



## Summer 2007

### In this issue

Yourka protected, Monitoring what we do, A new reserve in NSW, Noongar cultural values assessment, Open Day and plants returning at Charles Darwin Reserve



## You have done it again!

A heartfelt thanks from Bush Heritage CEO **Doug Humann**

Thank you to all our wonderful supporters who gave so generously to help buy and protect Yourka Station in far-north Queensland. Your contributions have made an enormous difference, raising over \$374 000, and your gifts continue to come in. I am delighted to tell you that Yourka is now protected. Every one of your donations helped.

I particularly want to thank long-term supporters Ian and Nan Landon-Smith whose very significant contribution early in our Yourka campaign was an extraordinary act of trust and generosity. The commitment of our Bush Heritage supporters in wanting to do all they can to protect our astounding country never ceases to humble me.

Yourka is a gem and the diversity of its wildlife is astonishing. Its 43 500 hectares of grassy woodlands, rocky escarpments and waterways will now be a secure home to these species, which may include up to 23 that are listed as threatened. And this property has values greater than just its threatened ecosystems and species. Its importance as a refuge for those animals and plants affected by climate change will be borne out in the years to come.

Planning for the property's future management needs is already under way and the monitoring points are going in. Volunteer programs and field trips will begin in 2009, so watch for information in *Bush Heritage News*. Thank you again for protecting yet another stunning piece of our special country.

### The next step

As one campaign ends in success, so it leads to another. In the past twelve months you have helped us to acquire five new properties, both large and small. Now we must care for them and the rare and threatened birds, mammals, reptiles and myriad other animals and plants that live within their boundaries. Restoring the health of the soils, waterways and vegetation communities is the key. **Your gift to the bush this Christmas** will help give all the creatures a safe home.

### And your gift can be a present for a friend.

This festive season, you can donate to Bush Heritage as a gift for a friend. We will send you a special card to pass on to your friend that acknowledges your gift to them. Just call us on 1300 628 873 or visit [www.bushheritage.org.au](http://www.bushheritage.org.au)





## Monitoring what we do

Bush Heritage Applied Ecology Manager **Paul Foreman** explains the importance of monitoring our work on reserves

Bush Heritage and its supporters are buying and managing land to protect Australia's biodiversity. We are also increasingly working with other landowners outside our reserves in order to carry out conservation work over a much greater area. The possibilities are exciting and the benefits enormous.

All our land management work is designed to maintain the health of those ecosystems that are already in good condition and to actively improve

the health of those ecosystems that are damaged, including natural waterways. We do this mostly by removing or reducing grazing pressure, controlled burning, managing weeds and feral animal populations and stabilising the soils. In a healthy environment the animals and plants thrive.

When we buy a new property we set specific ecological goals that we want to achieve. These goals might include restoring a natural spring damaged by pigs, building up the numbers of a particular threatened bird species, or restoring a burning regime to control woody weeds that are invading a native grassland.

But how do we know if our management activities are actually achieving these ecological goals? How do we ensure that our supporters, who invest generously in the work of Bush Heritage, are getting the best possible return for conservation from their investment?

We monitor closely how the environment changes as a result of our management.

Bush Heritage's Ecological Outcomes Monitoring program has been developed to give us the necessary data. It represents one of the first attempts in Australia to identify the environmental factors that provide reliable and comparable information about the health of our ecosystems. In the past this has mostly been determined by the presence or absence of particular species of plants and animals. Our monitoring program is now rolling out across all our reserves, generously funded by the Macquarie Group Foundation.

Over time, as we systematically record changes in the vegetation, the waterways and the populations of animals and plants, then analyse and interpret the data, we can report back on the success of our work. Importantly, the information gleaned allows us to assess and adapt our management strategies to ensure that we get the best results and reach each ecological goal.

### So what is involved?

On each new property we first select the monitoring sites. These are located in a representative sample of all ecosystems, and variations within those ecosystems, present on the property.



