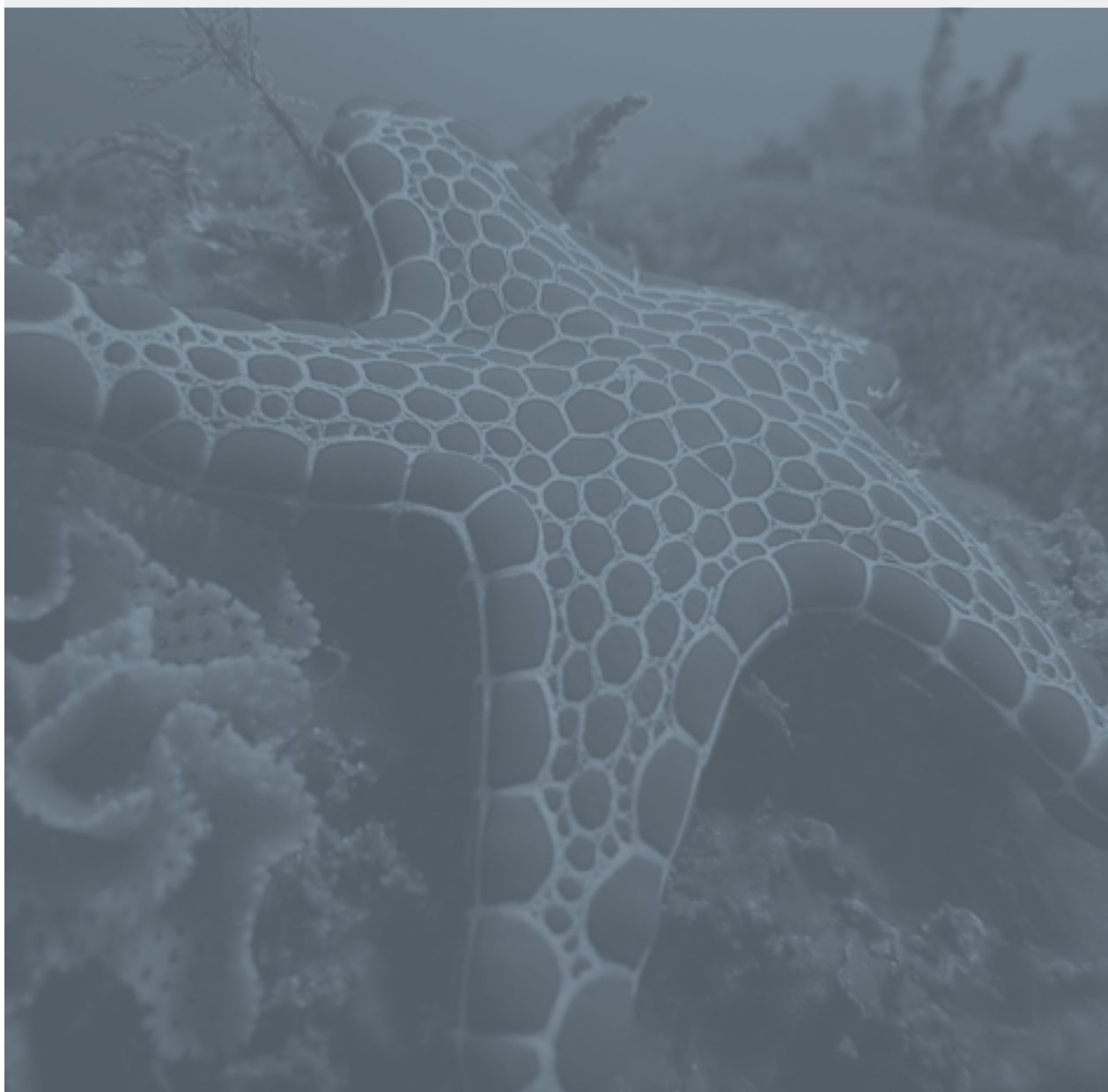


4 Planning, reporting and performance



Director of National Parks strategic planning and performance

Reporting on outcomes in conservation areas under Parks Australia management through the annual report is one method we use to communicate our natural and cultural heritage management, how we have supported the aspirations of traditional Aboriginal owners for their land, and opportunities we have made for visitors to experience unique destinations. Other reporting mechanisms are noted in this chapter.

Portfolio Budget Statements 2013–14

These documents detail budget initiatives and appropriations against specific outcomes and outputs. The annual report completes the budget cycle by reporting on outcomes and outputs in the year under review. The Director of National Parks was included in the department's 2013–14 Portfolio Budget Statements and contributes to the achievement of Outcome 1:

The conservation and protection of Australia's terrestrial and marine biodiversity and ecosystems through supporting research, developing information, supporting natural resource management, and establishing and managing Commonwealth protected areas.

The Director contributes to meeting this outcome through:

Conservation and appreciation of Commonwealth reserves through the provision of safe visitor access, the control of invasive species and working with stakeholders and neighbours.

Performance outcomes for Program 1.1: Parks and Reserves, as identified in the Portfolio Budget Statements, follow.

Strategic Plan 2012–16

The department's strategic plan is the basis for its business planning and is reviewed annually to assess progress against priorities. Management of Commonwealth reserves in accordance with internationally agreed principles is identified as a priority in the plan.

Parks Australia Divisional Plan 2010–14

This plan sets out the long-term outcomes and shorter term outputs for the Director of National Parks against seven key result areas (KRAs) as follows:

- KRA 1—Natural heritage management
- KRA 2—Cultural heritage management
- KRA 3—Joint management and working with Indigenous communities
- KRA 4—Use and appreciation of protected areas
- KRA 5—Stakeholders and partnerships
- KRA 6—Business management
- KRA 7—Biodiversity science, knowledge management and use.

KRA 3—joint management and working with Indigenous communities—applies largely to the three jointly managed reserves: Uluru–Kata Tjuta, Kakadu and Booderee national parks.

Strategies to achieve the outcomes described in the Parks Australia Divisional Plan and the department's Strategic Plan are detailed in Parks Australia branch, section, team and individual work plans.

Management plans

Section 366 of the *Environment Protection and Biodiversity Conservation Act 1999* requires the Director (or in the case of a jointly managed park, the Director and the relevant board of management) to prepare management plans for Commonwealth reserves for the reserve's protection and conservation. Management plans have a maximum life of 10 years and must set out how the reserves are to be managed consistent with the relevant Australian International Union for Conservation of Nature (IUCN) reserve management principles.

As at 30 June 2014, seven Commonwealth terrestrial reserves (six national parks and one botanic gardens) and 59 Commonwealth marine reserves were established

Four terrestrial reserve management plans are in place as at 30 June 2014. In 2013–14 a new management plan was released for Christmas Island National Park following public comment. A draft management plan for Booderee National Park has been released for public comment and is in the process of being finalised. Draft management plans are currently in preparation for Pulu Keeling National Park and Kakadu National Park, and are expected to be released for public comment in 2014–15.

The Australian Government's commitment to review the management arrangements for the Commonwealth marine reserves proclaimed in November 2012 is progressing. The first step was to set aside the management plans that were scheduled to come into effect in July 2014. This was achieved in December 2013, when the Governor-General reproclaimed the Commonwealth marine reserves established in November 2012. Until new management plans are developed and come into effect, transitional management arrangements are in place for the South-west, North-west, North, Temperate East and Coral Sea marine reserves.

The management plan for the South-east Marine Reserves Network came into effect on 1 July 2013 and is the first Director of National Parks management plan to encompass a large regional network of Commonwealth marine reserves. A new management plan is currently being prepared by the department's Australian Antarctic Division for the Heard Island and McDonald Islands Marine Reserve to replace the previous plan that expired in August 2012.

The Director of National Parks is responsible for implementing these management plans and collaborates with Commonwealth and state agencies, including the Australian Fisheries Management Authority and the Australian Customs and Border Protection Service to ensure compliance and enforcement of the plans.

Performance outcomes

The following performance outcomes for 2013–14 use key result areas, outcomes and indicators identified in the Parks Australia Divisional Plan and key performance indicators and deliverables identified in the 2013–14 Portfolio Budget Statements (marked 'PBS').

KRA 1—Natural heritage management

Objective

- The Commonwealth protected area estate management contributes to the long-term viability of Australia's biodiversity.

Actions

- Design and implement conservation activities to maintain or improve the status of natural values for which Commonwealth reserves were declared and/or recognised.^{PBS}
- Minimise the impacts of invasive species and other major threats to natural values of Commonwealth reserves.
- Design, implement and monitor the outcomes of specific programmes to increase the viability of threatened species in reserves.
- Undertake monitoring and research to increase knowledge and understanding and provide an evidence base for current and future conservation actions both on and off Commonwealth reserves.^{PBS}

2013–14 results

- **Design and implement conservation activities to maintain or improve the status of natural values for which Commonwealth reserves were declared and/or recognised.**
- **Minimise the impacts of invasive species and other major threats to natural values of Commonwealth reserves.**

Parks Australia continued to actively manage Commonwealth terrestrial and marine reserves to reduce threats and build resilient ecosystems to help protect and conserve biodiversity and cultural heritage. Key achievements in 2013–14 included:

