

THE AUSTRALIAN NATIONAL BOTANIC GARDENS – A LIVING BIODIVERSITY HOTSPOT

The Australian National Botanic Gardens is the national and internationally renowned botanic garden that holds the world's most comprehensive collection of Australian native plants, including a large number of rare and threatened species.

With an outstanding reputation for scientific and horticultural research the Gardens makes a significant contribution to the conservation and sustainable use of Australia's plant biodiversity. The Gardens will continue to demonstrate leadership in contemporary seed collection, curation and research, as we work towards the conservation of Australia's plant species.

The Gardens has established strong international and national partnerships, for example we work closely with Royal Botanic Gardens, Kew and we are an active member of the Australian Seed Bank Partnership. Further, our participation in the Global Strategy for Plant Conservation means we are helping to alleviate threats to endangered plants worldwide.

The Australian National Botanic Gardens
grows one third of Australia's plant species.
We are a destination of choice for visitors to
the National Capital.

In recent years we have:



Adopted a **Master Plan** that will enhance visitor experiences and grow our horticultural and research capabilities.



Selected a site for the new National Seed Bank as part of a proposed **National Horticulture Centre** within the Gardens.



Appointed a **seed conservation biologist** to lead the team and a dedicated **seed bank curator**, both with extensive specialist experience in banking native seed.



Attracted **researchers, research students and volunteers** undertaking collaborative research projects.

CAMPAIGN SUPPORTERS

The new National Seed Bank is a vital addition to the seed bank network in Australia and throughout the world. We must preserve biodiversity and cannot allow plant species to disappear. Seed Banks will help ensure the future of the planet for the next generations.

The record of achievement at the Australian National Botanic Gardens in seed collection, conservation, regeneration and research is to be applauded and the new facility will ensure that its talented staff and volunteers are better supported and encouraged to enhance their already outstanding achievements.

To safeguard Australia's native flora, a new purpose-built modern facility is needed. A thriving research hub and purpose designed vault for the storage of seeds and the comprehensive information on how to germinate and grow each species, will provide the desired security for each plant species collected.

The future of the Gardens will rely on continuing to enhance, display and protect its unique collection with a focus on strong research programs and deepening Australia's appreciation of our plant heritage. The new National Seed Bank at the ANBG is critical for realising our future vision.

You can leave a legacy, by helping to ensure the survival of some of our most endangered plants through seed banking – please join us in our fundraising campaign.

Michael and Marlena Jeffery

JOIN US IN SECURING THE FUTURE OF AUSTRALIAN PLANTS REVITALISE THE NATIONAL SEED BANK

www.anbg.gov.au/nationalseedbankcampaign

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The seed bank will be an important innovation catalysing critical research on the conservation of Australia's unique plant life.

PROF DAVID LINDENMAYER, ANU



Australian Government
Parks Australia



THE NEW NATIONAL SEED BANK

Building a
unique collection
of Australian
native seeds
for conservation
and research

AN INVITATION
TO CONTRIBUTE

AN INVITATION TO CONTRIBUTE TO SAFEGUARDING AUSTRALIA'S PLANT HERITAGE

As we approach the 50th anniversary of the Australian National Botanic Gardens in 2020, we are focused on developing enhanced horticultural capabilities and visitor experiences into the Gardens future. We are committed to ensuring that we remain at the forefront of contemporary botanic gardens worldwide and that the unique and diverse heritage of Australian plants is appreciated and protected.

The National Seed Bank is a key component of this long-term vision.

More than 1200 plant species in Australia are endangered and ex-situ collections of plant species are insurance policies against extinction in the wild. Seed Banks are valuable storehouses for conservation work, seeds are available for essential research and support for re-introduction of plants to their native habitats.

The Gardens current seed bank is at capacity and unless expanded will not allow us to achieve our future goals in both seed banking and research functions. Accordingly we intend to expand our seed bank collection and research capacity with a new purpose-built Seed Bank Facility.

We invite you to join us in building a contemporary National Seed Bank to guarantee the continuing collection, study and preservation of Australia's plant heritage.

Dr Judy West AO
Executive Director



A new National Seed Bank facility will safeguard
the future of Australian plant species.