Clockwise from top: Knob-tailed gecko captured in a pitfall trap. PHOTO: BUSH HERITAGE Assessing erosion at Yourka Reserve, Qld. PHOTO: WAYNE LAWLER/ECOPIX Setting up pitfall lines at a monitoring site on Charles Darwin Reserve, WA. PHOTO: BUSH HERITAGE Reserve Manager Leanne Hales recording orchids at Eurardy Reserve, WA. PHOTO: PAUL HALES

This includes places where there are differences in slope and aspect, management history and fire or flood impacts, and also any current threats or possible future threats.

With this information at hand, we prepare the management plans and identify our conservation 'targets': those species, ecosystems, ecosystem processes or threats that need special attention. In the case of each target, we set ecological goals that establish what we want to achieve and by when. Work plans, which specify the actions needed on the ground, follow.

Then the monitoring begins. At each site we record a detailed site description, the status of the bird population, soil-surface dynamics and vegetation structure and the presence of animals and flowering plants. These 'indicators' give us valuable information about what is happening at the site and, over time, allow us to monitor changes in the landscape. (More information about these indicators and how they were chosen is available on the Bush Heritage website: [www.bushheritage.org.au/what\\_we\\_do/managing\\_land](http://www.bushheritage.org.au/what_we_do/managing_land) )

We then match our management activities to the changes we see in the land. Each time we record a new set of data at each site, another page in the story unfolds. The land 'tells' us how it is responding to the reduced grazing pressure, erosion-control work, controlled burns and management of feral animal and weed species. As our understanding grows, we adapt and hone what we are doing to more effectively reach our ecological



goals, a process we have called 'adaptive management'.

With time, especially as we are now starting to add monitoring sites to those properties that we manage with our partners, we will be able to see changes in the vegetation and bird populations on a continental scale. This process will provide vital information about how animals and plants are dealing with the effects of climate change.

Reporting back to our supporters, and the community generally, on how their donations and the scarce conservation dollar are protecting our biodiversity is the last critical part of this process. Your enthusiasm and support are keys

to our success, so we need to keep you informed about what we are achieving together. Only then will Bush Heritage be the best possible guardian of our natural environment.

As we improve the health and resilience of our reserves, and also of the land that we assist others to manage, the country will be better able to sustain its populations of animals and plants despite further pressures from development or the changes resulting from global warming.

Macquarie Group  
Foundation



Clockwise from top: Ecologist Hugh Pringle and Reserve Manager Paul Hales assessing regrowth on saltbush, Eurardy Reserve, WA. PHOTO: LEANNE HALES Lantana will need to be controlled at Yourka Reserve, Qld. PHOTO: WAYNE LAWLER/ECOPIX Vegetation returns at the fringes of a wetland after grazing stock are removed, Eurardy Reserve, WA. Installing pitfall traps, Eurardy Reserve, WA. PHOTOS: LEANNE HALES



## Another new reserve in New South Wales

A generous gift of land has given Bush Heritage a new reserve in New South Wales. Supporter Louise Sylvan donated her 55 hectare property 'Nameless' and, at her request, it will be known as the Bush Heritage 'Nameless' Sylvan Reserve. The title 'Nameless' was chosen by Louise Sylvan's late husband Richard, whose foresight first secured the land for conservation. 'The ambiguity [of the name] would please him,' Louise said. We are very grateful to Louise for this far-sighted and generous gift.

The property is situated on the steep slopes of the Illawarra Escarpment approximately 10 kilometres north of Berry and close to Barren Grounds Nature Reserve. It protects one of the few remnants of endangered Illawarra subtropical rainforest. At the higher elevations there are species from the cool temperate and warm temperate rainforest, while on the lower slopes and along the creek lines the warm

temperate and subtropical species dominate. These species include the giant stinging tree *Dendrocnide excels*, red cedar *Toona ciliata*, various figs *Ficus* spp. and the brush bloodwood *Baloghia inophylla*.