- The sub-Antarctic Heard Island and McDonald Islands Marine Reserve, known as one of the most biologically pristine areas in the world, was extended by 6200 square kilometres via Proclamation by the Governor-General on 25 March 2014. With a total area of 71 200 square kilometres, the reserve is now Australia's largest International Union for Conservation of Nature (IUCN) 1a Strict Nature Reserve, offering controlled access for scientific research and monitoring to protect habitats, ecosystems and native species.
- Kakadu National Park's prescribed burning programme continued under the Stone Country fire-management strategy and prevented broad-scale late-dry-season wildfires in this landscape unit. Work has commenced to update the park's fire-management strategy including the development of fine-scale fire plans to manage threatened species and communities.
- Kakadu park staff and Bininj (especially ranger groups) worked with staff from the National Seed Bank (Australian National Botanic Gardens) to learn how to collect seed from Kakadu's rare and threatened plants for safe keeping.
- The Northern Australia Environmental Research Programme project investigating the impact of feral cats (*Felis catus*) on small mammals in Kakadu has constructed two cat-proof enclosures and commenced survey work in the park.
- The Christmas Island Minesite-to-Forest Rehabilitation Programme continued under a memorandum of understanding between the Director and the Department of Infrastructure and Regional Development. Earthworks and plantings were completed over a total of 22 hectares of former mine fields with a total of 19 000 plantings. This comprised 16 500 primary plantings across 6 hectares of bare mine fields and 2500 secondary plantings across 16 hectares of previously planted fields. Around 125 hectares of previously planted fields were maintained (weeding and fertilising) and biophysical monitoring of planted fields also occurred.
- In March 2014, Cyclone Gillian caused significant damage to selected areas of Christmas Island's rainforest habitats, particularly some areas of tall evergreen rainforest nesting habitat for the endangered Abbott's booby (*Papasula abbotti*), and rainforest vegetation in the Dales Ramsar wetland. Park staff rescued and rehabilitated Abbott's boobies from fallen trees. While many of those rescued died due to injuries and other factors, such as dehydration and diet issues, other chicks have successfully taken to the wing. Sites for monitoring of rainforest recovery were also established and weed monitoring and control in the Dales occurred as tree losses increased light gaps and provided opportunity for weed growth.
- A 10-year Reptile Conservation Plan was completed under the advice of the Christmas Island Reptile Advisory Panel. Two panel meetings were held.
- While Christmas Island's captive-management programme for the Lister's gecko (*Lepidodactylus listeri*) and blue-tailed skink (*Cryptoblepharus egeriae*) progressed well, the last Christmas Island forest skink (*Emoia nativitatis*) in captivity died in 2013–14.

- Anecdotal evidence from long-term residents and park staff on Christmas Island indicated that the most significant recruitment of red crabs (*Gecarcoidea natalis*) from the sea since the 1990s occurred in early 2014. The favourable sea and climatic conditions and efforts by park staff to reduce red crab mortality over a number of years (crazy ant (*Anoplolepis gracilipes*) control and mitigating vehicle impacts), helped to ensure that significant numbers of red crabs were able to spawn.
- Observational evidence showed that significantly less red crab deaths from vehicles were recorded during the 2013–14 annual breeding migration compared to 2010. This was largely due to more effective off-park road management between the Shire of Christmas Island and the Christmas Island National Park. However, road mortality of robber crabs (*Birgus latro*) from vehicles continues to increase with 756 deaths recorded in 2013, compared with 676 in 2012, 667 in 2011 and 854 in 2010. The park community education programme continues to raise awareness of the vehicle threat to migrating crabs on the Island.
- Control burns in Booderee National Park to protect key assets in fire-prone habitat, to protect and promote environmental values, and manage the weed bitou bush (*Chrysanthemoides monilifera*), were conducted in 2014. An unusually warm beginning to winter allowed additional and unexpected burning to be conducted.
- Booderee's spray-burn-spray strategy, which has been refined over the past decade, has led to a steady decline in density and distribution of the key environmental weed, bitou bush.

Invasive species management

Park managers have nominated and prioritised 24 significant invasive species across the six terrestrial reserves to identify changes in overall distribution and abundance. Of the selected species, the populations of six species are increasing, eight remain steady, five are falling, and population data are deficient for five species^{PBS} (further information on monitoring of significant invasive species is provided in Appendix B: Portfolio Budget Statements reporting 2013–14).

- A pilot tropical fire ant (*Solenopsis invicta*) control project at Ashmore Reef Commonwealth Marine Reserve was completed in 2012–13 and evaluated in February 2014. It showed that the 14-month baiting programme significantly reduced fire ant densities on the islands. The success of the pilot project indicates that eradication could be feasible with a longer term programme. Based on these findings an eradication plan for tropical fire ants at Ashmore Reef Commonwealth Marine Reserve is being developed.
- Christmas Island National Park Crazy Ant Scientific Advisory Panel met in November 2013 and provided ongoing advice in relation to the crazy ant biological control programme. Management actions in 2013–14 to control yellow crazy ants included:
 - The biennial island-wide survey to map crazy ant supercolonies and determine red crab population abundance and distribution, as well as to monitor other aspects of the island's biodiversity, was completed in 2013. The results of this survey indicate that the red crab population has declined by approximately 18 to 19 per cent since 2011 with

an estimated population of 37 to 41 million. The area of yellow crazy ant supercolonies was estimated to be approximately 476 hectares. Red crab declines are unlikely to be entirely due to yellow crazy ants, as recruitment of crabs from the sea over recent years was poor until early 2014.

- Implementation of a biological control programme for crazy ants continued under a three-year (1 July 2013 to 30 June 2016) contract with LaTrobe University. Work conducted included completion of host-specificity testing of biological control agents (a parasitic wasp) in Malaysia, including any off-target impacts. Research was also initiated into aspects of the life history of the target organism (yellow lac scale (*Tachardina aurantiaca*)) to develop techniques for rearing both the scale insect and the parasitic wasp.
- Construction of a shade house facility to raise the biological control agent commenced in 2014.
- The final report from CESAR Consultants on the off-target impacts of the 2012 crazy ant aerial baiting programme (as well as previous programmes) was received in July 2013. The report found no evidence that either Fipronil or Insect Growth Regulator baits had any off-target impacts or that there is bioaccumulation in the environment.
- Christmas Island National Park continued to facilitate and support cross-tenure cat and rat management across various areas of the island. From the programme's commencement in May 2010 to June 2014 an estimated 650 feral cats were removed. Park staff also conducted rat baiting in red-tailed tropic bird-breeding colonies. These efforts resulted in significant improvement in the nesting success of red-tailed tropic birds (*Phaethon rubricauda*) with benefits to other native species, particularly the golden bosun (*Phaethon lepturus fulvus*). A programme to monitor and trial the baiting of feral cats in remote areas of the park and island was also implemented by park staff, in conjunction with the Western Australian Department of Parks and Wildlife.
- Christmas Island park staff continued to monitor and control the single known infestation of invasive Siam weed (*Chromolaena odorata*). Monitoring did not detect any flowering plants at this site or at infestations at other locations of the island.
- Monitoring initiated in June 2012 to detect the potential entry of rats to Pulu Keeling National Park from suspected illegal-entry vessels shipwrecked on the island continued. No rats were detected.
- A biosecurity plan was prepared for Pulu Keeling National Park. The plan assessed biosecurity risks to the park's natural values and identified operational protocols to help reduce these risks and respond to incursions of high-risk invasive species, such as rats and Siam weed. Staff implemented risk mitigation protocols during visits to the park.
- Monthly fox baiting using 1080 baits continued to keep fox numbers low in Booderee. Prior to planned reintroduction of long-nosed potoroos (*Potorous tridactylus*), professional shooters were employed for one week in the release area to eradicate any bait-shy foxes. One fox was shot.
- Booderee National Park conducted aerial helicopter spraying using ultra-low-volume techniques to control bitou bush (*Chrysanthemoides monillifera*) in June 2014. Treatment by targeted hand spraying (88.5 hectares), ground-spraying (9.6 hectares) and hand-pulling (22 hectares) contributed to the general decline of this invasive species in the park.

- Aerial spraying of invasive kikuyu grass (*Pennisetum clandestinum*) occurred in June 2014 in penguin habitat on Bowen Island in Booderee.
- Woody weed removal continued in Norfolk Island National Park and Botanic Gardens. New herbicide application methods have been trialled, allowing for more efficient weed-control operations.
- Numbers of feral animals (foxes, cats and rabbits) are in decline due to continued trapping programmes at Uluru–Kata Tjuta National Park. The park is co-investing with the Ayres Rock Resort to maintain a trapping programme in areas of high biodiversity and threatened-species populations across the park.
- Trials aimed at discovering alternate control methods for buffel grass (*Cenchrus ciliaris*) at Uluru–Kata Tjuta National Park are proving positive. Analyses of the results are currently under way.
- Monitoring and control programmes for invasive weeds in Kakadu National Park continued throughout the year. This covered 222 known mimosa (*Mimosa pigra*) infestation sites ranging in size from 0.5 square metres to 30 square metres. All plots were surveyed by either helicopter, in conjunction with the National Environmental Research Program, quad or airboat, and more than 100 seedlings were destroyed.
- Monitoring and treatment of known para grass (*Urochloa mutica*) and olive hymenachne (*Hymenachne amplexicaulis*) sites in the East, South and West Alligator River in Kakadu National Park catchments continued. However both these species continue to spread and now require different management approaches.
- Roadside surveys of the Arnhem and Kakadu highways resulted in the detection and removal of 29 Gamba grass (*Andropogon gayanus*) plants. The historic infestation in the Mudginbardi area was surveyed by helicopter and treated on the ground. The two highways bisecting the park continue to be a conduit for the dispersal Gamba seeds through the park.
- A roadside survey of the Arnhem and Kakadu highways found plants of the species Wynn cassia (*Chamaecrista rotundifolia*) around Coinda and along the Munmalary road. These plants were treated and follow-up surveys of these sites has found no further plants. The location and extent of this weed in the park is currently not known. Mission grass (*Pennisetum polystachion*) was treated in strategic locations. Broad-scale control of this species throughout the park requires different management approaches and renewed levels of resourcing.
- The following was achieved in feral animal management at Kakadu:
 - Continued implementation of a wild-dog management programme for Jabiru township in collaboration with the West Arnhem Shire Council.
 - Completion of two cat-exclusion areas which will assist researchers to understand the role of cats in the documented decline of small mammals across northern Australia.
 - A feral animal control programme focused on culling of animals affecting public safety including an opportunistic culling of pigs (*Sus scrofa*) and buffaloes (*Bubalus bubalis*) around known mimosa plots.
 - Implementation of surveys for the invasive big-headed ant in the Jabiru town and Coinda lease areas.