KEY FUNCTIONS

Seeds are the essence of the next generation. We need seeds to ensure long term survival of plant species. Seed banks can store seed for thousands of years if held in appropriate conditions. A new seed bank facility will extend and enhance our native seed collection, research capability and knowledge on the collection, processing, storage and germination of Australian native seeds.

The National Seed Bank team will undertake four key functions:



CONSERVATION

Long-term storage for rare and threatened species and species from communities of national significance, or iconic or floristically unique locations.



RESEARCH

Develop new knowledge about the seed ecology, biology and physiology of Australian native seeds. Establish protocols for future 'activation' of seed collections by discovering their dormancy and germination cues.



PROPAGATION

Supply seed for production of plants as part of the Gardens 'living collection' and for the recovery, translocation, rehabilitation and restoration of rare species or communities.



SUPPLY

Provide seed for conservation and to approved organisations for research through the plant release program.

What we now need is a contemporary facility – a new National Seed Bank – a treasure trove of our unique Australian seeds, a productive research hub and ex situ vault storing seeds for future generations.



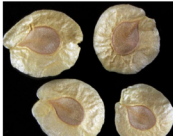
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Over 70 eucalypt species are at risk of extinction. Without seed banking, we could lose these plants that define us as a nation.

GREGORY ANDREWS,
THREATENED SPECIES COMMISSIONER



Millennium Seed Bank, Kew



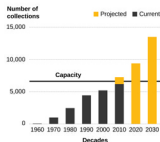
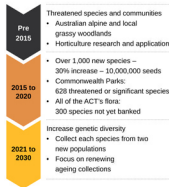
WHY WE NEED A NEW SEED BANK

Our current seed bank is reaching capacity and will not be able to accommodate the ambitious collection targets for 2030. Modern laboratory facilities are needed to advance our research capability, improving seed biological knowledge and enabling contribution to national and international conservation priorities.

The Australian Government Threatened Species Strategy was announced July 2016. The Strategy aims to bank the seeds of 100% of known threatened species by 2020.

The National Seed Bank is supported by the Australian Government and has a vital role in achieving this target.

SEED COLLECTION TARGETS – THE NATIONAL SEED BANK



Without a new Seed Bank facility we will not have the space to meet our targets, nor protect species that are not currently considered threatened.

The new facility will include large and integrated seed drying and cool rooms to ensure best practice seed handling during the banking process, incubation space for germination testing, improved laboratories with greater research capacity to expand our conservation partnership programs, a larger seed processing room and an expanded integrated freezer seed bank 'vault' to store the long-term conservation collections.

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We fully support and endorse the Australian National Botanic Gardens campaign to raise funds for a new National Seed Bank. Such a facility is essential if Australia is to conserve all of its unique botanical diversity for future generations.

DR PAUL R. SMITH, BOTANIC GARDENS CONSERVATION INTERNATIONAL



POD Pavilion, Kuala Lumpur Building, Malaysia



A RECORD OF ACHIEVEMENT

The Gardens has an impressive record of achievement in seed banking and collaborative research and partnerships:

- Our current seed bank facilities hold around 6,900 individual seed collections from 3,238 different plant species, with collections going back to the early 1960s.
- Our professional and dedicated staff have achieved this within our ageing facilities and with the support of volunteers.
- In our role on behalf of the Australian Government and as a member of the Australian Seed Bank Partnership, we are conserving seeds of species within Commonwealth national parks.
- Seed collection and staff training supporting plant conservation and restoration in Kakadu, Christmas Island and Norfolk Island National Parks.
- We have strong linkages with the Royal Botanic Gardens at Kew and provide seed to the Millennium Seed Bank partnership.

Our recent seed research has impact and is achieving innovative practical outcomes:

- Research revealing impacts of climate change on the ecology and longevity of Australian Alpine seeds to improve conservation practices.
- Information for land managers on soil seed banks and ecology of endangered alpine sphagnum bogs and fens to assist in maintaining ecosystem benefits.
- Increasing knowledge to enable conservation and restoration of grassy woodlands and rare and threatened flora.
- Seed identification and trait information made freely available through our new Seed Image Library to mobilise information required for restoration, research and art without disturbing the seed collections.

Our National Seed Bank is an active partner in the Australian Seed Bank Partnership through which almost 40% of Australia's threatened flora is secured in conservation seed banks.