

2012-2013  
**Annual  
Report**



**ZOOS**  
SOUTH AUSTRALIA



[zoossa.com.au](http://zoossa.com.au)

Principal Partner

**Westpac**

# Passion

We inspire and influence through our valuable conservation efforts and recognise success.

# Effectiveness

We focus on clearly defined shared goals and support people to achieve them.

# Innovation

We seek creative ways to achieve goals and promote a culture of learning and improving.

# Integrity

We are guided by our values and deliver on our promises.

# Respect

We respect individual's values and encourage a culture of collaboration, listening and trust.

**ZOOS**  
SOUTH AUSTRALIA



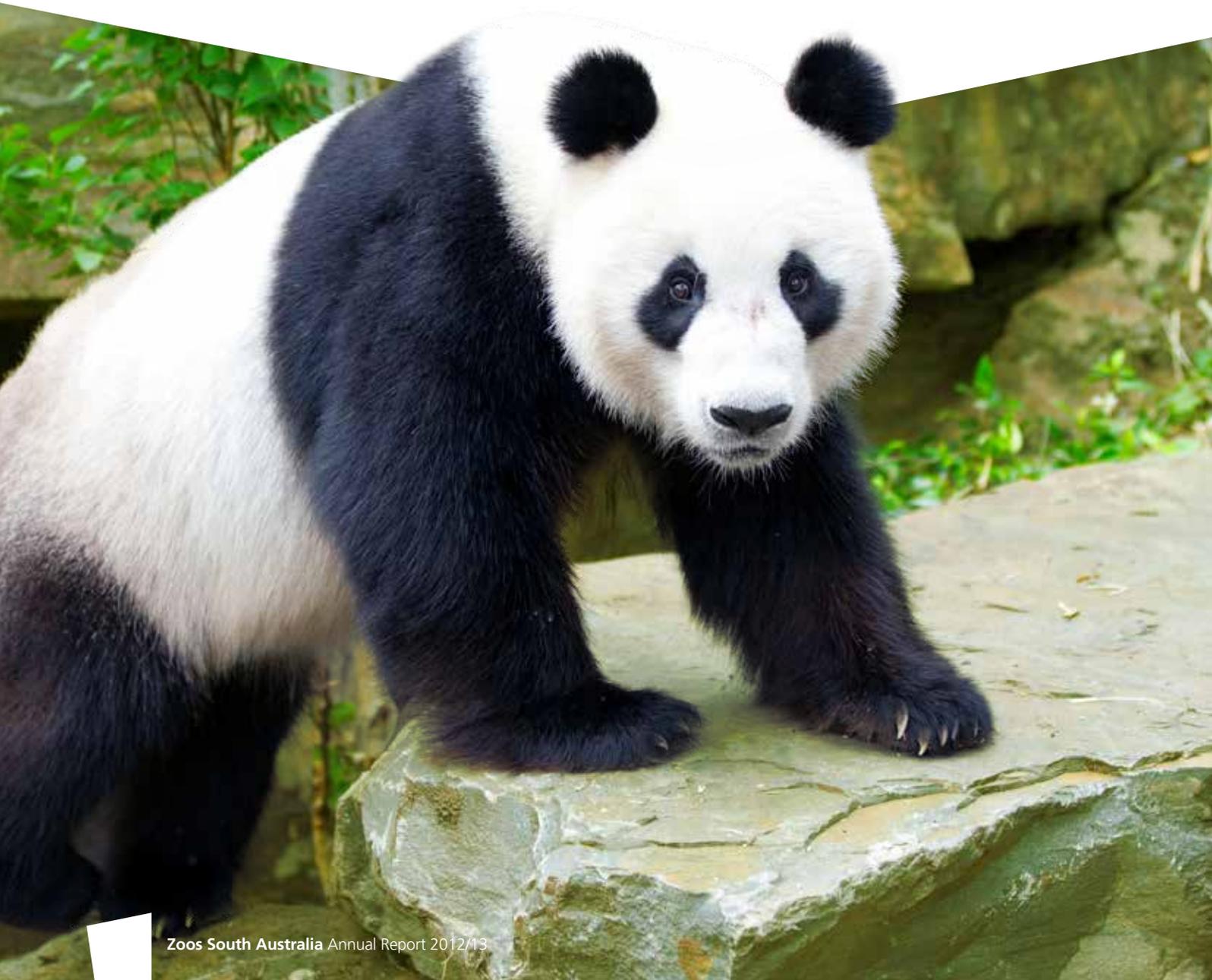
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# Zoos SA Vision, Mission and Goals



Zoos SA is a long-established and successful organisation that is an integral part of South Australia. Since Adelaide Zoo opened to the public in 1883, six generations of South Australians have passed through its gates.

We are a not-for-profit, membership-based society dedicated to biodiversity conservation with more than 30,000 members as at 30 June.

## Our 20-Year Vision

Our vision is to lead and achieve long-term conservation change through our internationally renowned sites, programs and people.

## Our Mission

Zoos SA is a charitable conservation society that exists to save species from extinction and to connect people with nature.

## Our Business

As set out in Zoos SA's Strategic Plan 2012 - 2017, the organisation has four primary goals and a series of strategies to achieve these. The Five Year Business Plan builds on this framework. The relationship between the Strategic Plan and the Business Plan is shown below.

### Strategic Plan

### Business Plan





# President's Report

**T**he last twelve months have been exciting for Zoos South Australia (Zoos SA), with much work happening across the organisation. We have also been fortunate to celebrate a string of breeding successes and key milestones including the 130th anniversary of Adelaide Zoo.

A key activity over the last year has been the formal commencement of Zoos SA's master planning process. The development of a master plan is important in guiding organisational direction and is closely linked with our future infrastructure investment, yearly species management plan and calendar of events. Aligning all aspects of our business will foster a consolidated approach to future planning, ensuring that a high level of animal welfare is maintained and both sites continue to be engaging, educational and fun for visitors and members. Part one of the master planning process involved a visit from world renowned zoo planner, John Coe, who met with staff from across the organisation.

This visit provided valuable insight and was followed by an internal workshop where discussions and ideas were streamlined and the formal process began. This work will continue into the new financial year with the Zoos SA Master Plan overview document expected to be complete and available in mid 2014.

This year Zoos SA has benefited greatly from the election of two new Board members and two co-opted Board members. David Sanders, a Chartered Accountant and Audit Partner at Ernst & Young, and Graeme Crook, a Zoologist who has worked in a number of animal care and research related roles, joined the team in November. Co-opted Board members Kate Thiele, CE of Guide Dogs SA, and Bryce Coombe, Managing Director at Clemenger BBDO, commenced in October. Their expertise in conservation, animal management, finance, marketing and the not for profit sector has further strengthened the existing Board. The formation of the Risk and Governance Committee, which sits alongside the Finance and Audit Committee, means the Board are now supported by two sub-committees.



A number of initiatives were introduced throughout the year to further engage with and recognise Zoos SA members for their support. For the first time members were invited to bring a friend to the zoo for free during Adelaide Zoo's 130th birthday celebrations. The day was a great success with many members and their friends enjoying free activities, rides and entertainment. Following the popularity of this event, planning has begun to ensure similar value add activities are held on a regular basis to further engage with our members.

Success was recorded in breeding programs across the organisation with a Chimpanzee infant, Spotted Hyena cub, Plains Zebra filly, Southern White Rhinoceros calf, Przewalski's Horse filly, five Cheetah cubs, five African Lion cubs and six Warru joeys all born at Monarto Zoo. At Adelaide Zoo a Dusky Langur

infant, two Palm Cockatoo chicks, three Western Swamp Tortoises and four Fennec Fox kits were welcomed. Recording this level of breeding success, especially across a number of key breeding programs, is a coup for the organisation and a credit to our hardworking staff.

I and the other Board members have been very pleased to see the progress made this year and I am positive that Zoos SA will continue to strengthen as an organisation.

**Dr Carla Litchfield**

**President**  
Zoos SA



# Chief Executive's Report

**I** am very pleased to report positive results for two of our key measures with both visitor numbers and membership numbers achieving higher figures than last year.

These results were in part achieved by an increase in events and activities on offer at both Adelaide and Monarto. Over the past year a cross-departmental committee was formed to oversee the development of a forward plan of events and activities. This group identified key dates and peak periods throughout the year to provide special opportunities for engagement with visitors, members, staff and volunteers. So far this has seen the roll out of a number of initiatives including additional activities and promotions on Westpac Father's and Mother's Days, Westpac Enrichment Day at Adelaide Zoo and the April school holidays campaign, 'Mythical Creatures'. The aim of these activities is to create a more immersive, educational and enjoyable experience for visitors to ensure every zoo trip is unique and memorable.

One of the highlights of the committee's work over the past year was the celebration of Adelaide Zoo's 130th anniversary in May. The four-day birthday party saw a great response with good visitor numbers and a fun birthday party atmosphere throughout the zoo. We also hosted a special anniversary event attended by Zoos SA patron, His Excellency Rear Admiral Kevin Scarce. Overall it was a great weekend and a fitting celebration for such a special anniversary. The committee is now busy planning activities for Monarto Zoo's 30th anniversary in October.

A large piece of work undertaken this year was the first review of Zoos SA's Five Year Business Plan. This process included consultation and feedback from staff across the organisation and a critical review of the actions outlined in the 2012/13 plan. I am pleased to say that we have made significant headway against the many tasks outlined in this plan. I thank all staff who contributed to this and whose hard work and energy ensured expense reduction strategies and efficiency targets were met.

The appropriate accounting treatment for employee entitlement liabilities and the ongoing lease commitment at Warrawong Sanctuary meant that we recorded an operating deficit for the year which is outlined in the financial report. Our forward budgets are on track to return to an operating surplus. The review process provided a valuable opportunity to assess the Five Year Business Plan against the goals outlined in Zoos SA's Strategic Plan and will occur annually to ensure the organisation is progressing well and staying on track with key business goals.

In February 2013 we announced that Zoos SA would cease business operations at Warrawong Sanctuary. This decision was made following a detailed assessment of Warrawong Sanctuary's operations as outlined in the Zoos SA Five Year Business Plan. While we considered many options for the business, ultimately, we could no longer absorb the annual operating loss nor afford the sizeable investment and necessary infrastructure required to comply with fire restrictions in relation to the use of our educational facility, bush cabins and cafe during the Fire Danger Season. The majority of animals that Zoos SA introduced to the property have been transferred to Adelaide and Monarto Zoos or private licensed holders where suitable. We continue to monitor the site and ensure the property's feral proof fence line is maintained.

In November Adelaide Zoo celebrated the 30th anniversary of volunteering and to show our appreciation staff surprised volunteers with a special zoo experience.