Design, implement and monitor specific programmes to increase the viability of threatened species in reserves

- Park managers nominated 43 species across the six terrestrial reserves to determine whether viable populations of these significant species have been maintained in those reserves. Of the selected species, the wild populations of the estuarine crocodile (*Crocodylus porosus*), the Norfolk Island green parrot (*Cyanoramphus cookii*) and the captive bred populations of the blue-tailed skink (*Cryptoblepharus egeriae*) and Lister's gecko (*Lepidodactylus listeri*) are increasing, 16 species remain steady, 13 are decreasing, one may be extinct, and population data are deficient for nine species.^{PBS} (Further information on species monitoring is provided in Appendix B: Portfolio Budget Statements reporting 2013–14.)
- A threatened-species prioritisation process, coordinated by the National Environmental Research Program, was developed to assist with resource allocation decision-making related to threatened-species management. This tool will be tested and implemented during 2014–15.
- A translocation project in cooperation with Forestry Corporation of NSW to reintroduce the regionally extinct long-nosed Potoroo to Booderee National Park was attempted in May. The project will continue over the next two to three years providing for the translocation of up to 36 adults as a new breeding population.
- The Christmas Island National Park captive-breeding programme for native terrestrial reptiles, undertaken in partnership with Sydney's Taronga Zoo, continued to result in increasing captive populations of Lister's gecko and blue-tailed skink. On-island captive populations of the former increased by 83 per cent since 2012–13 (to 204 individuals) and the latter by 28 per cent (to 440 individuals), supplemented by smaller off-island populations at Taronga. Construction of a new reptile housing and captive-breeding facility to cater for expanding on-island populations was also completed with the assistance of the Foundation for National Parks. Unfortunately, the captive population of the forest skink was too small to be viable, and in 2013–14 the last captive individual died.
- A survey of the Christmas Island flying fox (*Pteropus melanotus*) using the same survey methods used in 2012 showed a reduced detection rate of about 41 per cent at fixed monitoring points compared to 2006. Further surveys of this likely population decline will be implemented in 2014–15.
- Monitoring continued of the 39 Environment Protection and Biodiversity Conservation Act listed endangered Cocos buff-banded rails (*Gallirallus philippensis andrewsi*) successfully translocated from Pulu Keeling National Park to nearby Horsburgh Island in early 2013. There are good indications that the population may become self sustaining, as adults, juveniles and chicks have been detected. Results are pending and further sampling is planned in 2014–15. A population survey of the Cocos buff-banded rail population was completed on Pulu Keeling National Park.
- At Uluru–Kata Tjuta National Park, monitoring continued to record a steady number of the translocated population of the endangered mala or rufous hare-wallaby (*Lagorchestes hirsutus*). The National Mala Recovery Team is meeting regularly to improve population management of the species as a whole. Numbers of the vulnerable tjakura or great desert skink (*Liopholis kintorei*) decreased in the park's borefield habitat due to exposure to wildfire and subsequent invasion of feral animals.

- Prescribed burning at Uluru–Kata Tjuṯa National Park was conducted to improve management of threatened-species habitat between Uluru and Kata Tjuṯa. Based on research, fire in this area is now more intensively managed to ensure the correct balance of habitat types for all species present. This includes prescribed burning within the mala enclosure to ensure a natural balance between available nesting and grazing habitats and available food plants.
- Two scientific journal articles were published reporting the results of surveys of two little-known small mammals in Uluru–Kata Tjuṯa: the Ooldea dunnart (*Sminthopsis ooldea*) and the endangered southern marsupial mole (*Notoryctes typhlops*).
- Surveys conducted for the Norfolk Island green parrot (*Cyanoramphus cookii*) in 2013 indicated that the population was in decline with an estimate of between 46 and 92 individual birds present in Norfolk Island National Park.
- In Norfolk Island National Park, feral cat and rat predation is a serious risk to the green parrot adults, chicks and eggs, particularly when the birds are nesting. To address this threat, 70 predator-resistant nest sites have been constructed in the park. Matched with increased rat and cat baiting, this programme assisted 32 Norfolk Island green parrot chicks to fledge over the seven-month period between November 2013 and June 2014. This dramatic recruitment is a direct result of ongoing feral cat and rat control, as well as community engagement on control of domestic cats.
- Proceedings from a Kakadu National Park threatened-species workshop were completed in June 2014. More than 50 stakeholders attended the workshop, including traditional Aboriginal owners, government agencies, academic institutions, neighbouring landholders and non-government conservation organisations. This workshop builds on previous Kakadu symposia that have focused on landscape change and factors driving biodiversity change: weeds, fire, climate change, feral animals and cultural heritage. This information is being used to develop the Kakadu National Park Threatened Species Strategy. The strategy, which is expected to be completed by December 2014, is being prepared in partnership with Charles Darwin University. The strategy underpins a number of critical conservation projects to protect threatened species, to be implemented in collaboration with the newly appointed Threatened Species Commissioner.
- The National Environmental Research Program monitoring project has shown that Kakadu is an extremely important refuge area for the critically endangered spartooth shark (*Glyphis glyphis*) and endangered northern river shark (*Glyphis garricki*). There have been 324 northern river sharks recorded in the park's four river systems with the majority (220) being recorded in the South Alligator river. This is 80 per cent of all known records of this species. There have been 93 spartooth sharks recorded in the park's four river systems with the majority (86) being recorded in the South Alligator River.
- Kakadu National Park continued its project with the University of Sydney and the Territory Wildlife Park, monitoring the impact of cane toads (*Rhinella marina*) on a population of northern quolls (*Dasyurus hallucatus*) at East Alligator Ranger Station. Eighty eight captive-bred quolls, trained to avoid cane toads, were released at the site in the 2009–10 wet season. Results from the 2013–14 trapping session show that adults are passing the toad avoidance behaviour onto their offspring. Unfortunately, recent trapping also shows that the population is being significantly impacted by wild-dog predation.

- Kakadu monitoring confirmed steady numbers of estuarine crocodiles estimated at between 8000 and 12 000 animals or 10 per cent of the total Northern Territory population.
- Ongoing surveys of the nesting activity of vulnerable flatback turtles (*Natator depressus*) on Gardangarl (Field Island, Kakadu) indicated a stable population with above-average numbers with 87 turtles and 58 nests recorded over the 20-day survey period. Recapture of turtles tagged in the past has climbed to 96 per cent in 2013 from 55 per cent in 2002.

Undertake monitoring and research to increase knowledge and understanding and provide an evidence base for current and future conservation actions both on and off Commonwealth reserves

In the oceans

- An extensive patrol in the Coral Sea Commonwealth Marine Reserve was undertaken late in 2013. Rapid environmental appraisals were conducted on 15 coral cays in the southern and central Coral Sea to assess vegetation condition and provide information on seabird and marine-turtle nesting numbers and areas.

On land

- The five-year re-survey of Kakadu's fire plots was undertaken to assess the effects of fire on land and animal species and provide direction on fire management in the park. Data analysis is under way and a report will be available in December 2014.
- Six climate change research projects funded by the department's National Environmental Research Program continued in Kakadu's wetland and coastal environments, to map and model present conditions and analyse changes over time in aquatic biodiversity. This work will assess potential effects on northern Australia's aquatic biodiversity caused by climate change, sea-level rise and other threatening processes in the region, and to design management strategies to minimise their impact. A project to collect core samples from isolated waterholes to assess previous climate change and fire regimes is also under way in Kakadu.
- Monitoring of the South Alligator Valley containment rehabilitation area of Kakadu (an area affected by previous uranium-mining activity) is establishing base-line trends that indicate there has been no impact on groundwater and vegetation.
- Biodiversity hotspot research surveys in Kakadu continued in collaboration with the Northern Territory Government's Biodiversity Unit. The number of Leichhardt's grasshoppers (*Petasida ephippigera*) in the Nourlangie area was found to fluctuate each season and have been previously impacted by localised fire events. The species is generally stable in most survey sites largely due to a specific fire-management strategy. Unexpectedly, one site showed an increase from 13 individuals in 2013 to 800 in January 2014, suggesting that the eggs of this species may persist in the soil longer than first thought.
- Kakadu National Park is working with Charles Darwin University to study glider species in the Top End. DNA tests of a glider species previously thought to be the sugar glider have shown that it may be a new mammal species which is more closely related to squirrel or mahogany gliders.

- Kakadu National Park assisted scientists to map olive hymenachne and para grass in the Wildman, West and South Alligator River floodplains under the National Environmental Research Program. This project will develop detailed distribution maps and undertake trials of chemical control methods for para grass.
- Staff from the Australian Biological Resources Study have been working with Kakadu National Park to develop a better system of collecting and managing weed control data which has been tested in the Bush Blitz programme.
- The Australian National Botanic Gardens continued a research programme to investigate ecological drivers of seed germination and establishment for plants of endangered Australian alpine and sub-alpine bogs and fens. A two to three-year seed burial experiment was established to monitor persistence, germination and dormancy cycling of seeds in the soil seed bank. Seeds are periodically retrieved from field plots and germination is tested in the laboratory. To date 26 000 of 39 000 seeds have been assessed with the aim of informing conservation and land-management actions.
- Long-term monitoring at Booderee National Park shows key indicator species increased rapidly during the early 2000s in the first few years of fox baiting and have now declined to a new and stable equilibrium abundance. Stable or increasing population trends for threatened eastern bristlebirds (*Dasyornis brachypterus*) and shorebirds were recorded, likely in response to maintaining low fox numbers.
- Ongoing monitoring of myrtle rust (*Uredo rangelii*) in Booderee Botanic Gardens shows all six specimens of *Rhodamnia rubescens* in its collection continue to be infected after it was first detected three years ago. One specimen of *Rhodomyrtus sericea* has been affected for the past two years. The infection disfigures and stunts foliage in the warmer, more humid time of year, but healthy new growth re-emerges every spring and early summer. No plants in the Gardens' collection have yet succumbed to the disease.
- Uluru–Kata Tjuta continues its partnership with CSIRO and Charles Darwin University to increase research on-park. This includes three PhD research programmes on park management decision-making (fire, impact of introduced mammalian carnivores, and condition of Uluru waterholes and mesic habitats). International herpetologists are undertaking further research on the threatened great desert skink.
- Camera-based surveys failed to detect a population of brushtail possums (*Trichurus vulpecula*) within the vicinity of the Kata Tjuta monolith, despite the presence of scat and tree scratches found intermittently in the area.
- Island-wide surveys for the Christmas Island hawk-owl (*Ninox natalis*), in conjunction with flying-fox surveys, indicated the hawk-owl population appears to be stable and is not of conservation concern.
- Marine turtle surveys were conducted on Cocos Keeling Islands. A total of 216 turtles were caught including 15 turtles that had previously been recorded (seven green turtles (*Chelonia mydas*) and eight Hawksbill turtles (*Eretmochelys imbricata*)). Long-term monitoring indicates a stable population for both species.

