

2010 - United Nations International Year of Biodiversity

Australia welcomes the International Year of Biodiversity 2010 as an opportunity to:

- raise awareness of how important biodiversity is to our lives
- demonstrate our strong commitment to protecting biodiversity, and
- strengthen our efforts to reduce the rate of biodiversity loss.

Australia will be celebrating the year with a number of activities and announcements with a biodiversity focus.

Bush Blitz

Australia launched its celebration of the International Year of Biodiversity with Bush Blitz - a pioneering three-year multimillion dollar partnership to identify the plants and animals in Australia's protected areas. An astounding three-quarters of Australia's biodiversity is yet to be identified, Bush Blitz hopes to put a dent in that number. No country has documented the biodiversity that exists in their protected areas in this way, let alone has it been undertaken across an entire continent.

The program was launched on the 15th of February 2010, by the Minister for Environment Protection, Heritage and the Arts the Hon Peter Garrett AM MP. "In this International Year of Biodiversity, Bush Blitz scientists will provide the baseline data that will help us protect our biodiversity. This is an investment in science-based decision making that will pay off for generations to come."

A national 'snapshot' of Australia's reserve system will enable more strategic acquisition of new reserves, enable world-leading management of existing reserves and allow preparation of climate change responses. The technology, information and partnerships required to assess the adequacy of Australia's reserve system at a national scale have not existed – until now.

A team of scientists will conduct six major biological surveys each year throughout Australia - discovering new species, making new records of species and reporting on them. Surveys will be conducted in the approximately 300 reserves that have been added to the National Reserve System within the past 15 years with Australian Government funding.

Bush Blitz is a cross-sector partnership drawing on the knowledge and expertise of government, non-government organisations, industry and science to document the biodiversity of the oldest continent on earth.

Further details on Bush Blitz are available at: www.bushblitz.org.au.

The Commonwealth Environment Research Facilities (CERF)

The Commonwealth Environment Research Facilities (CERF) program is marking the International Year of Biodiversity with a special focus on biodiversity.

The biodiversity focus was announced on the 19 February 2010, by the Minister for Environment Protection, Heritage and the Arts, the Hon Peter Garrett AM MP. "(T)he Australian Government recognises the vital role research plays in delivering environmental management, policies and programs," Mr Garrett said. "As Australia confronts the challenges of climate change, we are aiming for both a stronger, more resilient environment and a sustainable economy."

On 19 February 2010, the Minister for the Environment, Heritage and the Arts announced that the future research investment from the Commonwealth Environment Research Facilities (CERF) will focus on biodiversity, coinciding with the International Year of Biodiversity. This investment is being delivered through the National Environmental Research Program (NERP), and replaces the CERF program. The CERF program is currently in transition.

The NERP will provide around \$20 million each year for environmental research to improve our capacity to understand, manage and conserve Australia's unique biodiversity and ecosystems through the generation of world-class research, and its delivery to Australian environmental decision-makers and other stakeholders.

Research hubs will be established to examine emerging biodiversity issues, including in terrestrial and marine ecosystems, across Northern Australia, and the Great Barrier Reef and Torres Strait. Up to \$7 million each year will be allocated for the Great Barrier Reef and Torres Strait hub (including its administration).

2010 CERF Conference

The 2010 CERF Conference focused on how CERF research has influenced and contributed to contemporary environmental policy. It was held at Old Parliament House from 24-26 May 2010. The conference featured presentations from Australia's leading environmental researchers as well as up and coming researchers.

More about CERF.

Media release, 19 February 2010

Science meeting Parliament

A successful breakfast briefing on the importance of biodiversity was hosted by the Federation of Australian Scientific and Technological Societies (FASTS) at Parliament House on 10 March to honour the International Year of Biodiversity. The breakfast briefing was titled 'International Year of Biodiversity: So what's biodiversity done for me? Why biodiversity matters: the economic, social and environmental perspectives'. The Hon Peter Garrett MP, Minister for Environment Protection, Heritage and the Arts gave the welcoming address.

The breakfast briefing was part of *Science meets Parliament*, a flagship event of Australia's scientific community.