The fast-flowing, vibrant Irwin's Creek flows through the reserve and on the day that our assessment team visited the property there were platypus and native water rats frolicking around the pools, dragon flies everywhere and freshwater crayfish scurrying under the rocks. The water quality is excellent.

'Nameless' Sylvan Reserve is also very significant for a range of threatened and endangered species. Animal and plant surveys have yet to be undertaken but likely species include the endangered tiger quoll, vulnerable long-nosed potoroo, common bent-wing bat, eastern pygmy possum and mountain brushtail, and the greater glider, sugar glider, feathertail glider, yellow-bellied glider and powerful owl.



Our main management issues will be to control weeds such as lantana, wild tobacco tree and coral tree, and to manage feral pigs, foxes, goats and cats. New fences will be needed to keep out the neighbourhood cattle that currently have unrestricted access to the lower areas of the property.

This is a very special place and we are delighted that it has become a Bush Heritage reserve.



Clockwise from top left: Rocky creek at 'Nameless' Sylvan Reserve. PHOTO: PAUL FOREMAN Platypus. PHOTO: DAVE WATTS Sugar glider. PHOTO: JIRI LOCHMAN/LOCHMAN TRANSPARENCIES Forest fringe. PHOTO: PAUL FOREMAN Long-nosed potoroo. PHOTO: JIRI LOCHMAN/LOCHMAN TRANSPARENCIES



## Noongar cultural values assessment moves to Peniup Creek Reserve

Bush Heritage Indigenous partnership officers **Ken Hayward** and **Sarah Eccles** report on progress with the cultural values assessments throughout the Gondwana Link properties

It is widely acknowledged within Bush Heritage that Indigenous people have a vital role to play in looking after country and in the conservation management of land throughout Australia. Noongar traditional lands extend across Gondwana Link in south-west Western Australia, and Bush Heritage is encouraging the involvement of Noongar people in caring for country on these Gondwana Link properties.

The cultural values assessment of Chereninup Creek Reserve was completed in August (see *Bush Heritage News*, Spring 2007). The Elders and Noongar youth are now incorporating this information and their shared knowledge into a cultural values management plan for the reserve. The plan will also include oral histories and stories about the region from the Elders.



Now the cultural values assessment has started on nearby Peniup Creek Reserve, the latest property purchased for Gondwana Link. This property is jointly owned by Bush Heritage and Greening Australia (WA).

On Peniup Creek Reserve, Noongar youth have received cultural instruction from their Elders about spiritual connections with the land and the uses of bush tucker and medicine plants. Scatters of stone artefacts have been identified. The young people are also learning contemporary archaeology and ecological management practices from

the staff of the Gondwana Link partner organisations.

*'It is so wonderful to be back out on country with our young ones and to see the difference in the self-esteem of the youth who are participating in this project,'* said Noongar Elder Averil Dean.

These cultural values assessments have been a positive way for Noongar people, Bush Heritage staff and staff from other Gondwana Link partner organisations to work together. The assessments help young Noongar people to build vital connections with their country and to develop skills for future employment and for later life. The assessments also bring together people with different perspectives on the land so that they can combine their knowledge into a unified plan to guide them as they look after the country into the future.

**We would like to acknowledge the Sara Halvedene Foundation for its generous support of this work.**



Clockwise from top left: The field crew who carried out the cultural assessment. PHOTO: HOLLEE WORRELL David Guilfoyle teaching Brodie Williams and Brad Farmer how to identify and record a scatter of artefacts. Comparing the dughite snake to a stick are, from left, Brodie Williams, Jayden Woods, Daniel Woods and Luke Mowaljarlai. Noongar mob at the reserve. Noongar Elder Eugene Eades on Peniup Creek. Inset: Typical scatter of artefacts at Peniup Creek Reserve. PHOTOS: KEN HAYWARD, JOE DORTCH & DAVID GUILFOYLE



## Key plants returning at Charles Darwin Reserve

Reserve managers **Andrea and Kurt Tschirner** and Ecologist **Hugh Pringle** report on the return of plant species to Charles Darwin Reserve

The impacts of feral goats in the arid rangeland areas of Western Australia are devastating. Feral goats are extremely hardy animals. They eat a large variety of native plants, often standing in the branches of shrubs and trees, and their hooves damage the delicate arid soil crusts.