More than 250 of our 500 strong volunteer group were greeted by a red carpet welcome to the applause of staff, enjoyed drinks in the Bamboo Forest and were treated to a lovely dinner on the Central Lawns, all while being pampered by our thankful staff. The evening proved to be a roaring success and we have no doubt the volunteer program will continue to flourish over the next 30 years!

Since starting in the role in September 2012 I have received strong support from all staff and volunteers and I thank all for their hard work and commitment. I would also like to thank the Board who have contributed significantly to driving improvements in our governance reporting and planning. I look forward to seeing what the next year brings.

**Elaine Bensted**

**Chief Executive**  
Zoos SA

# Board Members and Governance



In line with the rules of the society, Zoos SA is governed by a volunteer Board with members donating their time and professional expertise. Board members are responsible for the performance of the incorporated association. The Board draws on and applies relevant corporate governance principles

and practices, has approved a Charter and ensures conflicts of interest are considered at every meeting. Day to day management of the business is delegated by the Board to the Chief Executive and senior management team, with monthly performance reports provided to the Board from the Chief Executive.

## Zoos SA Board



### Dr Carla Litchfield

President since December 2012.  
Board member since November 2005.

Dr Litchfield has a PhD in Psychology (Animal Behaviour) and is a lecturer at the University of South Australia. Her passion is to develop the area of conservation psychology to change human behaviour to help save wildlife and natural environments while minimising human-animal conflict.

(Term of appointment expires: November 2013)



### Rodney Hobbs

Vice President since December 2012.  
Board member since November 2007.

Rodney has a Bachelor of Commerce and has worked for the State Government since 1997. He has extensive experience in strategic and business planning, financial, human and physical resource analysis and allocation, policy development, and in developing, managing and the oversight of budgets and capital works.

(Term of appointment expires: November 2016)



### Clive Watts

Board member since November 2008.

Clive is a long time member and volunteer of the society and retired lecturer in biology at the University of South Australia. His love of animals and plants and the wish to conserve them drives his passion for Zoos SA and its conservation activities.

(Term of appointment expires: November 2014)



### Graeme Crook

Board member since December 2012.

Graeme is a zoologist and a research manager at the CRC for High Integrity Australian Pork. He has extensive knowledge in animal management and conservation.

(Term of appointment expires: November 2015)



### David Sanders

Board member since December 2012.

David is a partner at Ernst & Young Adelaide and is a qualified chartered accountant and registered company auditor. David and his family have been members of the zoo for many years.

(Term of appointment expires: November 2015)



### Kevin McGuinness

Board member since November 2009.

Kevin is a chartered accountant with more than 25 years experience in senior finance and operation roles. He is a former president of the society with a passion for the zoo and the role it plays within the SA community.

(Term of appointment expires: November 2014.)



### Bryce Coombe

Co-opted Board member since October 2012.

Bryce is the Managing Director of Clemenger BBDO Adelaide and has worked with many high profile SA brands. His extensive marketing expertise complements the skill set across the Board profile.

(Term of appointment expires: October 2013)



### Kate Thiele

Co-opted Board member since November 2012.

Kate is the Chief Executive of Guide Dogs SA and has more than ten years of board and executive experience. Her experience in the not for profit sector and governance brings valuable skills to the Board.

(Term of appointment expires: November 2015)

## Previous Board Members

### Nicholas Newland

Board member since November 2006.  
(Term of appointment ceased December 2012)

### Lea Kent

Staff representative since November 2010.  
(Term of appointment ceased December 2012)

## Board Meeting Attendance 2012–13

Board Members	Number of meetings eligible to attend	Number of meetings attended	Appointed
Dr Carla Litchfield	14	13	Reappointed x 6/12/12
Rodney Hobbs	14	12	Reappointed x 29/11/11
Kevin McGuinness	14	14	Reappointed x 6/12/12
Graeme Crook	8	8	Appointed x 6/12/12
David Sanders	8	7	Appointed x 6/12/12
Clive Watts	14	14	Reappointed x 6/12/12
Kate Thiele	8	7	Appointed x 27/11/12
Bryce Coombe	9	7	Appointed x 1/10/12
Nicholas Newland	5	5	Term expired x 6/12/12

## Sub-Committee Membership and Attendance 2012–13

Sub-Committee	Number of meetings eligible to attend	Number of meetings attended	Appointed
<b>Risk and Governance Committee Members</b>			
Kate Thiele (Chair)	2	2	24/1/13
Kevin McGuinness	2	2	24/1/13
Neil Killmier	2	2	24/1/13
<b>Finance and Audit Committee Members</b>			
Kevin McGuinness (Chair)	10	9	10/8/10
Rodney Hobbs	10	9	10/8/10
David Sanders	10	9	4/2/11

## Zoos SA Senior Management

The Chief Executive and senior management team are responsible for the implementation of corporate strategy and business plan initiatives. A new organisational structure was implemented this year with the organisation now managed through six divisions. Each director is supported by a team of staff and a formal delegations manual outlines the level of authority held by positions within the organisation.

Chief Executive Elaine Bensted					
Director Corporate Services	Director Life Sciences	Director Business Operations	Director Policy Planning and Sustainability	Director Human Resources	Director Conservation and Education
Karen Polkinghorne	Peter Clark	Sarah Brown	Vicki-Jo Russell	Vicky Whiteway	Dr Wendy Foster

# Year in Review Snap Shot



**35,000**

trees were planted at

**Monarto Zoo**

Plantings included **26** different species



New members

**9926 + 171 = 10,097**

annual members

corporate members

total new members

Total members

**24,679 + 3416 + 2067**

annual members

corporate members

life members



**30,162**

Total Members

**361** animals were born

at Adelaide Zoo

**96** animals were born

at Monarto Zoo



Our first 'Small Change'

campaigns at Monarto Zoo

have raised more than **\$7,000**

for conservation



**353,600**

people visited Adelaide Zoo

**108,381**

people visited Monarto Zoo



**5228** visitors participated in Behind the Scenes Experiences

**1226** visitors participated in Adelaide Zoo Westpac Brief Animal Encounters



over **500** registered volunteers

across both sites



**50,795** visits

through Adelaide and Monarto Zoo's

education program

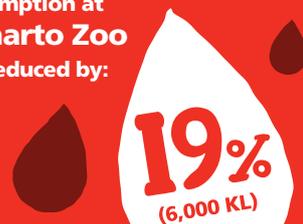


Ground water consumption at Adelaide Zoo was reduced by:

**15%**  
(9,000KL)

Mains water consumption at Monarto Zoo was reduced by:

**19%**  
(6,000 KL)



Supporting African Rangers

**33**

Sera Rangers received life insurance

through Zoos SA contributions

# Year in Review

# Financial

# Snap Shot



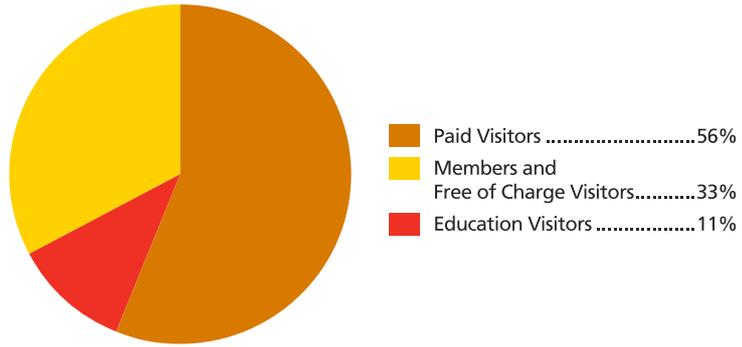
**T**he last twelve months, while challenging, have seen positive improvements in Zoos SA's financial position. The first review of our Five Year Business plan has been approved by the State Government. We are pleased to report that despite a tough budget and challenging revenue targets during a difficult economic period, we have improved our base financial standing. We also saw positive results in visitation with Adelaide Zoo visitor numbers on par with last financial year and Monarto Zoo visitor numbers increasing by 11%.

**Key Achievements:**

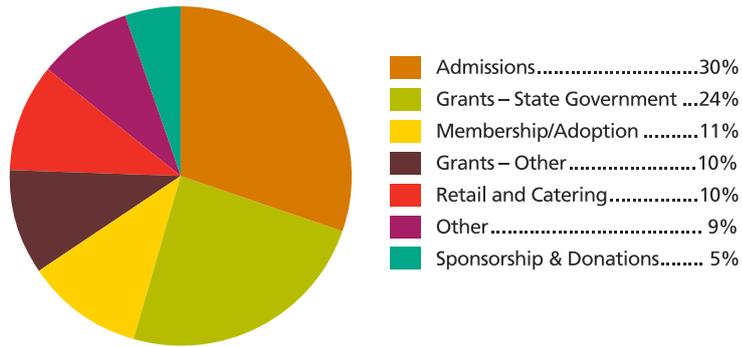
- > Reducing trade creditors.
- > Improving the internal and external reporting timetable.
- > Rebuilding relationships with creditors and other stakeholders.
- > Increasing capital spend with further growth planned for 2013–14.
- > Introducing sick leave provision.
- > Forecasting debt repayments to begin from 2015–16.
- > The closure of the business at Warrawong Sanctuary has had a positive impact on our future budget.
- > Reducing expenditure in both salaries and goods and services.
- > Increasing key revenue items such as membership, retail, catering and admissions.

Zoos SA currently has a \$7.5m loan with Westpac. The Five Year Business Plan, released in July 2012, detailed a plan to sell the Wild Africa land at Monarto Zoo in the 2013–14 year and apply the proceeds (estimated in the 2012–13 Business Plan as \$2m) to partial reduction of this debt. There is currently a proposal for the development of a drag strip on an adjacent property to this land. In 2012–13 we appealed this development approval and our appeal was upheld, however we understand the application will be re-lodged. The outcome of this development application may have a significant impact on the property valuation, and hence the timing of this sale is being discussed further with the State Government and Westpac.

**Visitor Numbers**

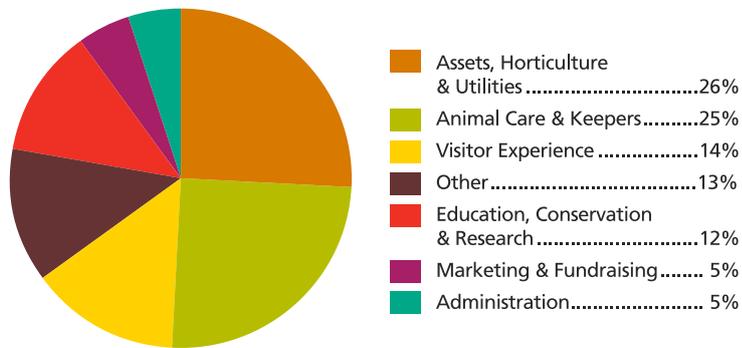


**Revenue**



This is a graphical representation of the society's revenue for 2012-13 as detailed in table form on page 49. Grants revenue has been further separated into 'State Government' and 'Other' categories.