Science meets Parliament, run by the Federation of Australian Scientific and Technological Societies (FASTS), draws scientists to Australia's national capital, Canberra, for a series of face-to-face meetings with parliamentarians to discuss a range of science and innovation issues.

Panellists involved in the breakfast briefing included:

- Prof Jeff Bennett, Director Environmental Economics Research Hub, ANU who discussed the impact and importance of biodiversity on the economy
- Dr Brian Walker, Research Fellow CSIRO Sustainable Ecosystems & Program Director and Chair of the Board of the Resilience Alliance Biodiversity in our lives gave a presentation on '*from insects to ecosystems*'
- Dr Tony Press, Antarctic Climate and Ecosystems Cooperative Research Centre presented a case study: '*krill, small but significant*'.

FASTS represents the interests of some 60,000 Australian scientists and technologists and works to influence science and technology policy for the economic, environmental and social benefit of Australia. *Science meets Parliament* is an annual event that was first held in 1999.

Further information on FASTS is available at:
www.fast.org/index.php?option=com_content&task=view&id=1

Media release, 5 March 2010, Science meets Parliament:
www.fast.org/images/SmP2009/100305%20smp%20media%20alert.pdf

EnviroQuest 2010

Children are the key to the future of biodiversity. In order to involve the younger generation in the International Year of Biodiversity, the Australian National Botanic Gardens are celebrating with EnviroQuest. EnviroQuest is a program for schools that invites students and teachers to venture to the 40 hectare outdoor living classroom to discover Australia's rich natural and cultural heritage. Here, students can explore the connections between people, plants and animals through inquiry based explorations and hands-on learning experiences.

The Australian National Botanic Gardens offers students the opportunity on site to engage with a wide range of Australian ecosystems. Children can investigate the adaptation of Australian plants as they walk from a Tasmanian rainforest up the east coast to the World Heritage listed rainforest of northern Queensland and then to the arid mallee, the alpine regions and Australian grasslands. It is an opportunity for students to explore around one-third of Australian plant species.

The Australian National Botanic Gardens, established in 1970, maintains a scientific living collection of native plants from all parts of Australia. The plants are displayed for the enjoyment and education of visitors and are used for research into plant classification and biology. The Australian National Herbarium, the world's largest single collection of Australian preserved plant specimens is closely associated with the living collection. The Gardens also cultivates plants threatened in the wild, helping protect them against

extinction and providing information which might assist re-introduction to their natural habitat.

For more information on EnviroQuest 2010 go to: www.anbg.gov.au/gardens/education

For more information on the ANBG go to: <http://www.anbg.gov.au/gardens/index.html>

Clean-up Australia Day

Hundreds of thousands of volunteers helped celebrate Clean Up Australia Day's 20th anniversary in this International Year of Biodiversity. On 7 March volunteers donned gloves to clean up Australia's major rubbish hotspot areas of the most frequently dropped rubbish, including cigarette butts and recyclables such as glass, plastic and paper.

The Clean Up Australia Day event encourages and inspires hundreds of thousands of Australians to take to their local park, beach, bushland and streets to make a difference.

In 1989 an 'average Australian bloke' had a simple idea to make a difference in his own backyard - Sydney Harbour. This simple idea has now become the nation's largest community-based environmental event, Clean Up Australia Day.

Over the campaign period, now in its in the twentieth year, some 588,000 volunteers across Australia have filled Clean Up Australia Day rubbish bags with approximately 15,560 tonnes of rubbish.

For more on Clean Up Australia visit: www.cleanup.org.au/au/

Healthy Parks Healthy People Congress 2010

The inaugural Healthy Parks, Healthy People Congress 2010 was held in Melbourne from 11-16 April 2010 and hosted by Parks Victoria. This ground breaking international event explored how nature contributes to individual wellbeing and broader social benefits. The Congress attracted some 1000 participants from Australia and around the world.

Participants to the *Healthy Parks, Healthy People Congress* came from many different sectors, representing urban planning, community development, physical and mental health, tourism, education, recreation, ecology and park management (urban and protected area) and industrial and technological sectors. This diversity of perspectives allowed participants to understand the benefits of nature through many eyes.

