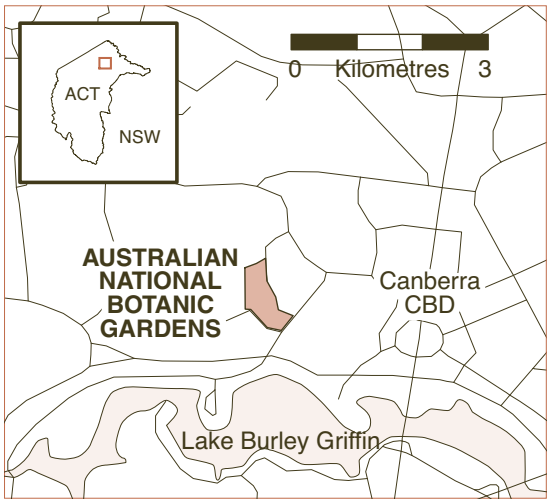
Australian National Botanic Gardens

http://www.anbg.gov.au



Special features

The Australian National Botanic Gardens (ANBG) is a major scientific, educational and recreational resource. It was one of the first botanic gardens in the world to adopt the study and display of indigenous species as a principal goal. Approximately one-third of the known flowering plant species that occur in Australia, and about half the known eucalypt species, are represented in its living collection. The ANBG is a national showcase in the horticultural use of Australia's indigenous plants.

The ANBG contributes to meeting Australia's obligations under various international environment conventions to which Australia is a signatory. In particular, the Convention on Biological Diversity recognises the importance of botanic gardens in ex situ and in situ conservation, research, training, plant identification and monitoring, raising public awareness, providing access to genetic resources, and global cooperation in relation to sustainable use of plant biodiversity.

Location	Latitude 35°16′ South, Longitude 149°06′ East
Area	85 hectares
Proclamation date	17 September 1991
IUCN category	Category IV
Biogeographic context	Displays plants from a vast range of biogeographic regions—alpine to tropical, coastal to central desert
Management plan	Second plan expires 9 January 2009
Other significant management documents	Management plan implementation schedule; risk assessment and management schedule; ANBG Masterplan (National Capital Authority); Capital Works and Maintenance Plan 2002–2005; Emergency Response Procedures Manual June 2005; ANBG Fire Procedures 2006; kangaroo and wallaby management plans; ANBG Education Service Policy; ANBG Photograph Collection Policy; Agreement for the Establishment and Operation of the Centre for Plant Biodiversity Research between the Director of National Parks and the CSIRO

Financial	Operating	$8.629 million
	Capital	$0.945 million
	Revenue	$0.499 million
Visitors	464,827 recorded	
Permits	4 commercial activity permits; 46 wedding or wedding photography licences; 145 licences to publish 648 photographs from the collection	

International conventions and agreements	
World Heritage Convention	Supports Australia's World Heritage sites through botanical research, scientific plant collections, plant identification, botanical information management and horticultural and educational programmes
Wetlands (Ramsar) Convention	Supports Australia's obligations under the Ramsar Convention through access to plant identification services and data on aquatic plants in the Australian National Herbarium, and through delivery of information on Australia's aquatic plants through its website
Other agreements	Collaborates with international organisations including: · International Association of Botanic Gardens · International Association of Plant Taxonomists · International Plant Propagators Society · International Union of Biological Sciences Taxonomic Databases Working Group · International Plant Name Index (Kew Botanic Gardens and Harvard University) · Global Biodiversity Information Facility · International Organisation for Plant Information World Vascular Plant Checklist Project

Environment Protection and Biodiversity Conservation Act 1999	
Heritage	On Commonwealth Heritage List

Centre for Plant Biodiversity Research

The Centre for Plant Biodiversity Research is a joint venture by the ANBG and CSIRO Plant Industry. It was formed in 1993 and renewed for a further 10 years in 2000.