**Expenses**



This is a graphical representation of the society's expenses for 2012-13 as detailed in table form on page 49. Salaries costs have been further split into the major departmental expense categories so as to provide more detailed information on how funds are spent.

In preparing our business plan for future years, we have developed a forward budget that enables annual debt payments against this loan from within our annual operating budget from the 2015–16 year forward. The debt repayment schedule will continue to be discussed with Westpac and the State Government throughout the plan period.

This financial year we were impacted by significant increases to the cost of our utilities, power and water, and expenditure increases by CPI or higher. Apart from the State Government Annual Operating Grant, most of Zoos SA's income lines do not reflect an increase in CPI.

Zoos SA Audited Financial Statement can be viewed on page 45.

# Saving Species from Extinction





## Conserving Species in our Zoos

**T**he last twelve months have been significant, with a number of important births, deaths and transfers at both sites. Staff at both sites participated in a number of research and field studies, headed trapping expeditions to support conservation work in the wild and attended numerous animal management conferences and training modules (Appendix F). A number of staff also managed recovery teams and regional studbooks (Appendix C and D).

This year staff also undertook a total review of all husbandry work procedures and behavioural enrichment programs ensuring they were in line with industry standards. The majority of animal diets were also reviewed, with the remaining to be completed in the next financial year.

A complete listing of animals housed at Adelaide and Monarto Zoo listed under the Convention on International Trade in Endangered Species of Wild Fauna and Flora and International Union for the Conservation of Nature is detailed in Appendix A.



## Adelaide Zoo

### Welcomed additions

- August 2012 – Birth of a Dusky Leaf Langur infant, the fifth born in the South East Asian mixed boardwalk exhibit
- October 2012 – Fennec Fox pair Matt and Scamp welcomed their second litter of kits, one male and one female
- November 2012 – Adelaide Zoo's breeding pair of Palm Cockatoos continued to prosper hatching two additional chicks this year
- December 2012–January 2013 – Eight critically endangered Orange-bellied Parrot chicks fledged during the recent breeding season
- January 2013 – Fennec Fox pair Amber and Tizga welcomed their first female kit
- January 2013 – Birth of a male cria (Alpaca), the first ever born at the zoo

- February 2013 – Three Ghost Bats were born, adding to the captive population
- February to March 2013 – Birth of six goats in the Children's Zoo farmyard contact area
- May 2013 – Three critically endangered Western Swamp Tortoises were hatched in the Reptile House

### Sorely missed

- September 2012 – Much loved Pygmy Hippopotamus, Janice, was diagnosed with age related illness and the decision was made to euthanise her due to her deteriorating quality of life
- January 2013 – Sumatran Orangutan, Karta, gave birth to a stillborn infant which suffered a complication, just prior or during birth, impeding blood flow to the brain
- February 2013 – Female Malayan Sun Bear, Manji, lost her battle with liver cancer

- In April 2013 – Red Panda, Maya, passed away due to suspected toxin ingestion
- April 2013 – A male Australian Bustard passed away

### New to the zoo

- December 2012 – Goodfellows Tree Kangaroo, Kiunga, arrived from France to join the international captive breeding program
- January 2013 – Two female Highland Cattle arrived in the Children's Zoo, the first ever to reside at the zoo
- April 2013 – Female Golden Lion Tamarin, Aurora, arrived from the US and has been paired with male, Rio, for breeding
- May 2013 – Five Oriental Small-clawed Otters arrived from Perth Zoo
- June 2013 – Three South American Coatis arrived from Melbourne Zoo
- June 2013 – Six Helmeted Guineafowl are to be housed in the Children's Zoo pending veterinary clearance

### Giant Panda

August 2012 saw the second Giant Panda breeding season at Adelaide Zoo. While no mating occurred, behavioural improvement was witnessed in both Wang Wang and Funi. Following the breeding season Funi underwent a pseudo pregnancy and was given access to a den area where her maternal instincts were clearly displayed. The team continue to provide an in depth training program for both animals including saline fluid injections, x-ray training and allergy testing injection training. With the assistance of Chinese experts, the addition of artificial insemination has been included in the 2013 breeding plans.

## Monarto Zoo

### Welcomed additions

- › August 2012 – Birth of the first Chimpanzee infant in Monarto's history, Zuri
- › September 2012 – Birth of a zebra filly, Dafina, and the first female Southern White Rhinoceros calf, Kibibi
- › October 2012 – Birth of five Cheetah cubs to mum Nakula
- › February 2013 – The first successful Spotted Hyena caesarean in Australia with the birth of cub Zuberi
- › February 2013 – The birth of a Przewalski's Horse
- › April 2013 – Birth of three lion cubs, one male and two females, to second-time mum Tiombe
- › April 2013 – Three Tasmanian Devils were born during the breeding season, one male and two females
- › June 2013 – Birth of one male and one female lion cub to second time mum Kiamba
- › The Native Breeding Centre saw success in the bilby, Mainland Tammar Wallaby, Brush-tailed Bettong and Warru breeding programs

### Sorely missed

- › August 2012 – A female Australian Bustard passed away
- › December 2012 – A giraffe in the zoo's bachelor group of males was euthanised due to joint related issues
- › June 2013 – An older female Przewalski's Horse, Geraldine, was euthanised and another was stillborn in January 2013



- › April 2013 – Monarto said goodbye to its beloved ambassador Cheetah, Askari, the dominant male of the zoo's hand-reared group. The decision was made to humanely put him to sleep after his quality of life had rapidly deteriorated due to acute renal failure. In May 2013 another male, Masuka, from the breeding pair was also euthanised due to similar health issues.

### New to the zoo

- › July 2012 – Three young female Bison from Altina Wildlife Park joined Monarto's aging herd
- › January 2013 – Monarto welcomed a male Bongo, Isaac, from Melbourne Zoo
- › February 2013 – Six male Meerkats arrived from Melbourne Zoo
- › May 2013 – One male and two female Fennec Foxes arrived from Adelaide Zoo



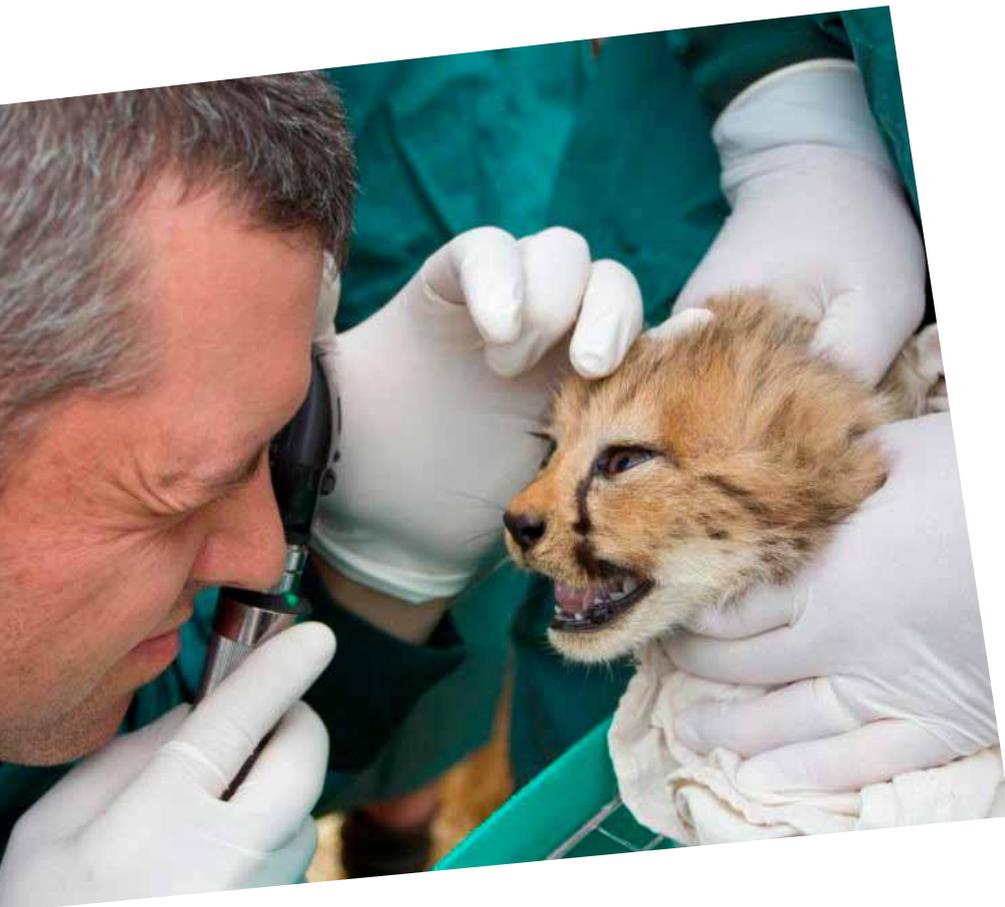
## Warrawong Sanctuary

Upon the closure of Warrawong Sanctuary the majority of animals that the zoo introduced to Warrawong or that required special care were relocated to Adelaide or Monarto Zoo.

- › Bettongs and Mainland Tammar Wallabies were transferred to Monarto Zoo
- › All hand-reared Mainland Tammar Wallabies and Quokkas were transferred to Adelaide Zoo
- › Animals used in interactive animal presentations were transferred to Adelaide Zoo or licensed private holders
- › A number of kangaroos were transferred to Rocking Horse Animal Park or other licensed private holders

The platypus will remain onsite as they are completely self-reliant and were thriving at Warrawong well before the zoo took over management of the site, and are not dependent on special care.

Until the future of the site is determined by the Ngarrindjeri people, zoo staff will continue to maintain the fence line and ensure the ongoing welfare of the animals that remain onsite.



- > Close monitoring of the aging Greater Flamingo who requires anti-arthritis treatment

#### **Key highlights at Monarto Zoo:**

- > Hand-rearing a Cheetah cub that was unable to be mother-reared for medical reasons
- > An increase of interaction and training opportunities resulted in closer monitoring of the adult Cheetah by blood sampling
- > Performing a caesarean on Spotted Hyena, Forest, which produced a healthy cub for the expanding clan

#### **Key wildlife highlights:**

- > Reinforced biosecurity measures to deal with local flying foxes that have been demonstrated to harbour lyssavirus and hendravirus
- > Continuing the zoo industry wildlife surveillance project
- > Monitoring of the resident Brush Tail Possums at Adelaide Zoo which show a healthy and stable population

#### **New facilities and equipment in the Animal Health Centre:**

- > A dedicated x-ray machine at Monarto Zoo
- > An updated biochemistry analyser
- > An expanded small animal intensive care capacity with dedicated oxygen generators

# Animal Health

**T**he Animal Health area has seen staff focused on providing clinical services to Zoos SA animals and supporting the organisations wider conservation programs. In addition to this work the team is dedicated to the training and supervision of veterinary university students.