The Congress aimed to:

- explore the many societal benefits provided by parks and nature
- build the relevance of parks and nature to society
- share knowledge, initiatives and innovations achieved by collaborating across sectors
- develop an international agenda that reunites nature with social health

- identify opportunities for better collaboration at global, international and local levels
- establish an information exchange network.

The Congress is a milestone as we begin to realign nature with broader social health objectives. By reinforcing the connections between the health of communities and the health of protected areas and parks, we can nurture a truly sustainable society which recognises its dependence on the natural environment. Striking a balance between developmental and human needs for environmental services is a challenge confronting governments in a number of developing and developed countries alike.

For further information on the *Healthy Parks Healthy People* Congress 2010 please go to: healthyparkshealthypeoplecongress.org/index.php.

Funding for museum biodiversity awareness projects

Australian museums have been given \$300,000 to help raise awareness of Australia's biodiversity during the United Nations International Year of Biodiversity. The Council of Australasian Museum Directors (CAMD) is using the funds to establish a national framework to support local International Year of Biodiversity action. This will include a national website, marketing and promotional activities, and project officers to stage and support events.

CAMD will also support local awareness projects, ranging from walks and water-borne excursions, to performance and web-based activity through small grants rounds. The first five projects from Victoria, Tasmania, New South Wales and South Australia were launched by Parliamentary Secretary for Innovation and Industry, the Hon Richard Marles, on 22 April 2010.

This collaborative program, developed by Australia's major museums, is the first major initiative under Inspiring Australia, a national strategy to promote engagement with science. It is a partnership between CAMD and the Australian Government's Science Connections Program.

CAMD is offering local museums up to \$5,000 in seed funding for projects that raise awareness of biodiversity issues. The first five local projects to receive seed funding are as follows:

Tasmanian Museum and Art Gallery: "A Year of Wonder in the Island Arc"

Tasmania, with its living cargo of plants and animals, has been a separate island for 12 000 years. The wide variety of landscapes and habitats has been protected from some of the effects of climate change, human impact and introduced species that have caused extinctions in mainland Australia. Through this program of public lectures, curatorial talks, sessions in the Zoology Gallery, and web based outreach; visitors will discover Tasmania's ancient origins, unique biodiversity and the unusually high numbers of endemic animal and plant species that are present here.

South Australian Maritime Museum: "Diversity at Sea: Port River Dolphins"

The Diversity at Sea program will enable visitors to explore the rich biodiversity of South Australia's marine bioregions. The program will draw in depth on the local and topical example of the Port River dolphin pod. Visitors will engage in innovative and experiential experiments using the South Australian Maritime Museum's resources including the

museum's historic launch to watch and listen to the dolphins in their natural habitat. The program is based on a cross-disciplinary collaboration between a history museum, a conservation society and a state department for environment.

The Bug Blitz Trust and partners: "Ballarat Biodiversity Discovery"

Over a weekend, groups of visitors to Narmbool (a 2000 ha pastoral property near Ballarat with large tracts of bushland and biodiversity conservation zones and corridors) join the Sovereign Hill education team and scientists from Museum Victoria in exploring the insect and other fauna diversity of a unique part of western Victoria. Groups of between 20-30 people will walk the tracks on Narmbool, visiting sites to investigate terrestrial and aquatic invertebrate life.

Museum Victoria: "The Art of Scientific Observation"

To celebrate the Year of Biodiversity, Museum Victoria is delivering a cross-disciplinary program of science, art and performance across Victoria during Science Week 2010. Entitled The Art of Scientific Observation, this outreach program is being developed with local scientific and cultural partners in regional centres. The Art of Scientific Observation aims to connect people with their local environment and foster collaboration between cultural and scientific organisations to engage new audiences via creative techniques including performance and drawing workshops. Through collaboration with local cultural centres and science research organisations, this project will attract participation from areas surrounding these regional centres.

Crack Theatre Festival: "Biodiversity Performance"

The centre of this project is the development of a new cross-artform work at the intersection of the 'two cultures': Science and the Arts. This emerging field is a fertile space for creative experimentation. Project managers David Finnigan and Gillian Schwab have a strong background in interdisciplinary practice and in communicating science concepts through performance. Drawing on the resources of the Australian Museum, the project will be a convergence, a conversation and possibly a confrontation between artistic and scientific ways of seeing.