The Australian National Herbarium is the foundation of this facility, housing voucher specimens for research and environmental studies and for plants in the ANBG with databases supporting the living, herbarium, and photograph collections. The herbarium is a major contributor to the network of Australasian herbaria, to Australia's Virtual Herbarium—a national project involving all states and territories—and to the

Australian Plant Census project to produce a national endorsed list of scientific names for Australian plants.

Monitoring

The ANBG's scientific planting is documented through voucher specimens in the Australian National Herbarium. A team of botanists, including national and international collaborators, ensure that the correct botanical names are always applied. New collection accessions help document the occurrence and distribution of plants in Australia.

A specialised and sophisticated database system maintains essential links between specimens in the herbarium, contemporary scientific literature, and the plants in the gardens.

A team of ANBG staff continually assesses the ANBG's living plant specimens.

Future challenges

Water resource management continues to be a major challenge for the ANBG. This is due to both the continuing drought and sharp increases in unit water costs in Canberra. A new computerised irrigation management system was purchased in 2005–06 which will be used to manage irrigation more efficiently and generate water use savings.

The impact of climate change will be a major focus for the ANBG, as it seeks to understand and adapt to the changes in local and Australian climate and to communicate sound climate change and horticultural messages to its visitors and clients.

Maintaining the ANBG's growing role as a tourist attraction will remain a key focus. Visitor attractions like the Friends of the ANBG's summer concerts and guided tours will continue to be important.

The Friends provided $38,000 to build a new visitor shelter expected to be ready for use by December 2006.

Work continued on the Australian Plant Census project to produce a list of flowering plant names for the whole of Australia that is endorsed by the Australian Government and the state and territory herbaria. The project coordinator is located at the ANBG and the project is due for completion in 2007.

Funding for the first phase of Australia's Virtual Herbarium ended in 2006 and the ANBG is working with state and territory herbaria and museums to build on this project through a number of new national infrastructure proposals.

Report on performance by key result areas

KRA1: Natural heritage management

Major issues

- Water management infrastructure

Actions

- Increase water use efficiency

Performance results 2005–06

- Met Australian Capital Territory water use reduction targets for the year
- Purchased a $180,000 irrigation management system (see case study on page 54)

KRA2: Cultural heritage management

Major issues

- Interpretation
- Education

Actions

- Provide interpretation and education programmes for all sectors of the community

Performance results 2005–06

- Hosted three major exhibitions in the visitor centre—'Art and the Bryophyte', 'Phoenix: Fire and Australian Plants' and 'Flora Tasmanica'
- Completed the ANBG's first artist in residence project with funding from the Australian Network for Art and Technology. The project is the Synapse Art and Science Residency Programme. The artist worked with the ANBG's cryptogam scientist on the exhibition 'Art and the Bryophyte'
- Continued evening spotlighting tours, the 'Twilight Forest Adventures', for school and community groups
- Hosted a popular live reptile exhibition—'Snakes Alive'
- Commenced upgrading the Rainforest Gully interpretation signage (to be completed in September 2006)

KRA4: Visitor management and reserve use

Major issues

- Visitor management in emergencies
- Visitor centre

Actions

- Implement visitor safety plan
- Upgrade facilities for the visitor centre, exhibition space and bookshop
- Initiate marketing plan

Performance results 2005–06

- Completed a major re-fit of the visitor centre in August 2005
- Engaged a marketing consultant, began stakeholder consultation and prepared a draft marketing strategy to be refined and implemented in 2006–07
- Recorded 464,827 visitors to the ANBG and 111,799 to the visitor centre
- 17,955 children attended the ANBG education programmes

KRA5: Stakeholders and partnerships

Major issues

- Friends of the ANBG
- Greening Australia
- Birrigai Outdoor School
- Centre for Plant Biodiversity Research

Actions

- Strengthen the partnership between the ANBG and the Friends of the ANBG
- Host the Greening Australia Community Seedbank on the ANBG site
- Continue the partnership with the Australian Capital Territory Government's Birrigai Outdoor School
- Continue to participate in the Centre for Plant Biodiversity Research, a joint venture between the ANBG and CSIRO Plant Industry