Onsite the team presented talks to Zoos SA volunteers and staff and participated in numerous careers workshops as well as hosting visitors from Ronald McDonald House. Offsite, a considerable amount of work has occurred in fieldwork, conservation and science. It has been a busy year full of interesting cases and exciting new developments which will continue as we expand our in-house diagnostic capabilities and explore applied research opportunities.

## **Clinical Services**

There have been a number of interesting cases in the last twelve months.

#### **Key highlights at Adelaide Zoo:**

- > Preparing for the Giant Panda breeding season including the use of artificial insemination as an option
- > Managing the condition of allergic pruritic, an itchy skin condition, in the male Giant Panda
- > Liver neoplasia in a sun bear which is common but was not easily detected via ultrasound
- > A Meerkat who has lost all pigmentation and is now almost white, hierarchy issues in the group limit investigation options
- > The loss of a Sumatran Orangutan stillborn infant as a result of umbilical cord entanglement



- > Collecting initial data to estimate the number of wombats per warren in various soil and habitat types.
- > Beginning non-lethal intervention trials to establish management options for wombats on agricultural properties.
- > Zoos SA Conservation Biologist, Dr Elisa Sparrow, travelled to the USA for a Southern Hairy-nosed Wombat conference at Brookfield Zoo in Chicago and met with experts in the field of human-wildlife conflict in the USA.

## Wallabies

Over the last twelve months much work has progressed in three of Zoos SA's wallaby programs: the Black-flanked Rock Wallaby (or Warru), Yellow-footed Rock Wallaby and Brush-tailed Rock Wallaby. Support of these programs includes a wide variety of activities ranging from feral control and captive breeding to the monitoring of released animals.

### Black-flanked Rock Wallaby (Warru) key highlights:

- > Returning five captive Warru, two males and three females, to the Warru pintji (fenced area) of the Anangu Pitjantjatjara Yankunytjatjara from Monarto Zoo.
- > Breeding six pouch young at Monarto Zoo. These offspring will be returned to the Warru pintji in 2014 to introduce genetic diversity to the current population.

### Yellow-footed Rock Wallaby key highlights:

- > Conducting three feral control trips to Aroona Sanctuary which provide ongoing management of feral animals such as goats, cats and foxes that impact on the Yellow-footed Rock Wallaby population. In total 85 individual animals have been recorded since the initial release of 10 wallabies in 1996.

# Conservation Projects beyond our Gates

**Z**oos SA has continued its work in conservation programs both nationally and internationally; much has been achieved with staff from across the organisation collaborating to reach key conservation milestones. One large task undertaken was a Conservation Snapshot which brought together information about many of the conservation programs Zoos SA is involved with. Information from 16 native and 11 international projects was captured during the process.

## Southern Hairy-nosed Wombat

Zoos SA has been involved in a long term study of Southern Hairy-nosed Wombats with great headway made into understanding and improving the relationship between landowners and

the species. Over the last twelve months the program received various grants from the Department of Environment, Water and Natural Resources, Geoscientists without Borders, Columbus Zoo, Inspiring Australia and NRM Community Grants which has enabled work to continue with great results.

### Key highlights:

- > Holding five regional community workshops to discuss wombat management across South Australia in Elliston, Tooligie, Wudinna, Penong and Nundroo.
- > Collecting data from more than 800 wombat warrens to determine the effectiveness of warren detectability using satellite imagery.

### **Brush-tailed Rock Wallaby key highlights:**

- Continuing the captive breeding program, with animals from eastern New South Wales introduced to the southern Victorian population to boost genetic diversity of the species.
- Continuing monitoring of animals following a wild release into the Grampians National Park in October 2012.

### **Red-tailed Black Cockatoo**

This year our work continued with local farmers in southeast South Australia to protect and restore stringybark habitat, which is one of the main feeding trees of the Red-tailed Black Cockatoo. To date farmers from more than 80 properties have been directly engaged in the project and more than 200 hectares of stringybark has been restored. Funding from the Caring for our Country grant concluded at the end of June 2013 and additional funding secured through the Native Vegetation Council to continue the project in 2014.

#### **Key highlights:**

- Providing ongoing support for the landholder network, including developing peer mentoring skills in the local community around Lucindale and Naracoorte.
- Hosting two tours of demonstration revegetation and habitat protection sites for more than 20 farmers in the Lucindale and Naracoorte area.
- Presenting at the National Landcare Conference in Sydney on the projects approach and value of working with farmers in conservation work.

**“Was a great arvo, learnt heaps and was interesting to see how proactive the farming community is in protecting the Red-tailed Cockatoo and hopefully they will flourish for further generations.”**

**Landowner involved in the Red-tailed Black Cockatoo Project**



### **Monarto Restoration Project**

The Monarto Restoration Project aims to restore and expand habitat at Monarto Zoo to represent what used to exist in the region. Progress has been made with the first round of biological surveys completed in areas that have been subject to restoration and revegetation activities. This process was successful with the discovery of two Western Pygmy Possums and further surveys are planned. These surveys will determine the effect of restoration and revegetation on Monarto Zoo's native biodiversity.

An intensive feral control program has also been undertaken across the property. The perimeter fence has now been made feral proof, with 14km of electrified overhang and a mesh skirt added to the fence to prevent new feral animals entering the site. Within the fenced area, fumigation and destruction of rabbit warrens over a 500 hectare area has seen a large reduction in rabbit numbers. Feral cats have now been completely eradicated from the site and

foxes greatly reduced. Weekly monitoring of the perimeter fence and rabbit warrens continues.

#### **Key highlights:**

- Revegetation of 55 hectares of previously cleared land.
- Improving a further 60 hectares of remnant bushland through supplementary planting, weeding and pest control activities.
- Planting of 50,000 tube stock across the property and 60 kilograms of native seed sown.
- Holding two planting festival events and three corporate planting days, plus working with more than a dozen schools.

## Research

In order to conduct effective conservation efforts, we need to understand how best to do the work; be it captive breeding, working with wild populations or running our education programs. To support this, a variety of research activities are undertaken across the organisation, both by staff and a range of research students. Studies are diverse and include long-term carbon sequestration study at Monarto, monitoring the health of Regent Parrots in the wild and understanding the breeding strategies of species like the Pygmy Blue-tongue Lizard.

Research conducted by Zoos SA staff or students supervised by Zoos SA staff:

- › Briony Horner "Resource usage in Pygmy Possums" (PhD)
- › Casey O'Brien "Translocation in the Southern-hairy Nosed Wombat" (PhD)
- › Hayley Tindle "Encouraging water conservation behaviour" (PhD)
- › Jillian Ryan "Role of flagship species in increasing conservation understanding: case study of Giant Pandas as a flagship for conservation" (PhD)
- › Liberty Olds "Small mammals of the Kimberley area, WA" (PhD)
- › Monika Szokalski "The impact of big cat experiences on animals, visitors and staff" (PhD)
- › Nicole Anderson "Vaccination studies and population viability assessment for African Wild Dogs" (PhD)
- › Rebecca West "Reintroduction biology of Black-flanked Rock Wallabies" (PhD)
- › Taylor Heath "Gut transit in perrisodactyls" (Honours)



## International Conservation Support

In addition to our native programs, Zoos SA provides conservation support on an international level. Projects receiving this support have a focus on protecting habitats, the species in them and working with the local community. Ecosystems identified for conservation support over the last year are the African Tropical Rainforests, African Rangelands, China's Sichuan Province, South East Asian Rainforest and Tetepare, Solomon Islands.

### Key Highlights:

- › Providing ranger support in Africa's tropical rainforest in Conkouti National Park, Congo and Africa's rangelands in Sera Conservancy, Kenya. The presence of the rangers in these areas is greatly reducing poaching and protecting a range of species including rhinos and Chimpanzees.
- › Supporting alternate livelihoods such as fish farming and more productive food crops around Bukit Tigapuluh, Indonesia and bead work in Sera Conservancy, Kenya.

- › Running a tour to Kruger National Park to raise funds for Kruger's counter poaching work which protects a range of wildlife, including the park's important rhino populations.
- › Undertaking community conservation in Tetepare, Solomon Islands where locals are protecting an island and the surrounding marine environment.
- › Continuing the 'They're Calling on You' campaign which raises awareness and funds for Chimpanzee conservation in Africa.
- › Supporting work on the fourth national survey of Giant Pandas which is near completion and will provide insight into how the international efforts of many organisations are translating into protecting Giant Pandas in the wild.
- › Supporting construction of ranger facilities at Heizhugou Nature Reserve, China, which is now under way, to assist in the protection of Giant Panda habitat.

# Connecting People with Nature





## Education

**Z**oos SA's education team works with teachers and students, pre-school to year twelve, developing and delivering education programs. The team is supported by two positions funded by the Department of Education and Child Development (DECD), and in 2013 the focus of the Adelaide DECD Education Manager role changed to have an increased focus on education program development. This change, along with the amalgamation of the education and conservation departments, has seen an increasing focus on clarifying roles, streamlining onsite processes, priorities, actions and outcomes. The Adelaide and Monarto Zoo education teams have worked together closely over the last twelve months to integrate new curriculum and existing learning design into various Zoos SA programs. Both sites offer unique experiences for students and programs are tailored to incorporate these differences.

**“I am 100 percent sure that was the best camp anyone had been on. The absolute best thing on the zoo-snooze was definitely the night walk. I will never forget the beauty of the zoo at night” I loved the education centre where it was full of animal skins, and I could feel what the animals feel like. I learned so much on the zoo-snooze I will never forget it.”**

- Year 6 student St Mary Magdalene College

### Education Visitor Numbers

Adelaide Zoo – 39, 780  
Monarto Zoo – 11, 015



## Programs

### McDonald's Zoomobile

This year the Adelaide Zoo McDonald's Zoomobile service has reached more than 20,000 people. In addition to the outreach activities, the program also started to deliver onsite presentations helping to inspire people to conserve species and habitats.