- One red-footed booby (*Sula sula*) survey on Pulu Keeling Island National Park was completed in 2013–14 and will contribute to long-term population trend analysis.
- A reptile translocation feasibility study was conducted on the Cocos Keeling Islands. The study assessed habitat suitability of selected islands for establishing insurance populations for the Christmas Island blue-tailed skink and the Lister's gecko.

KRA 2—Cultural heritage management

Objective

- Australia's cultural heritage is conserved and effectively communicated to the public.

Actions

- Identify, protect and conserve cultural heritage values for which the parks were declared/recognised.
- Minimise threats to cultural values.
- Work with traditional Aboriginal owners to assess and maintain key cultural sites.
- Provide assistance to traditional Aboriginal owners in recording and maintaining living cultural traditions.
- Assist in the facilitation of on-country activities to encourage intergenerational transfer of knowledge.
- Provide appropriate interpretive material to the public to communicate the cultural heritage of Commonwealth reserves.

2013–14 results

Identification and conservation of cultural sites

- Booderee staff liaised with the Wreck Bay Aboriginal Community Council on a number of proposed developments and potential impacts on cultural heritage.
- With the involvement of their traditional Aboriginal owners, Kakadu and Uluru–Kata Tjuṯa staff continued their rock art maintenance programmes. Uluru–Kata Tjuṯa's Cultural Site Management System database was upgraded and installed on new hardware.
- Uluru–Kata Tjuṯa staff undertook a five-day intensive refresher course that reviewed all facets of rock art maintenance and monitoring. Park staff and Muṯitjulu community rangers undertook extensive rock art maintenance and evaluation including the removal of graffiti.
- The Uluru–Kata Tjuṯa National Park cultural site management system has undergone extensive software and hardware updates with the addition of video applications and investment in tablet devices and software support.
- The Uluru–Kata Tjuṯa National Park photo collection has been shared with the Ara Irititja Project—an archival database of Anṅangu multimedia materials.
- Kakadu staff commissioned the development of a rock art field manual to assist field staff to undertake basic rock art maintenance in the field. The manual will be trialled during field work planned for August 2014. The field work will involve park staff, traditional Aboriginal owners and Indigenous ranger groups.
- A group of Kakadu traditional Aboriginal owners and staff were hosted by the Getty Institute to view the rock art conservation management and associated tourism opportunities in South Africa.
- Kakadu is working with a PhD student to identify and address management issues at several key art sites in the park. The study will research and review the rock art conservation techniques used by park staff.
- Kakadu staff attended a workshop on international contact art at the Darwin Museum.
- Kakadu staff continued discussions with the Aboriginal Areas Protection Authority, traditional Aboriginal owners and Northern Land Council about a register of sites of significance and access protocols in the park, particularly in relation to public walking routes. Several site visits have occurred with traditional Aboriginal owners to identify key sites for inclusion on the sacred site register. An on-country camp with members of the three clan groups from the south of the park promoted intergenerational exchange of knowledge relating to the sickness country in this area.
- Pulu Keeling staff contributed to arrangements for the proposed 2014 commemoration of the centenary of the wreck of the SMS Emden on the island during WW1. They also inspected and maintained Malay gravesites on North Keeling Island based on advice received from the religious leaders of the community.

Maintenance and promotion of traditional cultural values

- The Booderee Board of Management cultural heritage directions are included in the draft second management plan for the park. The Wreck Bay Aboriginal Community Council developed a draft cultural heritage plan for Wreck Bay lands in 2013–14.
- Uluru–Kata Tjuṯa is implementing the Cultural Heritage Action Plan with priorities for each year outlined by the Board of Management. Priorities for 2013–14 were rock art and sacred site maintenance and protection, oral history collection, support to the junior ranger programme, support for traditional hunting and gathering activities, and cultural heritage data base management including the park’s own data base and the photo database managed by the University of South Australia.
- Construction of a new Men’s Keeping Place in the Muṯitjulu Community at Uluru–Kata Tjuṯa was completed in partnership with traditional Aboriginal owners and the Central Land Council.
- Significant archaeological fieldwork associated with the Australian Research Council linkage project ‘Prehistory to History: Landscape and Cultural Change on the South Alligator River’ between Kakadu and the Australian National University was undertaken.
- Archaeological material collected from the Culaly Floodplain in Kakadu in November 2013 is being analysed. All material will be returned to country towards the end of 2014.

Histories, pre-histories and knowledge recording

- Six shipwreck condition assessments were undertaken at Elizabeth and Middleton Reefs, Lord Howe Commonwealth Marine Reserve. Four named wrecks were assessed, the Runic, Kaineo Maru, Fuku Maru and the Monray Frontier. These wrecks age from 16 to 53 years old. Two unnamed wrecks were also assessed. Photographic cataloguing over time has shown a significant level of deterioration of the Kaineo Maru. The other wrecks assessed were observed to be in a stable condition.
- Uluru–Kata Tjuṯa’s oral history collection is being catalogued and archived and traditional ecological knowledge recordings with senior traditional Aboriginal owners are being added to the Cultural Site Management System.
- In Kakadu, researchers are investigating the history of the buffalo hunting industry and mapping buffalo camps at Hidden Camp (south of Old Darwin road), the old Kapalga station site, and Gougo’s (a Russian buffalo hunter) camp at Munmarlary. Maintenance work on the historic Nourlangie camp complex is being planned with the Australian Conservation Volunteers.

KRA 3—Joint management and working with Indigenous communities

Objectives

- Indigenous communities benefit from, and play a lead role in, the Australian Government's protected-area management programme.
- Activities and investments contribute to meeting Closing the Gap targets.

Actions

- Facilitate effective participation of traditional Aboriginal owners and Indigenous communities in park management.^{PBS}
- Engage Indigenous staff and/or contractors to provide park services.^{PBS}
- Provide opportunities for the establishment of Indigenous-owned enterprises, including those which provide an Indigenous cultural experience to visitors.
- Work together with boards of management, land councils and service-delivery agencies to assist in meeting Closing the Gap targets.

2013–14 results

Parks Australia continued its long and proud history of working with Indigenous Australians in the joint management of Kakadu, Uluru–Kata Tjuta and Booderee National Parks.

Indigenous staffing

- The employment level of permanent Indigenous staff in Parks Australia's three jointly managed national parks was essentially unchanged from 2012–13, with a slight increase in the actual number of ongoing Indigenous staff to 54 people (equivalent to 47.58 full-time positions).
- There is strong Indigenous representation in ongoing roles at Kakadu, Uluru–Kata Tjuta and Booderee national parks.^{PBS}
- Specified trainee positions were maintained at Kakadu and Uluru–Kata Tjuta. Booderee commenced a specific trainee position in June 2013.^{PBS}
- Booderee filled an executive level position by advertising the position consistent with the APS special measures guidelines. The recruitment process resulted in the first ever ongoing Executive Level 1 appointment of a traditional owner at Booderee. Three Indigenous staff were engaged as casual employees at Booderee's visitor centre.^{PBS}
- Due to fluctuating project requirements and reduced revenue to the parks, long-term contracts expiring and difficulties recruiting staff in a transient population, the number of Indigenous staff engaged as casual employees at Kakadu fell from 52 to 35 (full-time equivalent).^{PBS}
- The Kakadu Indigenous Ranger Programme, funded through the Australian Government's Working on Country initiative, hosted 10.5 community rangers delivering visitor services and natural and cultural-heritage management programmes across the park. The Warnbi Association and Werenbun Aboriginal Corporation are partners in this programme with the park.^{PBS}

- The Mutitjulu Community Rangers Programme at Uluru–Kata Tjuta employed 35 (9.37 full-time equivalent) local Indigenous people in flexible employment arrangements to undertake a range of activities in the park with parks staff. This included walking-track maintenance, prescribed burning, feral animal control, cataloguing of oral history recordings and senior involvement in works planning.^{PBS}

Contribution of Aboriginal enterprises to park services

- Wreck Bay Aboriginal Community Council was contracted to provide works and services in excess of \$1.5 million in value. Services included cleaning and maintenance of roads, entry station, horticulture and infrastructure. Works included a variety of scheduled repair and maintenance projects as well as numerous unscheduled and capital expenditure works.^{PBS}
- In its 2012-13 annual report, Wreck Bay Aboriginal Community Council reported that its staffing levels had remained the same as the previous financial year with 14 full-time, four permanent part-time and up to 10 casual staff to deliver services to Booderee.^{PBS}
- The services contract between the Director and Wreck Bay Aboriginal Community Council is approaching the end of the first two years of operation. Extension of the contract will be subject to the outcomes of a review.^{PBS}
- In Kakadu, a new model for park interpretation was introduced with the Djabulukku Association contracted to provide tourism services over three years in campground management and surveillance. The association is delivering natural and cultural heritage interpretation in the East Alligator district and Ubirr over the next two years.^{PBS}
- Indigenous staff from Wurrng Cultural Tours and Ayal Aboriginal Tours are also contracted to provide cultural activities in other areas of Kakadu National Park from May to October each year.
- Gagudgu Lodge Coinda was contracted to provide Twin Falls shuttle and interpretive services to park visitors at Twin Falls. In 2014, Gagudgu Lodge Coinda have been contracted to provide campground management services at Gunamarr campground near Jim Jim Falls.