On Charles Darwin Reserve the past impacts of sheep and goats have caused localised erosion, especially around sensitive areas like the breakaways. Grazing has also caused the loss of many plant species that provide food for native birds and small mammals and play important roles in many habitats. For example, in the clay-pan country there is an absence of healthy populations of ruby saltbush *Enchylaena tomentosa*, sandalwood *Santalum spicatum* and pixie bush *Eremophila oldfieldii*.

Since the de-stocking of Charles Darwin Reserve, and with Bush Heritage's ongoing commitment to controlling feral goats, the reserve is experiencing a well-earned rest from persistent grazing. Already we are seeing seedlings of many 'palatable' species like saltbush emerging around the clay pans, despite the recent run of very dry years. At many of our ecological outcome monitoring sites we are seeing a really positive change.

This summer we removed 170 feral goats from Charles Darwin Reserve. Many were transported to Geraldton where they were processed and exported to Taiwan. Goats that were unsuitable for processing or that we couldn't trap were not wasted. After a bit of good marksmanship their meat was used to produce poison baits for foxes. Between October 2006 and July 2007, we laid out 3600 baits. This is good news for our malleefowl, small birds and mammals, and lizards.

## Charles Darwin Reserve Open Day and history

The Charles Darwin Reserve Open Day in September provided an opportunity for about 60 visitors to learn about the work that goes on at this Bush Heritage reserve. The guests, among them the great- and great-great-grandsons of Charles Darwin himself, were guided to malleefowl mounds, expanses of wildflowers and some of the historic buildings on the reserve.

A community history of the reserve was also launched. Researched and written by Charlie Nicholson, with contributions from many local people, this web-based history tells fascinating tales of the land on which the reserve is now situated. You can get a copy on CD from the Bush Heritage Conservation Support Centre or view it online at [www.bushheritage.org.au](http://www.bushheritage.org.au) and follow the links: Our Reserves/Western Australia/Charles Darwin Reserve/History.



Clockwise from top left: Goats camp at rocky breakaways and cause significant damage. Young sandalwood trees are heavily grazed. Rare plants found on the top of breakaways are often eliminated by goats. The Lockyer boys and family in front of the old White Wells homestead, their first home. Volunteers put a temporary water trough in a goat trap. PHOTOS: KURT & ANDREA TSCHIRNER

## From the CEO

Thanks to you, our generous supporters, 2006/07 was a year of significant growth, innovation and achievement for Bush Heritage. The advances occurred both on our reserves and also on land owned by our partners where we are assisting them with conservation work.

Nearly \$11 million was raised in donations and bequests, an increase of 27.2 per cent on the previous year. A further \$1.21 million was contributed in grants from government and philanthropic trusts (see Figure 1). Our total revenue for the financial year closed at over \$13.14 million, and 76 cents of every dollar spent was used to buy and protect land and its wildlife (see Figure 2). After setting aside endowment funds for the long-term management of our reserves, we finished the year with a healthy 'cash' operating surplus of \$1.7 million. Bush Heritage carries no debt, has the resources to undertake the necessary management work on all reserves and is ready to buy more land and build more partnerships to achieve our conservation goals.

It was heart-warming to welcome many new supporters to Bush Heritage. Over 17 600 people have now supported our work. Many of you have also included Bush Heritage as a beneficiary in your wills this year, with the number of confirmed bequests up 29 per cent on that from last year. Our sincere thanks to you for your foresight.