**“We had some great experiences today, the Zoomobile was fantastic and the gentleman giving the talk engaged the kids for over 45 minutes. We all learned something. We even were able to see parrots having a health check and the zoo surgeon took time out to come and talk to us. Very impressed, well done Adelaide Zoo.”**

- Adelaide Zoo visitor feedback

### Work Experience and Careers Days

More than 80 Year 11 and 12 students from metropolitan and country schools undertook week long work experience positions at Adelaide and Monarto Zoos. Tertiary students from a range of universities and TAFE courses have also undertaken professional placements with the veterinary, life science and conservation teams.

Another 200 senior secondary students attended full day career awareness sessions at both sites to provide them with information about the diverse careers found in a zoo environment.

### Planetkeeper

This popular program provides children with knowledge about conservation and how they can take action to make a difference. Participating groups learn about threatened species while visiting the zoo, continue to raise awareness back at their respective schools and then fundraise for chosen species – orangutan, tiger or sun bear. In the last financial year students raised approximately \$4,000 towards conservation support for these species.

### Ranger Program

In the last year the Ranger Program at Monarto Zoo has been redesigned and a room at the Southern White Rhinoceros Boma has been developed as a working ranger station. Students undertake activities as rangers, identifying animals and monitoring animal behaviour.

### Small Change Program

This year saw a new initiative commence that built a link between our animals at Monarto Zoo, zoo keeper talks, onsite activity, and fundraising for a conservation program in the wild. The first program focused on Chimpanzee conservation using the birth of Monarto's first chimp infant to convey the challenges faced by Chimpanzees in the wild; it raised approximately \$5,000. The second program made a link between our majestic giraffes to rangers working to protect the rangeland wildlife at the Sera conservancy with approximately \$3,500 raised.

### Photography Courses

These courses have continued to prove very popular with positive feedback throughout the year. Six SLR Basics and four Advanced SLR courses were conducted with some participants' photographs displayed on the Zoos SA website.

### Art at the Zoo

This is a new collaboration using performance art to connect students and teachers to nature promoting the key conservation goals of Zoos SA. Over two weeks 120 Flinders University primary specialist student teachers performed to more than 600 primary school students. The students enjoyed conservation productions designed and performed by the student teachers. Each performance was followed by a 45 minute workshop in one of the five Australian Curriculum arts themes: dance, drama, music, media or visual art.

### Zambia

In June 2013 two Monarto Education Officers accompanied a group of 15 Pulteney Grammar School students on a conservation exchange to Chipembele in Zambia. This partnership is directed at developing young conservation leaders and exposing them to conservation activity in a developing country.

### Professional Development Programs

In the last year Zoos SA education has been involved in various professional development programs. In early 2013 education officers worked with 60 teachers who visited various sites including the Botanic Gardens, the SA Museum and Adelaide Zoo. An Adelaide Zoo education officer also presented to 25 teachers offsite at Flinders University, informing them of how they can best use the zoo in their curriculum.

Zoos SA staff across the organisation are also involved in tertiary level training and teaching, in particular with the University of Adelaide's veterinary school and Flinders University biology students.



# Marketing

**M**arketing supports a number of key business activities to increase vital revenue streams including communicating our key messages and promoting value-add events and attendance driving activities. To achieve these goals we communicate across multiple platforms including Zoo Times, Zoo eNews, social media, blogs, traditional media and advertising mediums.

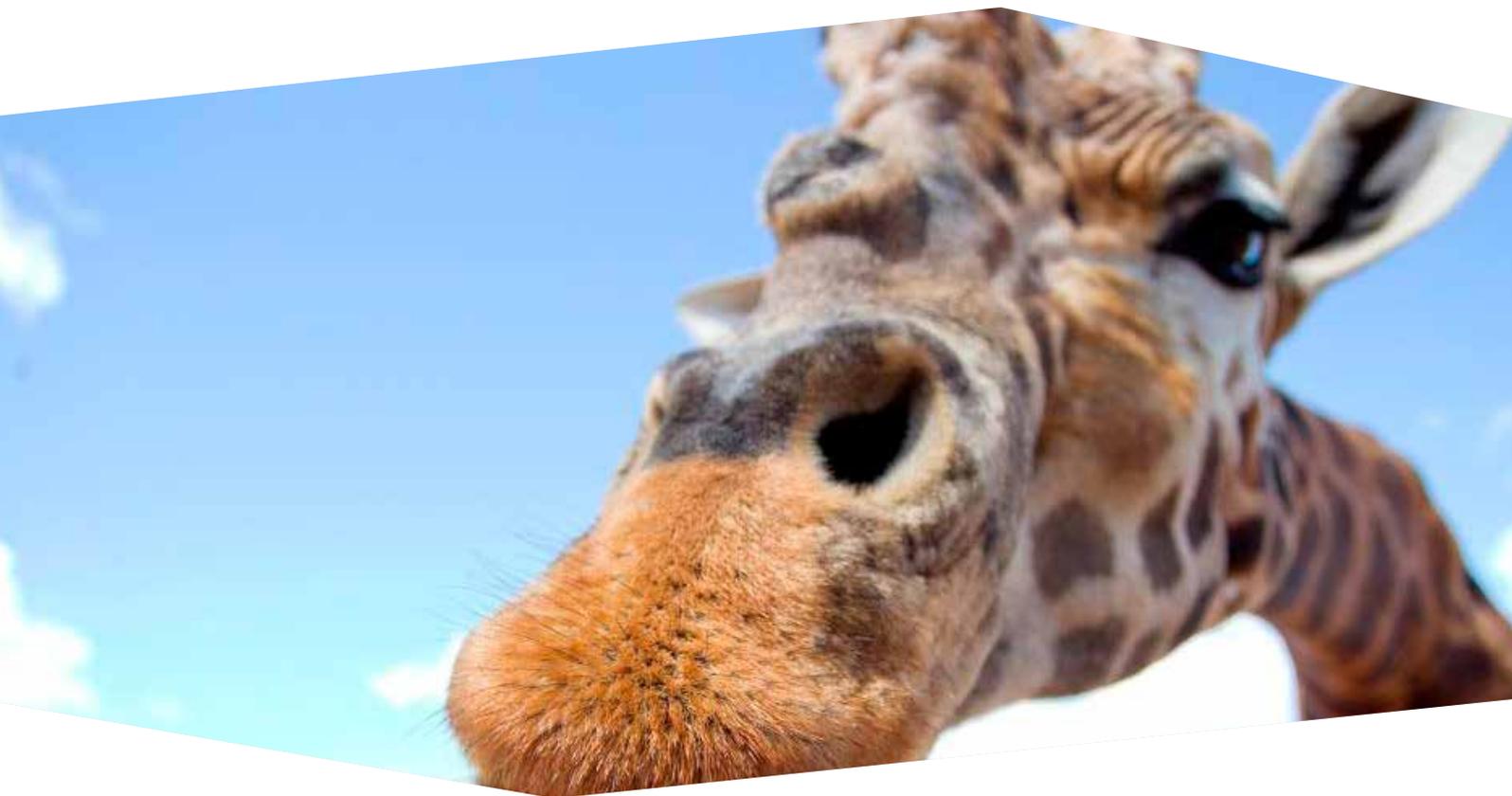
Key media highlights:

- > Appointment of a new CE in July
- > Release of the Five Year Business Plan
- > Key births at Monarto Zoo
- > Adelaide Zoo 130th anniversary
- > Giant Panda breeding season
- > New arrivals at both zoo sites

This financial year Zoos SA's major campaigns continued to centre around the school holiday periods. September's campaign highlighted zoo births and promoted new reasons to visit. January

saw the start of key anniversaries being communicated with The Royal Zoological Society of South Australia celebrating 135 years, Adelaide Zoo 130 years and Monarto Zoo 30 years. Commemorative logos were developed for each and applied across all communications. The 'Share the Good Times' photo competition in January engaged the public and supported the launch of the anniversary communications. Advertising mediums used this year included outdoor, print, radio and digital.

Building brand loyalty remained a focus through the year. Other campaigns supported the newly developed calendar of events which creates a changing experience and encourages repeat visitation. Some key events include Christmas, Easter, Westpac Mother's Day and Adelaide Zoo's 130th birthday. Securing media partnerships helped support these activities. To highlight just one successful media partnership, The Advertiser supported both Westpac Father's Day and Mother's Day through advertising opportunities and the circulation of special offers for the days.



## Our Partners

**T**he ongoing partnerships and friendships that Zoos SA has formed over the years continue to grow at both sites. Zoos SA acknowledges the significant annual funding support provided by the South Australian State Government and support from our principle partner Westpac.

These partnerships enable Zoos SA to achieve our mission and many valuable conservation projects at a local and international level. In turn our partners are also able to celebrate in our success and be recognised alongside a leading conservation charity.

Partnerships are always very important to the development of Zoos SA. We have, and continue to form, many new partnerships while maintaining the valued long term partnerships that we already enjoy.

Zoos SA values in-kind corporate support from the business community. Over the coming years we look forward to celebrating increased contributions to our organisation.

### **Key highlights:**

A sponsorship 'Thank You' event was held on 28 November in the Bamboo Forest and was attended by sponsors and key partners to acknowledge their ongoing support. Haigh's Chocolates donated truffles for the event and Golden North donated ice-creams — both were very well received by all guests.

Zoos SA's held a joint event with Principal Partner, Westpac from 23–26 May to celebrate Adelaide Zoo's 130th birthday. Coca Cola and Haigh's Chocolates also contributed to the festivities with the supply of some wonderful products.

Haigh's Chocolates supported Adelaide and Monarto Zoos during the onsite Easter festivities by supplying Haigh's Chocolates Easter eggs over the four days. The Haigh's Chocolates bilby also made an appearance each day at Adelaide Zoo with some additional treats.