For further information visit <http://grants.innovation.gov.au/SCOPE/Pages/Home.aspx>.

Independent review of the Environment Protection and Biodiversity Conservation Act 1999

The Minister for the Environment, Heritage and the Arts, Minister Garrett, is currently examining a major independent review of Australia's biodiversity legislation which was commissioned in 2008. The Minister expects to announce the Australian Government's response to the review in the second half of the 2010 International Year of Biodiversity. The response will build on our current legislation but with significant improvements directed at better placing the Australian Government in managing our current biodiversity challenges and those emerging in the future.

This is the first review of the EPBC Act since its commencement on 16 July 2000. The aim of the report was to review the performance of the Act and, consistent with the objective of protecting the environment and biological diversity and maintain ecological processes, to recommend reforms that:

- promote the sustainability of Australia's economic development
- reduce and simplify the regulatory burden

- ensure activities under the Act represent the most efficient and effective ways of achieving desired environmental outcomes
- are based on an effective federal arrangement.

Community participation during the review process was encouraged. Over the various stages of the public input process 339 written submissions were received and over 140 meetings were held with stakeholders in each Australian capital city.

National Reserve System

In this International Year of Biodiversity, Australia will be announcing a number of new protected areas to add to our already impressive National Reserve System. The National Reserve System is the nation's premier investment in biodiversity conservation

The National Reserve System is Australia's network of protected areas, conserving examples of our natural landscapes and native plants and animals for future generations. Based on a scientific framework, it is the nation's natural safety net against our biggest environmental challenges and is the cornerstone of Australia's efforts to protect terrestrial biodiversity in a changing climate.

The reserve system includes more than 9,000 protected areas covering more than 11 per cent of the country. It is made up of national parks, Indigenous lands and huge reserves run by non-profit conservation organisations, through to ecosystems protected by farmers on their private working properties. These protected areas are all managed for conservation according to international guidelines.

The Australian Government has committed to increase the National Reserve System by 25% by 2014, through the addition of a further 25 million hectares through property purchases and the establishment of Indigenous Protected Areas.

For more information on Australia's National Reserve System visit:
www.environment.gov.au/parks/nrs/index.html

Two new reserves were recently added to the National Reserve System, within priority bioregions in Queensland and South Australia.

The new Bowra Sanctuary in south-west Queensland is internationally renowned as one of Australia's most rewarding bird watching destinations. The 14,000 hectare reserve is home to more than 200 species of bird including the iconic Hall's babbler, the chestnut-breasted quail, Bourke's parrot and chirruping wedgebill.

Bowra was purchased for conservation by not-for-profit group the Australian Wildlife Conservancy, with \$1.2 million help from the Australian Government and generous private donations. It lies in one of the most under-protected bioregions in the country. Less than three per cent of the Mulga Lands bioregion is protected in parks and reserves. For more information on Bowra see www.environment.gov.au/parks/nrs/getting-involved/case-studies/bowra.html

New reserve Witchelina is a vast conservation area in the arid heartland of South Australia. At just over 4,200 square kilometres, Witchelina is the largest property ever purchased for the National Reserve System through Caring for our Country.

Witchelina's stony plains shelter the leathery gibber dragon and its red sand dunes are home to huge burrowing frogs. After rain, Witchelina's creeks and waterholes act as arid zone refuges for nomadic ducks, sandpipers and other waterbirds. The reserve was purchased for conservation by the Nature Foundation SA, with almost \$2 million from Caring for our Country and generous private contributions. Witchelina significantly increases the area protected in the under-represented Flinders Lofty Block bioregion, taking total levels of protection from 5.6 per cent to almost nine per cent. For more information on Witchelina see www.environment.gov.au/parks/nrs/getting-involved/case-studies/witchelina.html

Indigenous Protected Areas (IPAs)

A huge new protected area in South Australia's remote north will help protect one of the state's most endangered species – the warru or black-footed rock wallaby.