Training and support

- Junior Ranger programmes at the three jointly managed national parks continued in association with local primary schools and colleges. The lessons, aligned with school curriculums and delivered by park staff, are designed to educate students on the work undertaken by the Ranger and Cultural Resource Management teams. A total of 17 activities were conducted at Kakadu and included West Arnhem College (Jabiru and Gunbulunya) and Pine Creek School. At Uluru–Kata Tjuta the Junior and College Rangers programmes included a number of activities to support intergenerational cultural exchange including the development of a seasons calendar. For Booderee, 12 activities were held with preschool to year six students from Jervis Bay School.
- Kakadu continued to support the placement and employment of up to three Indigenous school-based apprentices. Participants are required to attend work one day a week and attend school for the other four days. The apprentices carry out day-to-day operational activities and work on special projects while gaining a TAFE qualification (Certification II Conservation and Land Management). The school-based apprentices are supervised and mentored by park staff while they are at work.

- A number of joint-management staff participated in the department's pilot cross-cultural appreciation and awareness training during 2013–14. This online programme was developed for all departmental staff and the pilot was trialled in the remote parks to test access and content appropriateness. Kakadu ran one cross-cultural exchange session in the period.
- A West Arnhem Indigenous leadership programme was delivered in Kakadu in collaboration with the Department of Prime Minister and Cabinet. Kakadu traditional Aboriginal owners played a key role in mentoring participants, and 21 people including key Indigenous staff participated in the four-day programme.
- Kakadu National Park has produced guidelines for researchers working with Bininj on the park to facilitate the development and maintenance of productive relationships between researchers, Bininj and Parks Australia. These guidelines are based on the protocols prepared by the National Environmental Research Program which were approved by the board last year.
- Work is being undertaken to prepare a DVD on guidelines for researchers to work with Bininj on Kakadu which will be presented to the board.
- Uluru–Kata Tjuta convened two women's governance workshops in August and October to facilitate greater engagement between senior female Parks Australia staff and female board members.
- Uluru–Kata Tjuta Board of Management endorsed the Intergenerational Training and Employment Strategy in 2013. The strategy sets the direction for training and employment in the park and established clear mechanisms and frameworks to support increased employment.
- At Booderee, a broad range of training was provided to park staff and Wreck Bay Aboriginal Community Council members in accordance with the park's training strategy. Support continues to be provided to two Indigenous staff members to undertake university studies.
- Booderee continued to support work-experience placement for Indigenous students from the Wreck Bay Community. Three school-based apprentices who began a two-year placement in the gardens in November 2012 remain in the programme. Booderee continues to support the Indigenous Ranger Cadet programme at Vincentia High School, targeting year nine and 10 students.

Boards of management

- The Booderee Board of Management met once informally during the year, together with two meetings of the Training and Interpretation subcommittees.
- The Kakadu Board of Management met four times and devoted one day each meeting to the preparation of the park's new plan of management.
- The Kakadu Tourism Consultative Committee met four times to provide advice and information to the board. The Kakadu Research Advisory Committee met once collectively and regularly provides advice to the board.
- Two meetings of the Uluru–Kata Tjuta Board of Management were held, supported by four meetings of the Tourism Consultative Committee and one each of the Cultural Heritage and Scientific and the Film and Photography Consultative committees.

KRA 4—Use and appreciation of protected areas

Objectives

- Commonwealth reserves are valued for providing broader benefits to society such as a greater appreciation and understanding of Australia's biodiversity, unique habitats and landscapes.
- Australia's protected areas are recognised as significant contributors to tourism.

Actions

- Provide inspirational, satisfying and safe experiences for visitors to Commonwealth reserves.^{PBS}
- Ensure visitor monitoring and reporting methods are consistent across the Commonwealth reserve estate.
- Minimise visitor impacts on natural and cultural values.
- Improve tourism and conservation partnerships.
- Facilitate National Landscape experience development strategies that promote sustainable and appropriate tourism in protected areas.

2013–14 results

Visitor numbers and satisfaction

- More than 140 tourism operations, including charter fishing, sightseeing and snorkelling and scuba diving, were authorised to occur in the actively managed Commonwealth marine reserves during 2013–14. The vast majority (90 operations) were in the Coral Sea Commonwealth Marine Reserve, followed by 20 in the Temperate East network, 17 in the South-east network and 14 from the North-west network.
- An estimated 1.3 million people visited Commonwealth terrestrial reserves in 2013–14, which remains consistent with the previous year's visitor numbers.
- Visitor surveys were undertaken at Kakadu and Uluru–Kata Tjuta in the 2013–14 year period. Over 98 per cent of visitors to Kakadu recorded a high overall level of satisfaction with their experience in the park. The survey results for Uluru–Kata Tjuta will be available in the latter half of 2014.^{PBS}

- While no formal visitor survey was undertaken at Booderee in 2013–14, staff continue to receive overwhelmingly positive feedback through letters and emails and particularly through repeat visitors booking campsites throughout the year.
- Booderee received record revenue collections in 2013–14 (up 17 per cent) driven mainly by better park-use fee compliance and camp revenue yields. Visitor numbers increased by approximately 5 per cent.
- Two new traffic counters were installed at the entrance to Booderee National Park and the entrance to the Booderee Botanic Gardens in November 2013. These digital counters will assist in more accurate estimates of visitor numbers and trends over future seasons.
- Visitor surveys were undertaken at the Australian National Botanic Gardens, with a high overall satisfaction rate of 94 per cent. An estimated 409 202 people visited the Gardens, a 4 per cent decrease from 2012–13.

Education/interpretation activities

- The Australian National Botanic Gardens hosted education programmes for 12 087 students from 218 schools from every state. One new education programme was developed for junior primary students and two new education programmes for secondary students.
- Christmas Island National Park staff conducted a series of educational activities for the public, including for the annual Bird and Nature Week participants as well as school and special interest group tours.
- Staff conducted the annual high school trip to Pulu Keeling National Park which included cultural and environmental information. Other environmental information sessions were also conducted.
- Booderee National Park conducted more than 100 cultural interpretation, science and historical education presentations throughout the year for junior rangers, visiting schools and university groups and for other visitors as part of the parks school-holiday education programmes.
- While the number of sessions offered to schools decreased slightly, slightly less than 3500 children and adults were the beneficiaries of Booderee's cultural education sessions overall in 2013–14.
- Several new activities were offered in 2013–14 in the 'Booderee Insights' programme. These included traditional basket weaving and string making with Galamban Aboriginal Experiences, outdoor Indigenous themed films at the Booderee Botanic Gardens amphitheatre, lighthouse stories and a Booderee Coast Walk.
- Uluru–Kata Tjuta staff distributed four tour guide newsletters, three e-newsletters and 12 industry updates for 2013–14 period.
- Uluru–Kata Tjuta staff delivered free interpretive events to visitors including the daily ranger-guided Mala Walk and cultural/environmental presentations. The park convened four information sessions and one cultural day for accredited guides to learn bush skills from Anangu and meet with the park management team to improve the quality and depth of interpretation about the park.

- In Kakadu, a record 53 000 visitors participated in more than 1800 seasonal interpretive ranger programme activities conducted from May to October, with 100 per cent of those surveyed reporting satisfaction with their experiences. Information and interpretive services were provided to 46 446 visitors at the Bowali Visitor Centre.
- Nineteen new volunteer guides were welcomed to the Australian National Botanic Gardens and completed their training. Volunteer guides provided twice daily free guided walks for visitors to the Gardens.
- In September 2013 the Australian National Botanic Gardens supported the Kids Teaching Kids Week, hosting 150 Canberra students in an innovative environmental education programme where students learn from each other.
- The reach of Parks Australia's digital-engagement tools grew considerably, telling stories from across the parks and reserves. The organisation attracted more than 520 000 unique web visitors (up 22 per cent) and the suite of social media channels achieved 4.5 million views (up 23 per cent).

Tourism and visitor facilities

- In November 2013 Booderee completed the construction of the new Murray's Boat Ramp wharf facility, a short-term tie-up and loading jetty with disabled access. This facility replaced the old wooden Murray's Wharf which had become unsafe and was demolished.
- New information/interpretive signage was installed in 2013–14 at Booderee's historic Cape St George Lighthouse and the marine information board at Murray's Boat Ramp. These signs contained historical, cultural, marine and ecological information.
- Booderee purchased and installed additional new lockable information boards at key visitation precincts around the park. Extra information on emergency contacts and campsite rules were installed.
- Booderee received approval for a new online campsite booking service in 2014. This is expected to be launched to the public in late 2014.
- Visitor services staff at Booderee continued to liaise with tourism industry stakeholders—at Jervis Bay Tourism, Shoalhaven and South Coast Tourism, and Destination NSW (Destination Marketing and Aboriginal Tourism Development representatives).
- Uluru–Kata Tjuta staff, in consultation with Anangu, finalised and installed new interpretive and safety informational signage including interpretive displays at the Cultural Centre, a new “respect country and culture” display, park boundary signs, a welcome sign, and signage for park fees and regulations.
- Uluru–Kata Tjuta staff, in consultation with Anangu, developed a variety of online audio tours for visitors that focused on the natural and cultural values of the park. The package included an introduction to the park, Uluru walks and activities, Kata Tjuta walks and activities.
- Uluru–Kata Tjuta approved its first commercial tourism licence, providing a five-year licence term for AAT Kings to continue to provide the Sunset BBQ at the park's cultural centre coach car park. The BBQ is a limited and exclusive activity and AAT Kings are able to remain in the park after normal closing time.