PRINCIPAL PARTNER



GOVERNMENT PARTNERS



Australian Government



Government of South Australia

MAJOR PARTNERS



CORPORATE PARTNERS



CORPORATE SUPPORTERS



PREFERRED SUPPLIERS



Jarvis Subaru

PREFERRED SERVICES



EXHIBIT SPONSORS

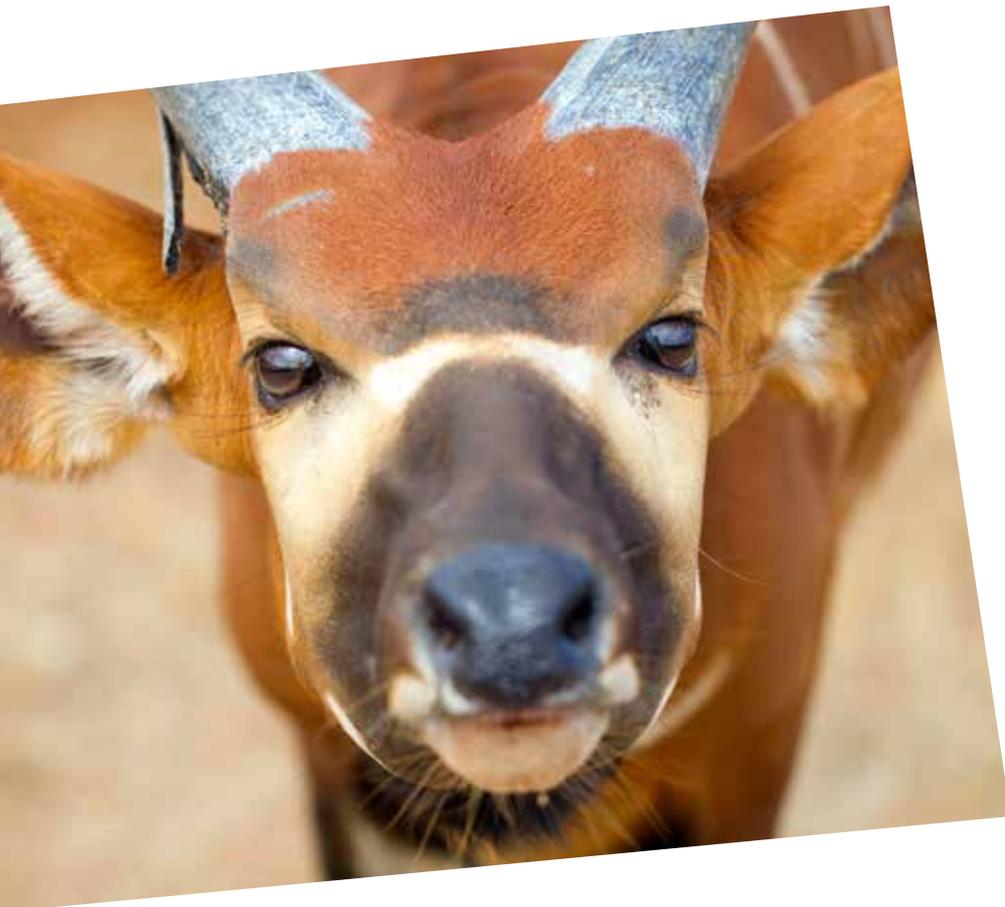


CONSERVATION SUPPORTERS

Alinta Energy  
Ian Potter Foundation

Mulhouse Zoo  
Nature Foundation

San Diego Zoo  
The University of Adelaide



## Fundraising

**Z**oos SA gratefully acknowledges the generous support of all our donors, benefactors, members and volunteers and in particular our valued government and corporate partners.

Fundraising gifts were received from 10,002 households with 30% of all financial supporters in 2012–13 engaged in new products they had not supported before. This indicates good cross-over between products, meaning that when supporters lapse from one fundraising product they often find another fundraising product of interest to them.

Bequests continue to play an important role in our local and international conservation efforts. Zoos SA is currently working on a structured bequest program that will see benefactor gifts supporting vital capital works programs.

Fundraising Activity	2012 - 2013	2011 - 2012	Difference
Corporate Sponsorship Cash	917,973	963,700	-45,727
Corporate in Kind Support	75,850	68,173	7,677
Fundraising Major Gifts	99,597	75,443	24,154
Appeals and Donations	65,805	68,693	-2,888
Sundry Income	-	90	-90
Bequests	22,234	1,130,016	-1,107,782
<b>TOTAL</b>	<b>1,181,459</b>	<b>2,306,115</b>	<b>-1,124,656</b>

## Donations

**T**he average gift reached \$348 per person, up from \$275 per person in 2011–12. The major acquisition activities for donations continued to be soft donation asks in the Zoo Times magazine. In addition a list rental of environmental charity supporters gained fresh supporters.

# Membership

With a challenging financial climate in the not for profit sector, over the last twelve months Zoos SA worked hard to achieve the positive results recorded in membership.

## Key highlights:

- > Running an extremely successful group buying campaign in March which welcomed 2,400 new annual members to the Society and netted a financial injection of \$100,000.
  - > Recording just over 30,000 Zoos SA members as at 30 June, 5,000 more than the previous year.
  - > Receiving nearly 200 life member applications.
  - > Commencing new trials for on and offsite in-person promotion of membership including hosting a stall at the Pregnancy, Babies and Children's and Expo.
  - > Hosting the inaugural 'Bring a Friend for Free Day' at Adelaide Zoo, the first in a number of revised and improved benefits for members.
  - > Creating a new Community Pass as an element of Zoos SA's community engagement and membership programs; this program will be rolled out in its entirety in the 2013-14 financial year.
- > In September 2012 a survey was distributed to member households with an excellent return rate with valuable feedback and insight provided into the zoo experience and membership benefits provided.
  - > Strengthening the corporate membership product with more than 1,100 individuals now involved in the program. Plans to further promote this to the business sector will be implemented as part of the Zoos SA Strategic Marketing Plan.

# Life Membership

The major acquisition activity was once again a direct-marketing campaign in May which utilised direct-mail, email and print advertising. In addition, a mini campaign was run in December capitalising on Christmas gift-giving. This achieved approximately two and a half times the usual response and will be repeated to a wider audience each year.

Membership Numbers	2013	2012
Companion, Honorary Associates and Conservation Friends	70	67
Life	2067	1923
Annual	24609	23666
Corporate	3416	1098
<b>TOTAL</b>	<b>30162</b>	<b>26754</b>

Membership Income	2013	2012	Difference
Annual Membership	1,819,513	1,708,305	111,208
Life Membership	291,981	235,612	56,369
<b>TOTAL</b>	<b>2,111,494</b>	<b>1,943,917</b>	<b>167,577</b>

# Animal Adoption

**T**his year more than 1,000 adopters supported species at both Adelaide and Monarto Zoos. Animal Adoption is a regular-giving product with most adopters renewing their gift each year. Income from this activity has increased each year for the past three years.

## Key highlights:

- › Implementing a new-look animal adoption program, focusing on 14 key species and including a more appealing product. Final product roll out will be completed in the 2013–14 financial year.
- › Increasing communication with Zoos SA animal supporters including tailored information for animal adopters.
- › Running a very successful animal adoption Christmas campaign which was the most successful in four years welcoming 264 new adopters to the program.

Animal Adoption Numbers	2013	2012
<b>TOTAL</b>	<b>1,023</b>	<b>990</b>
Animal Adoption Income	2012-13	2011-12
<b>TOTAL</b>	<b>138,114</b>	<b>127,069</b>

# Visitor Experience

One of the main objectives for the department over the last year was to review and improve our current products and develop new and exciting options for visitors. In 2012 Zoos SA implemented a forward planner of events and activities to enhance onsite experience for visitors and members to both Adelaide and Monarto Zoos. This cross-departmental process has been successful in developing a number of key activities and has resulted in the recruitment of an Events Coordinator to continue this focus.

Community support and partnerships continued this year with Zoos SA contributing approximately \$30,000 in free of charge admission tickets and behind the scenes experiences to South Australian community groups as donations or for event auction items. The organisation also participated in a range of community events offering special admission rates for Paraquad Day, the Special Children's Christmas Party and Playgroup SA Day.

Total attendances for the last five years were:

12/13	11/12	10/11	09/10	08/09
502,359	494,128	600,306	602,238	481,393

	2013	2012	Variance
Admissions	261,914	250,489	4.50%
Education	50,795	57,544	-13.20%
Members	107,251	104,090	2.90%
Other	44,838	38,112	15%
Functions	37,561	43,893	-14.42%
<b>Total</b>	<b>502,359</b>	<b>494,128</b>	<b>1.67%</b>

## Special admission price offers:

- > The Entertainment Book offer of 25% off admission prices for up to four people at both sites.
- > The Advertiser \$65 family pass special offer voucher for both sites during the October 2012 school holidays.
- > A 25% discount on family passes at both sites leading up to Christmas 2012.
- > Free entry for mums and dads on Mother's and Father's Day respectively.
- > Half price entry and extended opening hours at Adelaide Zoo for a week in January during the 'Beat the Heat' campaign.
- > Members 'Bring a Friend for Free Day'.
- > Reduced admission prices to celebrate Adelaide Zoo's 130th birthday.
- > A 10% discount on admission for Youth Hostel Association card holders.
- > Special admission rates for Outside School Hours Care (OSHC) groups during school holidays.
- > A 50% admissions discount with a Two Zoos Pass when tickets are purchased on the day of visiting at either site.

## Key Activities

### Adelaide Zoo Anniversary

2013 marked a significant milestone for Adelaide Zoo with the iconic South Australian institution celebrating its 130th anniversary. Starting on the anniversary date of 23 May, visitors and members were invited to enjoy a four-day birthday party including free entertainment, special entry prices, party games, interactive presentations, musical performances and special prize giveaways. In October 2013 Monarto Zoo will celebrate its 30th birthday with plans currently underway to commemorate this special milestone.

### Westpac Enrichment Days

Adelaide Zoo's Westpac Enrichment Days continue to be a popular event with both members and visitors. Enrichment creates variety in work and play for zoo animals, ensuring an environment that allows for physical and mental choices and challenges.

Recent activities have been further enhanced since the implementation of the forward planner of events and activities, with each Enrichment Day encompassing an educational and engaging theme. The program will be further developed with the first ever Monarto Zoo Westpac Enrichment Day planned for 22 September 2013 to coincide with International Rhino Day.

### Beat the Heat Campaign

In January Adelaide Zoo launched a week long 'Beat the Heat' campaign. The zoo opened an hour earlier and offered a half-price entry prior to 10:00am. This initiative was aimed at encouraging visits during the coolest part of the day for visitor comfort and when the animals are most active.

### Westpac Mother's and Father's Day

In September 2012 Zoos SA partnered with The Advertiser and Sunday Mail to celebrate Father's Day for the first time by offering dads free entry to both sites. Based on the success of this event the same offer was made available for mothers on Mother's Day 2013. Mother's Day further built on the promotion with additional activities available onsite for mums.



### School Holidays

These peak periods were themed around different topics to make both zoos a more fun and educational experience for visitors and members. Themes were supported by an extensive schedule of onsite activities which bring them to life on the ground and immerse visitors in the experience. April's 'Mythical Creatures' school holidays campaign was the first to be implemented in this way and received positive feedback. Successes and learnings from this process will be considered as upcoming school holiday programs are developed.

### Visitor Experience Surveys

Throughout last year various surveys were conducted to collect visitor feedback at both zoos. A general visitor survey was developed for use at various times throughout the year. This process is continuing with results reported regularly. In addition to this, a survey was sent to visitors following the April school holidays; participants were asked to answer questions about their recent school holiday experience which will further guide the development of future activity schedules.