Performance results 2005–06

- The Friends of the ANBG ran the annual students' photographic competition and the autumn and spring plant sales; published quarterly newsletters; provided volunteer guided walks each day; committed $20,000 to a new water feature near

the visitor centre, the 'Friends Cascade'; supported the ANBG's annual summer concerts in January–February 2006

- Continued the close collaboration between the ANBG seedstore and Greening Australia including joint field collecting, seed storage and management. The ANBG also provides Greening Australia with space for seedling production
- ANBG staff continued their management, research and technical support roles in the Centre for Plant Biodiversity Research and the Australian National Herbarium

KRA6: Business management

Major issues

- Budget management
- Staff management
- Risk management

Actions

- Ensure business continuity and delivery of services
- Continue ongoing risk assessment

Performance results 2005–06

- Increased non-government revenue by $40,000 due to increased fees for parking, venue hire and weddings. The Natural Heritage Trust continued to support Australia's Virtual Herbarium project
- Maintained staff flexibility and training through internal and external acting arrangements and casual employment
- Maintained and regularly updated the risk watch list

KRA7: Biodiversity knowledge management

Major issues

- Australian National Herbarium
- Australian plant names
- Taxonomic botanical research
- Botanical database and information management
- The ANBG website, incorporating the Centre for Plant Biodiversity Research and the Friends of the ANBG

Actions

- Maintain and curate the Australian National Herbarium collections and make botanical data, information and expertise available to the national and international botanical community
- Develop and maintain the Australian Plant Name Index and the Australian Plant Census to list all the flowering plants in Australia
- Undertake taxonomic and systematic research, and publish and disseminate research findings
- Develop and maintain scientific databases of Australian plant information
- Promote and provide information about Australian native plants via the internet

Performance results 2005–06

- Curated and databased specimens under the Australia's Virtual Herbarium project
- Continued management of the Australian Plant Name Index and the collaborative Australian Plant Census project to produce an agreed list of scientific names for Australia's flowering plants. The project is funded through the Natural Heritage Trust and endorsed by Australian Government, state and territory herbaria
- Researchers completed scientific papers or publications resulting from research undertaken at the Australian National Herbarium. Areas of study include Australian Orchidaceae, Asteraceae, Myrtaceae, Malvaceae, Santalaceae and the bryophytes
- The ANBG and Centre for Plant Biodiversity Research website continued to develop as the premier online resource for information about Australian plants. The website recorded about 35,000 hits each day, an increase of 8,000 per day

Water conservation at the Australian National Botanic Gardens

Weather monitoring station

The ANBG in Canberra contains the most diverse collection of cultivated native Australian plants in the country, despite major climatic limitations including low rainfall and regular winter frosts. An important feature of maintaining the health of this collection is the use of irrigation water, especially in the dry summer months.

In the past three summers the ACT Government and ACT water utility (ACTEW) have used water restrictions as part of a strategy to deal with low rainfall and reduced water availability. A long-term strategy designed to reduce water use is now in place. The strategy recognises the need to adapt to the impact of climate change and Canberra's location within the Murray–Darling Basin. The ACT and Australian governments are committed to promoting and managing sustainable water use in the Murray–Darling Basin.

As a major water user, the ANBG is implementing strategies to reduce the use of water, both for sustainability and economic reasons. In 2005–06 the ANBG invested $180,000 to design and install a computerised irrigation system. The new system will help the ANBG make a permanent reduction in its irrigation water use, and reduce water costs. The cost of water in the ACT has increased significantly for 2006–07, with the ANBG water bill forecast to increase by $90,000.

The irrigation system will enable horticulturists to accurately measure and analyse the impact of micro-climatic conditions. This information, with knowledge of the various species' water requirements, will be used to determine the most effective and efficient irrigation programmes, watering when, and as, needed. For 2006–07 the ANBG's target is to reduce water use by 20 per cent. The 2005–06 target of meeting the permanent water restrictions was met.