Our volunteers have again contributed an astonishing amount, not only on the reserves but also at our Conservation Support Centre in Melbourne. You have contributed support in kind to a value greater than \$684 000. Your hard work has not only produced impressive results on the ground but has also provided a direct cost-saving to Bush Heritage.

And you have helped us to add five new properties to our portfolio in the past twelve months, bringing our total land-holdings at the end of June to

676 000 hectares. The recent purchase of Yourka Station has subsequently added another 43 500 hectares. Thank you again.

Two of these new reserves (Scottsdale Reserve, NSW, and the third Nardoo Hills reserve, Vic) are located in our South East Grassy Box Woodland anchor region and two more (Monjebup and Peniup Creek reserves, WA) are in the South West Botanical Province anchor region. The two West Australian properties contribute significantly to the Gondwana Link program. 'Nameless' Sylvan Reserve in New South Wales was gifted to Bush Heritage (see Page 6). Management work is already under way on these reserves.

Over the past twelve months we have also received special grants to develop a system that will help to identify the key areas of land in our anchor regions that are a priority to protect, and to enable us to implement our monitoring program across the reserves. This monitoring program will allow us to assess the ecological results of our land management activities (see Pages 2 to 3).

We look forward to working with you throughout another exciting year so there will be more good news for the environment. From all of us at Bush Heritage, thank you for your wonderful contribution and let's keep the momentum going.



Doug Humann

The *Annual Financial Report 2006-2007* is now available on the Bush Heritage website or you can request a copy by phoning Bush Heritage on 1300 628 873.

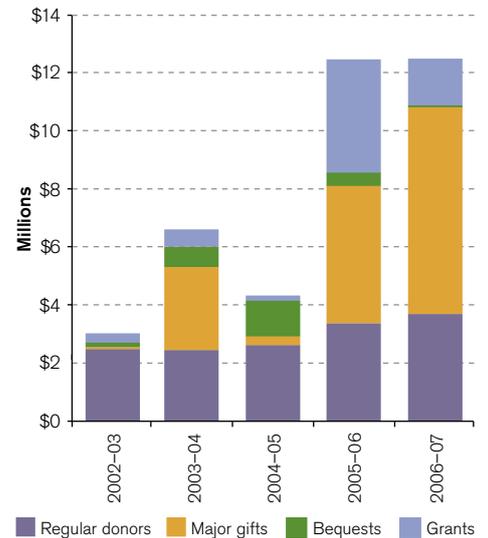


Figure 1 Income from donations

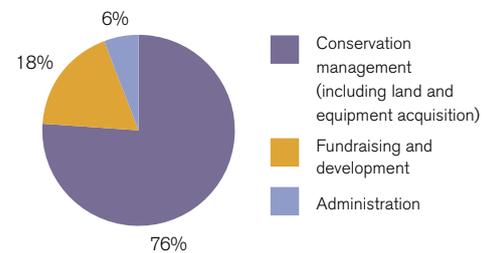


Figure 2 Distribution of expenditure 2006-07

## In memory

Jim and Rosa Hajinakitas donated in loving memory of **Arthur Voss**, and Dr and Mrs James Milne remembered **Abbey Mace**, 'a young, vital Australian girl'. Margaret and Michael Williams gave for **Rick Wood**, 'a great potter and supporter of the environment'.

Raquel Ormella gave for **Stephen Birch**, Iris Nicolades for **Michael Krizos**, Carl Martens for **Jason Ingram Roth**, Sue Webb for **Muriel Walkom**, Robert and Esme White for **Gwen den Hollander** and Kathleen Dunphy for **Elizabeth Ward**, who was a 'lover of the bush'.

Friends and family honoured **Christopher Blowes** and we received many donations in memory of **Ann Goodale**, 'an irreplaceable

*continued overleaf*