### Behind the Scenes Experiences and Westpac Brief Animal Encounters Review

This financial year saw a comprehensive review of all behind the scenes experiences undertaken across both sites to determine viability, suitability, conservation value and visitor experience. As a result of this a number of improvements to existing experiences were identified for implementation and a range of new experiences are being developed.

**“An excellent, informative and enjoyable tour. Our guide was very friendly and easy to talk to. The keepers made us feel very welcome and were most informative. A truly great experience.”**

- Boileau Behind The Scenes (Hippo Interactive) participant

# A Sustainable Approach



**F**ollowing last year's efforts to monitor the use of various resources and waste management, work in 2012–13 saw us build on that foundation to adopt a strategic approach to planning and activities. Previously implemented monitoring programs have kept the spotlight on areas of concern and the continued focus on improved management of these areas has seen positive results.

During the last year we have benchmarked with other zoos and taken additional actions to benefit our sustainability in the long term. Key activities in this area include eco efficiency and waste management reviews in collaboration with Zero Waste SA and the development of an Environmental Management Plan to guide future work.

The sustainability team also visited Zoos Victoria to meet with their equivalent sustainability team at both Melbourne and Werribee Zoos to see firsthand their environmental management achievements. The learning experience has provided valuable feedback to guide our sustainable management program.

## Water

Mains water consumption across both sites decreased further in 2012–13 despite a warm year with reduced rainfall. Combined water consumption across both sites reduced by 5% (4,000 KL), which is the lowest combined usage for the last six years and represents a 26% reduction on the 2007-08 financial year benchmark. These reductions have been critical given the increased cost of water.

Ground water consumption at Adelaide Zoo decreased by 15% (9,000 KL) in 2012–13 which can be attributed to reduced operating requirements for aquatic mammals throughout this period.

## Waste Management

Resource recovery across all sites continued to improve with a further reduction in Zoos SA's waste footprint. The diversion of waste from landfill disposal to recovery streams has increased to 82% which is a 5% improvement on 2011–12 and a 28% improvement from the 2009–10 financial year benchmark.

Improved waste practices are also helping to reduce our carbon footprint with a further 43 tonnes of landfill CO<sub>2</sub> being avoided. Since the adoption of new waste management practices in 2010, landfill greenhouse gas emissions have reduced by 62% or 127 tonnes. Our goal for next year is to improve the public waste arrangements giving visitors more choice and improving Zoos SA's sustainability message along with an integrated cleaning and waste management system.

## Energy

Energy consumption has remained static since the 9% reduction of the previous year. Consumption was fractionally less than the previous year with a very modest saving of 0.2% based on last year's consumption.

Monarto Zoo's solar farm increased its output in 2012–13 with productivity rising by 15% or 9,000 kWh.

## Eco Review

Zoos SA is undergoing an eco efficiency review supported by the South Australian Government and Zero Waste SA's Industry Program.

The objectives of the eco review are to:

- Review baselines for energy and water consumption at both sites.
- Identify options and opportunities to achieve and sustain increased energy and water efficiency improvements.
- Identify the investment required, project cost savings, and return on investment of potential energy and water efficiency measures.
- Investigate suitable systems for accurately measuring and reporting energy and water consumption across the various Zoos SA programs and services at each site.
- Provide a report outlining the reviews, findings and recommendations sufficient to form the basis of an eco efficiency strategy to complement the organisations sustainability goals.

Recommendations and findings from this review will be available in late 2013.

## Environmental Management Plan

An Environmental Management Plan (EMP) was developed to guide future work and provide a clear direction towards effective and sustainable environmental management. Actions for environmental improvements and fundamental business efficiencies have been developed in line with the Zoos SA Strategic Plan and Five Year Business Plan. Adoption of the EMP will also provide an integrated framework for the future development of an Environmental Management System should Zoos SA opt to adopt one in the future.



# Ethics and Welfare

## **Animal Welfare Charter**

A Zoos SA Animal Welfare Charter has been initiated to provide a framework for staff, zoo members and external stakeholders that details Zoos SA's approach and application of welfare to the animals in our care.

As a zoo-based conservation organisation responsible for the care of animals in our zoos and in the field through our conservation projects, we aim to ensure that our activities are underpinned by high standards in animal welfare that reflect the needs and interests of our animals at all times.

We recognise that within a zoo environment we cannot completely replicate an animal's natural habitat but to the best of our abilities we will endeavour to meet their physical, behavioural and psychological needs.

The finalised charter will be available in October 2013 via the Zoos SA website.

# An Advancing Organisation

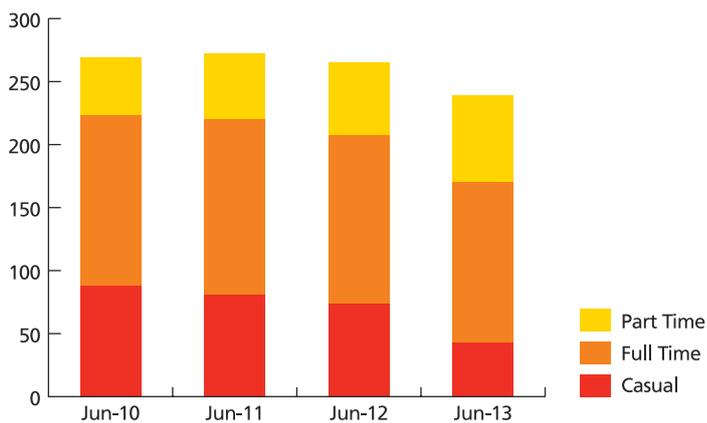




# Our People - Staff

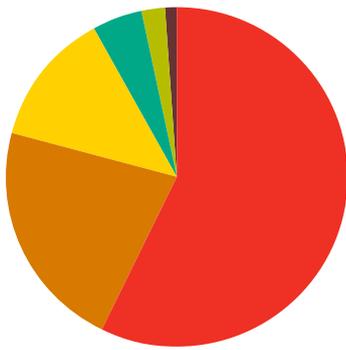
**O**ur staff have passion and purpose, and are the strength behind Zoos SA's greatest achievements. We have engaged in a number of traineeships and training programs to ensure that our staff have the skills and knowledge needed to achieve our goals and position Zoos SA for future success. This is for both frontline staff and for the strong, and often unseen, team in the background providing the services and support required to facilitate this important work. Our staff are extremely proud and incredibly lucky to be able to say that each one of them actively contributes to conservation on a daily basis. Sharing this passion and purpose is a great motivator and one we strive to continuously improve upon.

## Employees



Breakdown of staff numbers

June 13



- Life Sciences
- Business Operations
- Conservation and Education
- Corporate Services
- Human Resources
- Policy Planning and Sustainability

## Enterprise Bargaining Agreement

The negotiation and subsequent approval of Zoos SA's new Enterprise Bargaining Agreement (EBA) has been a key activity during the year. The organisation is committed to providing improved methods of employee consultation through the development of the Enterprise Bargaining Consultative Committee for all EBA related matters and a Staff Representative Forum.

The Agreement which was voted upon, approved and subsequently ratified includes:

- > An 8% wage increase over the three year agreement
- > Above Award benefits such as a 10% discount on goods and services within Zoos SA sites, access to the Employee Assistance Program, income protection, study leave and maternity support leave.
- > Life membership upon achieving 20 years of service
- > Clearer definitions of benefits and entitlements

## Workplace Health and Safety

This year has seen a strong focus on Workplace Health and Safety (WHS) throughout the organisation. All Zoos SA inductions emphasise the importance of this area and highlight the key responsibilities of staff. Manual Handling Training was completed with annual refresher courses and training for all new employees scheduled for 2013–14. Invigorated WHS meetings and regular safety drills at both sites also ensured WHS is top of mind across the organisation.

The Zoos SA Job Dictionary was reviewed to complement the functional capacity test undertaken by commencing employees and will assist with workers compensation ensuring prompt yet safe returns to work. The Job Dictionary provides a detailed description of each role undertaken within Zoos SA. This includes the physical activities and the actions required to undertake these, for example weights of objects to be lifted and actions needed to undertake these activities. By developing such a detailed map of roles it allows for an assessment of risk in each case, which can be aligned with a particular injury and tasks matched

to avoid injury. Overall Zoos SA saw a significant reduction in both claims and cost of claims for 2012–13 resulting in a reduction of injury claims and claimants. Workcover have reported there has been a 60% reduction in costs compared to 2011/12 actuals. There was a 42% reduction in claims made compared to the same period.

## Training and Development

Over the last twelve months Zoos SA has continued its Training and Development Fund program for staff. This has facilitated 37 traineeships, the completion of five Certificate IIIs in Captive Animals, with more in progress and seven Certificate IVs in Captive Animals which includes a staff management component as well as staff attendance at workshops, conferences and field projects both nationally and overseas.

This year more than \$20,000 was allocated from the Training and Development Fund which supports employee involvement in conferences, conservation projects and training programs.

Regular internal training sessions include; quarterly corporate inductions and monthly management development sessions as well as active involvement in management forums for senior managers.

## Aboriginal Learning on Country

The Aboriginal Learning on Country (ALOC) program has continued at Monarto Zoo over the last year. The current program has resulted in four team members successfully completing a Certificate III and two completing a Certificate IV in Conservation and Land Management at TAFE SA. The ALOC team has assisted with the Monarto Restoration Project, helped manage the land allocated in the future Wild Africa and worked offsite undertaking activities including planting, pest and weed control, fencing and prescribed burns and remain actively included in wider Zoos SA activities, such as the WHS Committee.

## Performance Development Plans

This year saw a 76% return rate on Performance Development Plans (PDP). This is a significant increase on previous figures and reflects the increased importance placed upon this tool by our senior management team in providing a record of employee achievements. The publication of the business and strategic plans allows for clearer alignment of individual and organisational goals, objectives and values and the process is being developed to clearly incorporate these.

## Social Club

The Zoos SA Social Club boasts nearly 60 members with a mix of employees and volunteers. The Social Club is administered by a steering committee of six employees who volunteer their time to develop and coordinate a range of activities for its members to socialise and engage with colleagues from different departments across our two sites.

The events held over the last year include:

- > 'Soup Day' as a welcome for the new Chief Executive
- > Staff Christmas function at Adelaide Zoo
- > A number of lunchtime BBQ's and parklands picnics
- > A Chinese banquet dinner event



## Our People - Volunteers

**Z**oos SA continues to be supported by a strong volunteer base of more than 500 volunteers and 15 volunteer programs across both sites. Activities undertaken by volunteers range from guiding, creating animal enrichment items, assisting with behind the scenes animal experiences, preparing post-mortem items for touch tables and revegetation and propagation work at both sites. This year has seen Zoos SA volunteers continue to thrive with several program updates and special events showcasing their contribution to the organisation.