In April, traditional owners established the Kalka-Pipalyatjara Indigenous Protected Area over 580,000 hectares of the Anangu Pitjantjatjara Yankunytjatjara (APY) Lands

The declaration creates a significant conservation corridor of more than 12 million hectares across state borders, as Kalka-Pipalyatjara connects Ngaanyatjarra IPA in Western Australia and the Watarru IPA in South Australia.

The latest IPA follows the declaration in March of two new Indigenous Protected Areas in the New South Wales tablelands. Tarriwa Kurrukun IPA and Boorabee and the Willows IPA protect stunning wetlands and stringy bark forests.

An Indigenous Protected Area is an area of Indigenous-owned land or sea where traditional owners have entered into an agreement with the Australian Government to promote biodiversity and cultural resource conservation. Indigenous Protected Areas make a significant contribution to Australian biodiversity conservation - making up over 23 per cent of Australia's National Reserve System.

Today there are 38 declared Indigenous Protected Areas covering more than 23 million hectares across Australia.

The Australian Government's Caring for our Country initiative plans to increase Indigenous Protected Areas by at least 40 per cent over the next five years - an increase of at least eight million hectares.

Indigenous Protected Areas deliver more than environmental benefits. Indigenous Protected Areas help Indigenous communities to protect their cultural values for future generations. They also deliver real benefits in better health, education, economic activity and social cohesion.

For more information on Indigenous Protected Areas in Australia go to: www.environment.gov.au/indigenous/ipa/index.html.

National Biodiversity Strategy (NBS) and Native Vegetation Framework (NVF) reviews

Biodiversity conservation efforts will be enhanced around Australia with the release of a revised National Biodiversity Strategy and Native Vegetation framework later this year. The strategies will have measurable targets and will set national direction for how governments, the community, industry and scientists manage and protect Australia's plants, animals and ecosystems over the next ten years.

The consultation draft of Australia's Biodiversity Conservation Strategy has been developed collaboratively by the states, territories and the Australian Government, with advice from CSIRO and the Bureau of Meteorology.

The consultation draft has been developed to replace the National Strategy for the Conservation of Australia's Biological Diversity, which was agreed in 1996.

The National Strategy for the Conservation of Australia's Biological Diversity has as its main goal the protection of biological diversity and the maintenance of ecological processes and systems. It stresses that high priority must be placed on developing and implementing integrated approaches to conservation that both conserve biological diversity and meet other community expectations.

Further information on the review of Australia's Biodiversity Conservation Strategy is available at: www.environment.gov.au/biodiversity/strategy/review.html.

The Native Vegetation Framework has been developed collaboratively by all State and Territory governments and the Australian Government.

The Natural Resource Management Ministerial Council (NRMMC) confirmed the importance of the Native Vegetation Framework as the national policy document for achieving:

- a reversal in the long-term decline of Australia's native vegetation, and
- an improvement in the condition of existing native vegetation.

The NRMMC endorsed the draft Australia's Native Vegetation Framework for public consultation in November 2009. The submissions will be used to amend the Framework for its final consideration by the NRMMC late this year.

Marine Bioregional Plans

Australia has one of the largest marine regions in the world. The area is home to a spectacular array of species, many of which are unique to Australian waters. The protection and conservation of Australia's marine biodiversity will take on a special emphasis during the International Year of Biodiversity.

Australia is in the process of developing five marine bioregional plans – the South-west, North, North-west, South-east and East regions which occur in waters from 3 to 200

nautical miles from shore - to better ensure the protection, conservation and sustainable use of Australia's marine environment.

The marine protected areas that will be established as a key element of the plans will meet the Australian Government's commitment towards the establishment of a National Representative System of Marine Protected Areas by 2012 – an undertaking by all Australian governments.

The first of the draft bioregional plans will be released towards the end of the International Year of Biodiversity.

For further information on Australia's marine bioregional planning process go to www.environment.gov.au/mbp

Memorandum of Understanding on the Conservation of Migratory Sharks

Australia has been actively involved in efforts to develop a global instrument for the conservation and management of migratory sharks under the Convention on Migratory Species and expects to become a signatory to the instrument in 2010.

The Memorandum of Understanding on the Conservation of Migratory Sharks was concluded on 12 February 2010. It covers the seven species of migratory shark currently listed on the Appendices of the Convention on Migratory Species — whale, basking, great white, porbeagle, longfin mako and shortfin mako sharks and the northern hemisphere population of spiny dogfish.