- Uluru–Kata Tjuta facilitated a very successful trial permit for Outback Cycling to provide a new visitor experience. Outback Cycling have set up operations at the Cultural Centre, hiring bikes to visitors to cycle around Uluru.
- As part of the Commercial Tourism Review for Parks Australia, Kakadu entered into 32 licences for unique or restricted activities in the park in April 2014. The licences offer commercial tour operators a five-year secure tender period and a range of experiences from safari camping to fishing and bushwalking. Licence operators are required to support local Indigenous businesses through employment opportunities, training and in-kind support.
- In 2013–14, Kakadu issued more than 100 commercial filming and photography permits. Tourism NT and Tourism Australia sponsored several of these permits.
- The Australian National Botanic Gardens implemented a new Visitor Services Volunteer programme to enhance visitor services at the Visitor Information Centre.
- The Flora Explorer electric passenger vehicle operated in the Gardens for a second year attracting 720 paying passengers.
- The Gardens continues to support Visit Canberra’s Enlighten Festival and Human Brochure tourism initiative with specially created Gardens public programmes.
- Final designs were completed for the Dales boardwalk on Christmas Island and a contract for its construction was entered into in March 2014. The boardwalk will be harmonious with the area’s status as a wetland of international importance listed under the Ramsar Convention. Key island stakeholders were engaged in the design process, to obtain their input and facilitate a consistent approach to boardwalks and viewing platforms across the island.
- Cyclone Gillian caused significant damage to visitor areas of Christmas Island National Park, resulting in the closure of all vehicle and walking tracks. Significant efforts and resources were allocated to repair and open visitor sites. Some sites remain temporarily closed.

Awards and events

- The new \$2 million Red Centre garden at the Australian National Botanic Gardens was completed and formally opened by Senator Simon Birmingham on 31 October 2013. Extensive media coverage of this event generated positive feedback from the general public for this new Gardens attraction.
- In November 2013, the Gardens won the prestigious ecotourism category in the Canberra and Capital Region Tourism Awards.
- The Gardens hosted an extensive range of popular public programmes and events including art and photographic exhibitions, monthly Storytime for families, horticultural workshops and National Science Week interactive science trail. The Summer Sounds concert series, held in January 2014 in partnership with the Friends of the Gardens, attracted 12 750 people over four weekends while the monthly ‘afterDARK’ evening tour programme attracted 877 visitors, with survey results reporting high visitor satisfaction.
- The Australian National Botanic Gardens is actively seeking collaborations to host major events. In 2013–14 these included Canberra Bush Capital Celebration weekend held on 2–3 November 2013 as part of the Canberra Centenary; ‘Sunset Cinema’ outdoor movies

for three evenings a week over six weeks during November and December 2013 which attracted 7167 attendants over 21 sessions (average of 341 per session); and 'Flix in Stix' music and short films event held in February 2014 attracting 1400 people.

- Booderee National Park staff provided interpretative information and promoted World Environment Day and the annual ORRCA Whale Census Day.
- Booderee, in conjunction with Australian National University researchers, launched a promotional book published by CSIRO *Booderee National Park – the Jewel of Jervis Bay*. It contains many beautiful images of the park and ecological information from research and monitoring programmes.
- Booderee assisted with two major events in 2013–14. The International Fleet Review in September–October 2013 with more than 20 international naval vessels anchored in Booderee waters over two days; and in March 2014 the NSW Reconciliation Council's Recognition Festival held at Bristol Point. Both events generated extra visitation and revenues and very positive feedback from participants and visitors alike.
- Through Booderee's permit system more than 10 local triathlon events and one commercially permitted triathlon event were held in the park in 2013–14.
- In March 2014 the Booderee Botanic Gardens won international recognition with a level two accreditation from The Morton Arboretum in the United States as part of its ArbNet programme. This was in recognition of the garden's significant tree collection supported by its high-quality data documentation and education programmes, involvement in conservation and good public access in general. This is the second Australian institution to be granted this award, and the first at this higher level.
- A film permit was issued to film the ruined lighthouse precinct in Booderee as part of a Coast Australia television series production of key sites around Australia.
- Uluru–Kata Tjuta hosted two major VIP events including a visit by the Governor General and Their Royal Highnesses, the Duke and Duchess of Cambridge, with the latter event attracting worldwide media coverage.
- Kakadu supported several community events including festivals celebrating Indigenous culture and community spirit, such as the Mahbilil Festival in Jabiru, the Jabiru careers expos, NAIDOC week, World Parks Day, World Wetlands Day and Parks Week.
- Kakadu interpretive rangers received six Super Deed awards in 2013. These awards are nominated by visitors to staff who have gone above and beyond and enhanced the visitor experience. Awards are issued through the local industry representative body, Tourism Top End.
- Kakadu hosted the production company Northern Pictures for 12 months during filming of a four-part documentary series on the park and its people. The series was purchased by the Australian Broadcasting Corporation and was screened in Australia and worldwide in September 2013.

KRA 5—Stakeholders and partnerships

Objective

- Parks Australia is recognised as a valued partner nationally and internationally in the conservation of biodiversity and collaborative research.

Actions

- Effectively involve stakeholders and partners in park-management activities.^{PBS}
- Form new and effective partnerships with government agencies, neighbours and stakeholders.
- Co-fund research projects with other agencies under equitable funding arrangements.^{PBS}
- Play a leadership role in targeted collaborative biodiversity research, such as through Australia's Virtual Herbarium and the Australian Seed Bank Partnership.

2013–14 results

- Constructive partnerships in managing Commonwealth reserves continued with state and territory government parks' agencies; industry groups including the Transport and Tourism Forum; councils; universities; non-government organisations; and community groups. Partnerships were also maintained with relevant Australian Government agencies including the Australian Fisheries Management Authority; the Department of Defence; the Department of Infrastructure and Regional Development; the Department of Agriculture; the Australian Customs and Border Protection Service; and Tourism Australia.
- Research partnerships continued with a range of organisations including the Parks and Wildlife Commission of the Northern Territory, CSIRO, Australian Institute of Marine Science, James Cook University, The Australian National University, University of Canberra, Charles Darwin University and The University of Sydney.
- Strong partnerships have been developed with the International Union for Conservation of Nature (IUCN) and the New South Wales National Parks and Wildlife Service through joint planning for the IUCN World Parks Congress scheduled for Sydney from 12–19 November 2014. Co-hosting this global event provides an opportunity to enhance Australia's reputation as a progressive and effective manager of biodiversity.
- The Parks Australia and Tourism Australia partnership to support Australia's National Landscapes initiative completed the suite of 16 National Landscapes in 2013. Individual National Landscapes' steering committees are progressing nature-based tourism and conservation initiatives in their landscapes. This includes the delivery of priority projects, building strategic partnerships to ensure strong ownership and engagement at the regional level and developing new high-quality visitor experiences. With the critical tools and resources now developed (including the majority of experience development strategies, guidebooks and landscape positioning) the foundations are in place for each Landscape to drive its own future.
- The long-standing agreement (more than 22 years) for the Centre for Australian National Biodiversity Research, a joint venture between CSIRO Plant Industry and the Australian National Botanic Gardens, continues to result in many collaborative projects and scientific outputs.

- In June 2014, Parks Australia signed a memorandum of understanding with Ecotourism Australia. The memorandum will help ensure Parks Australia continues to deliver high-quality visitor experiences in our reserves and demonstrate leadership in managing visitor experiences.
- Kakadu National Park participated in the steering committee for Australia's Timeless North National Landscape, contributing to completion of the Experience Development Action Plan and a tourism opportunities market sounding document. This plan includes the Jim Jim/Twin Falls project which is progressing well with plans for further consultation with traditional Aboriginal owners to progress to stage 2 of the project and development of a concept plan. The project is well supported by stakeholders and has attracted \$40 000 from the Northern Territory government.
- In May 2014, Kakadu facilitated a Mary River visitor-experience workshop which involved 30 tourism industry members, 30 traditional Aboriginal owners, and park staff. Industry updates are circulated fortnightly via the Kakadu website. The results from the workshop will assist with the development of a visitor-experience plan for this part of the park
- In June 2013, Kakadu launched its very own Facebook page which has now accumulated more than 1400 fans.
- Kakadu continued to work collaboratively with Northern Territory Government agencies, the Department of Defence, Indigenous Protected Areas and other neighbours to implement fire management at the landscape level.
- Uluru–Kata Tjuta National Park participated in the steering committee for Australia's Red Centre National Landscape contributing to the completion of the Experience Development Action Plan and tourism opportunities market sounding document for this landscape. The steering committee progressed a number of priority projects including creating a commercially appropriate foundation for ballooning near Uluru. A major events policy has also been developed by the park to provide guidelines and support appropriate opportunities for major events there.
- Uluru–Kata Tjuta has established a memorandum of understanding between the Director of National Parks and Voyages Indigenous Tourism Australia to work together for the benefit of both organisations.
- Uluru–Kata Tjuta finalised a comprehensive evaluation of the Mutijulu Essential Services Infrastructure Review in partnership with the Northern Territory Government, Power and Water Corporation and the Department of Prime Minister and Cabinet.
- Booderee continued its support for volunteers working on natural resource management projects including Booderee Park Care (approximately 550 person hours). Booderee also maintained its cooperative arrangements with land-management agencies and tourism bodies in the region and continued to lead regional fox management.
- Ten Annual Business Agreements were entered into in 2013–14 between the Director of National Parks and state and territory government parks and fisheries agencies to deliver critical management services, including surveillance and monitoring across the Commonwealth marine reserves estate.

