go directly to the conservation of Australia's native flora.

Donating to the Partnership is simple when using the secure PayPal portal on our website. We welcome contributions of any size and can work with you to design a package that suits the parts of our work that you would like to support.

The Australian Seed Bank Partnership is a registered business name of the Council of Heads of Australian Botanic Gardens Inc (ABN: 58 153 442 365). We are registered with the Australian Charities and Not-for-profits Commission, holding deductible-gift recipient status. Donations of \$2 and above are tax deductible.



Contact us

Australian Seed Bank Partnership
c/o Australian National Botanic Gardens
GPO Box 1777
Canberra ACT 2601 Australia

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+61 (0)2 6250 9473
seedpartnership.org.au

 [@AustralianSeedBankPartnership](https://www.facebook.com/AustralianSeedBankPartnership)

 [@SeedPartnership](https://twitter.com/SeedPartnership)

 [@SeedPartnership](https://www.instagram.com/SeedPartnership)

Swamp Everlasting (*Xerochrysum palustre*) growing on the shores
of Lake King William, Tasmania (Image: James Wood).