The memorandum is a significant step forward in terms of international collaboration to better manage and conserve migratory shark species.

Australia expects to sign the memorandum later in 2010, and will continue to be involved in the development of key actions to be included in a conservation plan for it.

For more information on the Memorandum of Understanding on the Conservation of Migratory Sharks go to:
http://www.cms.int/species/sharks/sharks_bkrd.htm

Antarctica

Australia has a special relationship with Antarctica and is committed to protecting the Antarctic environment (including through improved environmental practices), and to conducting globally significant science (particularly climate change science). The Australian Antarctic Division, as the leader of the Australian Antarctic program has a number of activities underway which celebrate Australia's commitment to biodiversity conservation in Antarctica during the International Year of Biodiversity.

One such activity is the Australian led multi-country project "Aliens in Antarctica" which examines the extent to which people from many countries unintentionally carry alien species, such as seeds and insects, into the Antarctic Region. It is hoped the results of the

project will contribute to the development of a strategy to minimise the effects of invasive alien species on the fragile Antarctic environment.

Other activities during the International Year of Biodiversity include a marine science voyage to assess the impacts of trawling on benthic habitats in the subantarctic and high Antarctic and the transfer of 20,000 specimens of Antarctic and sub-Antarctic flora to the Tasmanian Herbarium – a collection spanning almost 40 years.

For more information on the Australian Antarctic program go to www.aad.gov.au/default.asp.

Helping Islands Adapt Workshop

Invasive species have a major impact on Australia's environment, threatening our unique biodiversity and reducing overall species abundance and diversity. For this reason Australia is proud to be a partner of the New Zealand Government workshop on Regional Action to Combat Invasive Species on Islands to Preserve Biodiversity and Aid Climate Change Adaptation.

The workshop from 11-16 April 2010 was held in conjunction with the Secretariat for the Convention on Biological Diversity (CBD) and The Nature Conservancy and was co-sponsored by Australia. The objective of the workshop was to strengthen and mobilise capacity on islands across the globe to address the threats posed by invasive species in a climate change context.

For more information on the Helping Islands Adapt workshop go to <http://www.conference.co.nz/index.cfm/ISW10>.

For more information on invasive species in Australia go to <http://www.environment.gov.au/biodiversity/invasive/index.html>.

Commonwealth Scientific and Industrial Research Organisation

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is Australia's national science agency and one of the largest and most diverse research agencies in the world. The CSIRO has already held a number of exciting events for all ages to celebrate the International Year of Biodiversity and has many more planned.

One such event was "Discovery After Dark: an evening of science fun for grown-ups" presented by the CSIRO Discovery Centre. Held on the 18 May 2010 as a precursor to the International Day of Biodiversity on 22 May 2010, this free event involved a performance from exciting new local Canberra band the Graveyards while those in attendance roamed the floor of the Discovery Centre and played in the hands-on laboratory, let the 3D theatre blow their mind, and watched sticks insects and turtles show who's boss in the Live Creatures show.

The highlight of the night though was an open-mike event in which attendees brought along their own performance piece on the theme of biodiversity, nature, science or discovery. Performances included poems, stories, songs, comedy pieces and party tricks with the winner taking away \$1000 worth of prizes.

CSIRO hosts regular free public seminars at venues around Canberra, Australian Capital Territory. On 28 May 2010, one such seminar was presented by Professor Iain Gordon, the Theme Leader of CSIRO's new Building Resilience Australian Biodiversity Assets (BRABA) Theme. Professor Gordon's presentation, entitled "Biodiversity in Crisis Are we just fiddling while Rome burns?", looked at the challenges facing Australia's biodiversity and the ways the new BRABA research theme is working with managers and policy makers to develop and implement evidence-based decision making.

For more information on the CSIRO go to
http://www.csiro.au/csiro/channel/_ca_dch2t.html

Conclusion

In addition to the activities listed in this paper, the Australian Government will use all available opportunities to promote biodiversity in this International Year of Biodiversity.

Further information on biodiversity in Australia can be found at:
<http://www.environment.gov.au/biodiversity/index.html>.