- A major achievement in 2013–14 was the signing of a three-year memorandum of understanding with the Australian Fisheries Management Authority. Under the memorandum, a Commonwealth marine reserve alert service for Commonwealth commercial fisheries was established in collaboration with the commercial fishing industry. This alert service will ensure that vessels always know whenever they enter a marine reserve. The service now in effect in the South-east Commonwealth Marine Reserve Network will be extended to all other Commonwealth marine reserves later in 2014.
- A four-year Implementation Schedule for the South-east Commonwealth Marine Reserve Network Management Plan was finalised with input and assistance from the South-east Forum, which provides for multi-sector advice and input into South-east marine-reserve management. Actions during 2013–14 included improving marine reserve awareness in partnership with industry and other groups; and ongoing surveillance, monitoring and compliance risk planning with industry.
- The Australian National Botanic Gardens has enhanced its partnerships with Commonwealth reserves at Christmas Island, Kakadu and Uluru developing more specific and targeted actions on staff development, threatened-species recovery and biodiversity conservation outcomes. Gardens staff conducted training in seed collection and handling for 25 staff from Commonwealth reserves.
- The 'Friends of the Gardens' continued to actively support the Gardens through daily volunteer guided walks, support for major public events and financial support for projects such as the pavement artwork at the new Red Centre Garden and new Seed Bank equipment. The 'Seedy Volunteers' group completed its third year of seed collecting and contributed 395 hours of field assistance.
- The Gardens continued to coordinate the Australian Seed Bank Partnership and its national seed-collecting programme targeting species that are threatened, endemic or have economic potential. The partnership made 49 *ex situ* collections of 27 species susceptible to myrtle rust (*Puccinia psidii*) to support conservation and scientific research.
- Gardens staff collaborated with researchers from the Australian National University and Friends of the Gardens to present an Alpine seed and seedling ecology symposium with more than 40 stakeholders.
- The partnership with Greening Australia and the Centre for Australian National Biodiversity Research finalised a successful extension to the seed production and seed-harvesting project funded by the Australian Government's Caring for our Country initiative.
- The Gardens continued its partnership with the New South Wales Office of Environment and Heritage, Eurobodalla Regional Botanic Gardens and Booderee National Park to collect, bank and share seed and new plant material as part of a regional effort to address common threatened species issues and collections priorities.
- Under an agreement with the Australian Capital Territory Government to support *ex situ* conservation of the territory's rare and threatened plants, the Gardens undertook seed collection, seed banking and germination trials of four rare and threatened species and an agreed selection of native understorey species.

- The Gardens provided artistic inspiration for Melbourne sculptor Annee Miron and Canberra textile artist Sally Blake in May 2014 as part of Craft ACT's Artist-in-Residence programme. The 2014 programme presented by Craft ACT in association with ACT Parks and Conservation Service and the Gardens, is supporting a local, national and international artist to engage with and interpret an aspect of the environment through the theme of alpine bogs and fens.
- Norfolk Island National Park supported the Norfolk Island Flora and Fauna Society in presenting 'Invasive Species Month' throughout May 2014. This included presentations and activities to raise awareness of current weed and feral animal problems in the National Park, as well as the importance of biosecurity measures to prevent further incursions.
- To maintain island-wide cat and rat management efforts, Christmas Island National Park continued its successful partnerships with the Shire of Christmas Island, Australian Government departments, the Western Australian Department of Parks and Wildlife and Phosphate Resources Ltd.
- Christmas Island staff worked with the Shire to manage off-park roads to help reduce mortality of red crabs during the annual breeding migration; these activities received high levels of stakeholder and community support.
- Membership of and contributions to the Christmas Island Emergency Management Committee continued. This included a coordinated response to Cyclone Gillian and progressing an island-wide radio communications system.
- Membership of the Christmas Island Tourism Association continued, including collaborative media and promotional activities, such as the annual Bird and Nature Week.
- Two school-based trainees were engaged on Christmas Island to provide relevant work experience while helping to assist park management programmes.
- The programme with the Department of Immigration and Border Protection and Serco Group Pty Ltd to assist volunteer asylum seekers to gain work experience and skills by assisting with forest rehabilitation operations on Christmas Island continued.
- Logistical and/or equipment support was provided to various researchers and Western Australian Fisheries to carry out a range of research and monitoring activities related to the management plans for Pulu Keeling and the Christmas Island national parks. These included marine ecosystem monitoring and research into threatened, significant and invasive species, including land crab diversity.
- The Crazy Ant Scientific Advisory Panel, Cocos buff-banded rail recovery team and the Christmas Island Reptile Advisory Panel continued to operate effectively.
- One meeting of the Pulu Keeling National Park Community Management Committee was planned but was cancelled due to severe weather. Another meeting is planned for 2014–15.

KRA 6—Business management

Objectives

- Robust and accurate business systems are in place which promote health and safety, maintain park infrastructure integrity and ensure work is undertaken within budget constraints.
- Parks Australia's ecological footprint is minimised through adaptive management and supporting business practices.

Actions

- Base planning and decision making on the best available information, legal obligations and government and agency policies.^{PBS}
- Ensure expenditure does not exceed budget.
- Minimise the number of 'A' or 'B' findings from the annual Australian National Audit Office audit of Director of National Parks financial statements.
- Prepare and implement robust and effective management plans for Commonwealth reserves.
- Minimise risks and the number and severity of reportable work health and safety incidents involving workers and park users.^{PBS}
- Ensure that accessible assets and infrastructure are maintained in a safe condition.
- Use adaptive management regimes that respond to new information about impacts of climate change and improved technologies.
- Audit energy and water use and waste in Commonwealth reserves and implement actions to provide efficiencies and improvements.

2013–14 results

Management planning

- All Commonwealth reserves were managed in accordance with the requirements of the relevant Australian IUCN reserve management principles set out in the Environment Protection and Biodiversity Conservation Regulations.
- The South-east Commonwealth Marine Reserve Network Management Plan came into effect on 1 July 2013. The plan is the first to encompass a large regional network of Commonwealth marine reserves and will be implemented in consultation with key users and other stakeholders.
- The Australian Government's election commitment to review the management arrangements for the Commonwealth marine reserves proclaimed in November 2012 is under way. Until new management plans are developed and come into effect, transitional management arrangements are in place for the marine reserves in the South-west, North-west, North, Temperate East and Coral Sea.
- A draft management plan prepared by the Australian Antarctic Division for the Heard Island and McDonald Islands Marine Reserve was released for public comment on 30 June 2014. The new plan will replace the previous plan that expired in August 2012.

- Management plans for terrestrial reserves continued to be developed and implemented in line with Environment Protection and Biodiversity Conservation Act requirements. The Christmas Island National Park Management Plan 2014–2024 was completed and came into force. This included preparation of performance indicators and an implementation schedule for the plan. Other plans for Norfolk Island and Uluru–Kata Tjuta national parks and the Australian National Botanic Gardens remain current. A management plan for Booderee is in the process of being finalised, taking into account submissions received on a draft plan released for public comment. Draft management plans are currently in preparation for Pulu Keeling and Kakadu national parks which are expected to be released for public comment in 2014–15. The consultation phase with traditional Aboriginal owners for the new Kakadu Management Plan has been completed.
- Consistent with the drafting process for the new Kakadu Management Plan, the Board of Management approved the review of the Tourism Master Plan for Kakadu initially written in 2009.
- As part of the Kakadu Tourism Master Plan, draft visitor experience plans for both the Jim Jim/Twin Falls Precinct and Mary River Precinct are undergoing consultation with traditional Aboriginal owners and stakeholders. Both plans are expected to be presented to the Kakadu Board of Management in late 2014.
- A draft Christmas Island Biodiversity Conservation Plan, which is a multi-species recovery plan under the Environment Protection and Biodiversity Conservation Act, was released for three months' public comment.

Climate change

- Climate change strategies are in place for all terrestrial reserves.
- Further information on greenhouse gas emissions from energy consumption by parks and reserves is provided in the environmental sustainability report in Appendix C.

Financial and business management

- The Auditor-General issued an unqualified audit report for the 2013–14 financial statements of the Director of National Parks. There were no 'A' or 'B' findings from the Australian National Audit Office audit of the financial statements.
- The heating ventilation and air-conditioning upgrade project for the Australian National Botanic Gardens Botany and Herbarium buildings at the Australian National Botanic Gardens was completed. This upgrade has resulted in a reduction in electricity charges and includes a business management system providing capability for ongoing monitoring and programming.
- The Australian National Botanic Gardens managed the bequest programme, online donation system and generated sponsorship for the 'Summer Sounds' concert series. This included licence agreements such as Floresco in the Gardens and the Botanical Bookshop. The Gardens approached the market for a licensee to operate the Franklin building that became available after a consolidation of onsite office space.

- Until June 2014 the Director held the leases for Calperum and Taylorville stations, adjoining properties located near Renmark in South Australia. The properties are managed for conservation purposes consistent with trust arrangements established when they were acquired with funds contributed by the Australian Government. The properties have been managed for a number of years on behalf of the Director by Austland Services Pty Ltd (a company owned by the Australian Landscape Trust). The property leases have been transferred to Austland Services which will continue to manage the properties in accordance with the trust arrangements.

Risk and work health and safety

- The Director has participated in the Comcover Risk Management Benchmarking Scheme since 2002–03. In 2013–14 the Director scored 8.5 out of a possible 10 compared to an average score of 7.0 for the 135 participating Australian Government agencies. The Director achieved an overall risk maturity level of ‘structured’.^{PBS}
- Parks Australia recorded 138 work health and safety incidents in 2013–14 affecting parks staff and visitors.
- There were four dangerous incidents¹ that occurred within parks in 2013–14.
- One serious injury² was sustained by a Parks Australia worker³ during 2013–14, as well as one serious injury to a visitor.
- There were two visitor fatalities—one as a result of a crocodile attack and one drowning. There was also one resident fatality which was also a result of a crocodile attack.^{PBS}
- The \$6.9 million asbestos remediation project for Kakadu and Uluru–Kata Tjuta was completed.
- Uluru–Kata Tjuta completed the installation of a new digital radio network. This effectively removes most communication ‘black spots’ from the park, improving communication for emergencies and incident response activities for both park staff and neighbouring emergency service providers.

1 The definition of a dangerous incident is in accordance with Section 37 of the *Work Health and Safety Act 2011*. Under this definition, a dangerous incident is notifiable to the regulator Comcare.

2 The definition of serious injury or illness is in accordance with Section 36 of the *Work Health and Safety Act 2011*. Under this definition, a serious injury or illness is notifiable to the regulator Comcare.

3 The definition of a worker is in accordance with the *Work Health and Safety Act 2011* and includes employees, contractors and volunteers.

Objectives

- There is a comprehensive information base across Australia, including for the National Reserve System, that supports effective decision making, spatial management and conservation.
- Threatened native plant species occurring within Commonwealth parks and reserves are conserved in co-operation with national and international institutions.

Actions

- Provide high quality, comprehensive and current information to the Australian community through publications and enhanced websites to facilitate and foster understanding of park values and Australia's natural and cultural heritage.^{PBS}
- Undertake research designed to engage with end users and support evidence-based decision making by environmental managers and policymakers.^{PBS}
- Increase knowledge of Australia's biodiversity through research and training.^{PBS}
- Make effective use of research investment in Commonwealth reserves.
- Enhance *ex situ* conservation of Australia's rare and threatened biodiversity, through the activities of the Australian National Botanic Gardens and targeted projects.

2013–14 results

Websites and publications

- In October 2013, Parks Australia launched a new tourism-focussed website. Over the eight months to June 2014 the site has been visited by 244 749 people with 1 172 650 hits.
- The department launched a revised departmental website in November 2013. This new website contains pages specifically about Parks Australia and provides links to the Parks Australia tourism website.
- In total, 523 216 unique visitors accessed information about our parks and services on-line, representing an increase of 22.8 per cent on the previous year.
- The number of social media channels used to promote our national parks was expanded to include Instagram. The number of people who interacted with Parks Australia through our existing social media platforms increased by 23 per cent to 4.5 million views.
- The Australian National Botanic Gardens website has 38 048 pages, providing access to 56 000 images and was accessed on average 46 415 times each day during the year.
- Gardens staff completed 10 publications arising from Gardens' activities and projects. Topics covered included growing native plants, seed production, bioinformatics, and the contributions of the Australian Seed Bank Partnership to the Global Strategy for Plant Conservation.

Botanic gardens management

Parks Australia manages three botanic gardens: the Australian National Botanic Gardens, Norfolk Island Botanic Gardens and Booderee Botanic Gardens. The Australian National Botanic Gardens continued its valuable work in conservation programmes to collect, protect and build understanding of the genetic diversity of Australia's plants. In 2013–14 this included the following:

- The Gardens' conservation programme continued its focus on plants from Commonwealth reserves, grassy woodland communities, and sub-alpine flora. Specific conservation partnerships contributed to improving knowledge of 16 threatened species : *Pomaderris delicata*, *Zieria baeuerlenii*, *Swainsona recta*, *Eucalyptus imlayensis*, *Lepidium ginninderense*, *L. hyssopifolium*, *Plinthanthesis rodwayi*, *Dampiera fusca*, *Pultenaea baeuerlenii*, *Hakea pulvinifera*, *Arachnorchis actensis*, *Prasophyllum petilum*, *Corunastylis ectopa*, *Drabastrum alpestre*, *Acacia equisetifolia*, *Hibiscus brennanii*.
- The National Seed Bank made 26 seed collections of 15 species from Commonwealth reserves. In addition, 75 collections of 38 grassland species were made, increasing genetic diversity in the seed bank by making multiple collections of key species from different populations.
- Between January and March 2014 the National Seed Bank attained 113 seed collections from plants that occur in the endangered community Alpine Sphagnum bogs and associated fens, across New South Wales, Australian Capital Territory and Tasmania.
- The Gardens contributed to the collection of eight Environment Protection and Biodiversity Conservation listed *Zieria* species to the 1000 Species Project coordinated by the Australian Seed Bank Partnership and funded by the Millennium Seed Bank Partnership and Royal Botanic Gardens Kew.
- The Gardens continued with refinements to the Living Collections system, adding advanced reporting capabilities to support management and horticultural workflows; basic mapping capabilities for plant recording; participation within the Australian Seed Bank Portal, and integration with the Australian Plant Census and the department's Species Profile and Threats Database.

The Booderee Botanic Gardens, the only Indigenous-owned botanic gardens in Australia, continued its valuable work and services in 2013–14:

- Cultural programmes such as bush tucker interpretation were provided predominantly to visiting regional schools and community groups. There were 35 group visits this year with a total of 1270 participants.
- Facilities for cultural interpretation in the Gardens continued to expand with a new landscaping project known as the "Koori Garden" and a water feature depicting the lakes in the park nearing completion
- Booderee National Park continued its support for volunteers working on natural resource management projects including Booderee Park Care, with approximately 275 person hours spent at the Gardens.

Biodiversity knowledge

- In February 2014, marine reserve officers from Parks Australia and researchers from the Australian Research Council Centre of Excellence for Coral Reef Studies completed an assessment of the health of the remote Elizabeth and Middleton Reef Commonwealth Marine Reserve. Some key findings included the increase in the numbers of black cod (*Epinephelus daemeli*) and Galapagos shark (*Carcharhinus galapagensis*) since the last survey in 2011.
- A survey of the Oceanic Shoals Commonwealth Marine Reserve, off the coast of Northern Australia, was undertaken under the National Environmental Research Program Marine Biodiversity Hub. This was the first survey of its kind in any of the marine reserves of the North Network.
- A protocol for a standard approach to long-term monitoring of Trochus and sea cucumber species at Ashmore Reef Commonwealth Marine Reserve was developed in partnership with CSIRO and James Cook University. These species are important indicator species for coral reef health and are historically valuable for artisanal and commercial fisheries.
- *Ex situ* conservation of the nationally endangered Bomaderry Zieria (*Zieria bauerlenii*) is a project run since 2007 in collaboration between the Australian National Botanic Gardens, Booderee Botanic Gardens and Wollongong Botanic Gardens. The three gardens manage *ex situ* collections that together include more than 500 living plant specimens. Survey data has indicated a sharp decline in wild populations over the past seven years, highlighting the importance of *ex situ* conservation of this species. From a wild population in 2007 of about 1200 individuals, early reports seem to indicate this number may have been halved to approximately 500 to 600 individuals; causes of such a decline are not yet clear, but it is possible that drought preceding the survey and prolonged period without fire may have contributed to the impact.
- Australian National Botanic Gardens and the Centre for Australian National Biodiversity Research participated in national and international biodiversity information management and technical infrastructure projects in partnership with many stakeholders including the Council of Heads of Australasian Herbaria, the Council of Heads of Australia's Botanic Gardens and the Atlas of Living Australia.
- In partnership with Bioplatforms Australia and CSIRO, Parks Australia participated in a project to document the biodiversity of Australian soils, beginning with samples from Booderee and other Commonwealth national parks. The product will be a national dataset on soil biodiversity—the Biome of Australian Soil Environments—providing better knowledge of soil nutrients and microbial processes around the continent.
- Australian National Botanic Gardens updated the Australian Plant Image Index to make 3057 additional images accessible on the internet giving a total of 86 815 images widely available. The currency of data for the Australian Plant Name Index and the Australian Plant Census was maintained, including extensive editing of existing data and capture of new data. The Australian Plant Census is approaching the conclusion of the first pass of data compilation and resolution for vascular plants, with only the Orchidaceae (orchids) still outstanding.

- The Australian National Herbarium undertook a pilot study focused on data capture for plant specimens collected from Papua New Guinea. Of the family *Ericaceae* (rhododendrons), 2970 specimens were added to the database and detailed information gathered on the data capture process. This will inform any future projects involving recording of Papua New Guinean specimens.
- The Australian National Herbarium maintained the Census of Vascular Plants, Hornworts, Liverworts and Slime Moulds of the Australian Capital Territory, including collation of new data for the mosses, one of the only major groups of plants not yet represented in the census.
- The Australian National Herbarium added data for 13 005 herbarium specimens making a total of 911 259 specimens recorded and information available to the public through the internet.
- The Australian National Herbarium's highly successful summer botanical intern programme completed its 22nd year in February 2014. Second and third-year university students received work experience and formal training in herbarium botany and plant conservation.
- The Australian National Herbarium undertook a scientific survey of the weed flora of Norfolk Island, as part of the Norfolk Island Quarantine Survey coordinated by the Department of Agriculture. More than 400 collections will be lodged in the Australian National Herbarium as a permanent scientific record for this project.
- Researchers completed 25 scientific publications resulting from research undertaken at the Australian National Herbarium as part of the Centre for Australian National Biodiversity Research. Areas of study included *Asteraceae* (daisies), *Orchidaceae* (orchids), *Myrtaceae*, species conservation and restoration, soil microbial community composition, and invasive species.
- In collaboration with Atlas of Living Australia, the Australian Biological Resources Study and the Council of Heads of Australasian Herbaria, the Australian National Botanic Gardens began work to update the user interfaces to the Australian Plant Name Index and Australian Plant Census using the National Species Lists infrastructure.
- The Gardens and Centre for Australian National Biodiversity Research participated in a CSIRO initiated review and trial of potential Collections Management System replacements for deployment across all CSIRO collections. The Australian National Herbarium database system was deployed at the Australian Tropical Herbarium and delivery of data to Australia's Virtual Herbarium was automated.

- Parks Australia undertook the National Environmental Research Program emerging priorities project—Growing National Capacity in Baseline Environmental Monitoring, to support the Commonwealth’s stewardship of national long-term monitoring datasets. A collaboration with the Terrestrial Ecosystem Research Network (TERN) Eco-informatics facility will publish Parks Australia’s long-term monitoring datasets through the TERN Australian Ecological Knowledge and Observation System data portal, which will enable the discovery, access and re-use of Parks Australia field plot data for further complementary and interdisciplinary research and analysis.
- A Knowledge Management Strategy for Parks Australia Environmental Information 2014–2016 has been completed to improve our capacity to manage change in the environment. The strategy provides a framework for information management and custodianship to ensure that information needs are planned for, that information is appropriately acquired, stored and maintained, and that information is easily discoverable, accessible, shared and re-used.
- The Australian Biological Resources Study collects and disseminates information on plants, animals and other organisms found in Australia. Its range of taxonomic work and databases provides authoritative national references for species’ names. Accurate naming of species and understanding their relationships is critical for biodiversity conservation and management. The programme celebrated its 40th anniversary in December 2013. Outputs of the Australian Biological Resources Study, including performance results for 2013–14, are reported in the department’s annual report.
- The highly successful Bush Blitz national biodiversity discovery partnership between the Australian Government, BHP Billiton Sustainable Communities and Earthwatch Australia was extended until 30 June 2017. Bush Blitz has completed four species discovery surveys on conservation properties in three states totalling more than 700 000 hectares in 2013–14.
- While much of the scientific information from Bush Blitz is still being analysed, the results will contribute to our knowledge of biodiversity within the National Reserve System and better inform management decisions.