Monarto Zoo has 150 volunteers involved in the following programs:

- > Monarto Guides
- > Hospitality
- > Mallee Minders
- > Behavioural and Environmental Enrichment for Zoo Animals (BEEZA)

Adelaide Zoo has 350 volunteers involved in the following programs;

- > Children's Zoo
- > Zoo Guides
- > Information Centre
- > BEEZA
- > Zoo Youth
- > Zoo Education and McDonalds Zoomobile
- > Zoo Watch
- > Members Activity Groups
- > Cadaver Corp
- > Pot-O-Zoo (horticulture)

Warrawong Sanctuary

- > Bushies
- > Rovers

## Key events:

- › A special event held by appreciative staff in November 2012 to recognise 30 years of volunteering at Adelaide Zoo. Volunteers were treated to special zoo surprises, drinks and dinner on the Central Lawn.
- › A National Volunteer Week event was held in the Santos Conservation Centre where two 'President's Volunteer of the Year' awards were presented by Minister for Volunteering, Tony Piccolo, to long serving volunteers Hans Rosenboom and Sally Boxall. A listing of volunteer award and long service acknowledgments can be viewed in Appendix G.
- › Hosting a high tea and fashion parade organised by volunteers to celebrate Adelaide Zoo's 130th anniversary.

**“To those of you who have been stars for years - thanks. For those relatively new - thanks for expanding the zoo cosmos. Together you light up the night leaving visitors and staff to go ‘wow’! Congratulations on 30 years of volunteering.”**

**- Dr Ian (Wally) Walton, Monarto Zoo Education Officer from a speech given at the 30 years of volunteering event.**

## Key highlights:

- › Creating the first-ever BEEZA group at Monarto Zoo.
- › Completing a work shed for the Adelaide Zoo Pot-o-Zoos, who provide support to the horticulture team.
- › Celebrating the 20th anniversary of the Cadaver Corp.

The Volunteer Representative Group (VRG) held various fundraising events throughout the year with funds raised being distributed throughout the organisation. Funds are awarded following an internal application process and have been used to finance 16 various projects including bio chemical analysers for the vet department, scales for weighing orangutans and enrichment items for animals. Total funding allocation for projects amounted to \$59,600.

The VRG held 16 fundraising events this year including an Adelaide Zoo quiz night, 130th birthday high tea, 'Breakfast with the Cheetah' and 'Breakfast with the Chimps' at Monarto Zoo. Total fundraising efforts amounted to \$32,760.

# Assets and Horticulture

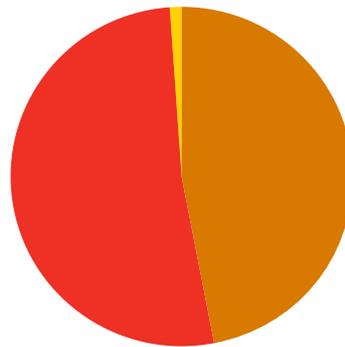
Over the past year the Assets and Horticulture area have been focused on maintaining and upgrading current infrastructure. Both departments are vital to the master planning process and have been working closely with the wider zoo team as this work continues.

## Assets

### Key highlights:

- > Undertaking a compliance audit of both sites to assess the condition of plants and infrastructure. Recommendations from this process have begun to be implemented and this will continue over the next few years on a priority basis.
- > Completing a panorama pattern pave salt wash pathway connecting the two tiger exhibits at Adelaide Zoo.
- > Upgrading the Sea Lion and walkthrough aviary boardwalks.
- > Upgrading the Monarto Zoo Tasmanian Devil exhibit, enabling keeper presentations with the species.
- > New climbing platform and shelter for the orangutans.
- > Major overhaul of the Monarto Zoo gate auto operating system.
- > Relocating the Monarto Zoo education facility.
- > Underfloor heating for the orangutan off-limits quarters.
- > The purchase of considerable replacement plant and equipment at both sites including Caterpillar Backhoe, three Toyota Hilux utilities, Grass slasher, refrigerate cooler for the meat storeroom, two vehicle transport trailers.

Plant Species



- Endangered
- Exotics
- Natives

## Horticulture

### Key Highlights:

- > Replacing the planting palette on the Adelaide Zoo front entrance green wall.
- > Undertaking a joint study with the University of South Australia investigating the biodiversity active upon green roofs and the efficiency of photovoltaic cells on green roofs.
- > Translocating a Queensland Bottle Tree (*Brachychiton repetrus*) to the Adelaide Zoo front entrance and Family Zone.
- > Constructing a facility to house Adelaide Zoo's horticultural Pot-a-Zoo volunteers.
- > Tree evaluation survey within the grounds of Adelaide Zoo.
- > Additional plantings of bamboo at the Bolivar bamboo plantation to support the ongoing dietary requirements of the Giant and Red Pandas.
- > Landscaping the front entrance of Monarto Zoo.

## Information Technology

The last year has seen significant improvements in Zoos SA's IT system. Focus was directed to improve core infrastructure including the raw fibre, switches, routers and wide area network. All communication cabinets have received attention, all switches were tested for virtual local area network (VLAN) leakage, firmware upgrades were completed and switches were added to a monitor list to ensure email notification should a power outage occur. Wide area network (WAN) upgrades have also been extensive with the entire external communication system revised resulting in an aggregated internet connection between Adelaide and Monarto Zoos. An IT strategic plan is in development with expected completion early in the 2013–14 financial year.

### Key highlights:

- > Creating a wireless internet system with wireless coverage currently available across 75% of Adelaide Zoo.
- > Installing and testing a 10MB Network termination unit (NTU) in the Adelaide Zoo server room which is the first step in creating a more stable link between sites.
- > Evaluating a new telephone service for both sites.
- > Sourcing quotes for new infrastructure and reviewing current printing contracts.



# Acknowledgements

## Honorary Life Members

Title	First Name	Surname
Sir	David	Attenborough
Mr	Max	Bourne
Mr	Nick	Cureton
Dr	Edward	McAlister AO
Mr	David	Minear
Dr	Rob	Morrison OAM
Mr	Alf	Prade
Mr	George	Purkiss

## Acknowledgements

Zoos SA could not achieve so much without the help of many friends, colleagues, volunteers and supporters.

Zoos SA acknowledges and thanks our Patron Rear Admiral Kevin Scarce AC CSC RANR.

A special thanks must go to volunteers Brian Rich, Peter McCarthy, Wayne Rohrig and Brian Matthews who continue to provide diagnostic support and nutritional advice to Animal Health Centre. Our thanks are also extended to all external specialists and suppliers, The University of Adelaide School and Animal and Veterinary Sciences, Dr Warren Foreman of the Adelaide Animal Hospital, Joan

Davy, Repromed, Healthscope, Total Medical Imaging Solutions, Department of Environment, Water and Natural Resources, Department of Primary Industries and Regions South Australia, Dr Andrew Carter of Adelaide Veterinary Specialist and Referral Centre, Dr Tony Reed of Veterinary Ophthalmic Referral, Dr John Punke of South Australia Vet Referrals, Australian Wildlife Health Network and Australian Registry of Wildlife Health and physician Dr Jonathan Martin.

Thanks also goes to the many landowners who have been involved in fieldwork including Ian Ferguson, Shannon Coulthard, Graham Ragless and Ed Nicholls with the Yellow-footed Rock Wallaby at Aroona and Kerry Gilkes and landowners in the Lucindale and Naracoorte region with the Red-tailed Black Cockatoo work.

A special thank you to John Freeth and Sharon Ede who provided instrumental support to our sustainability program and Marguerite Owen for her advice on developing business management systems.

We also thank landholders who have allowed access to their property for Southern Hairy-nosed Wombat research.

# Financial Statements



**Royal Zoological Society of South Australia Inc.**  
**Extracts from the Audited Financial Statements**

**Statement of Profit or Loss and Comprehensive Income – Year Ended 30 June 2013**

	<b>2013</b>	<b>2012</b>
	<b>\$</b>	<b>\$</b>
<b>Revenue</b>		
Admissions, Membership & Other Revenue	13,776,106	13,481,453
Grants	7,351,639	7,531,176
Bequests	22,234	1,130,016
<b>Total Revenue</b>	<b>21,149,979</b>	<b>22,142,645</b>
<b>Expenses</b>		
Salaries, Wages & On-Costs	(11,879,966)	(12,482,348)
Animal Care	(610,810)	(628,227)
Maintenance Consumables	(1,022,202)	(1,212,321)
Cost of Sales	(780,009)	(807,813)
Conservation & Research Projects	(1,733,981)	(1,384,563)
Utilities	(749,910)	(643,215)
Marketing & Promotion	(490,328)	(457,593)
Tours & Experiences	(806,106)	(856,245)
Depreciation	(2,812,909)	(2,986,702)
Impairment of Assets	-	(1,846,338)
Onerous Lease Expense	(1,165,013)	-
Other Expenses	(1,703,190)	(1,816,477)
<b>Total Expenses</b>	<b>(23,754,424)</b>	<b>(25,121,842)</b>
Profit/(Loss) from Operating Activities	(2,604,445)	(2,979,197)
Finance Income	85,615	44,087
Debt Forgiveness	-	13,216,968
Finance Expenses	(414,906)	(1,973,225)
<b>Net Financing Income/(Expense)</b>	<b>(329,291)</b>	<b>11,287,830</b>
<b>Profit/(Loss) for the Period</b>	<b>(2,933,736)</b>	<b>8,308,633</b>

**Royal Zoological Society of South Australia Inc.**  
**Extracts from the Audited Financial Statements**

**Statement of Financial Position – Year Ended 30 June 2013**

	2013 \$	2012 \$
<b>Current Assets</b>		
Cash and Cash Equivalents	665,581	658,358
Term Deposit	-	100,000
Receivables and Prepayments	1,614,430	475,279
Inventories	450,338	665,882
Held for Sale Property	1,500,000	1,500,000
<b>Total Current Assets</b>	<b>4,230,349</b>	<b>3,399,519</b>
<b>Non Current Assets</b>		
Available-for-sale Investments	8,501	8,533
Property, Plant and Equipment	48,277,815	50,719,488
<b>Total Non Current Assets</b>	<b>48,286,316</b>	<b>50,728,021</b>
<b>Total Assets</b>	<b>52,516,665</b>	<b>54,127,540</b>
<b>Current Liabilities</b>		
Sundry Creditors	2,412,610	1,862,779
Income in Advance	2,660,454	2,535,145
Loans and Borrowings	1,778,789	1,600,651
Provision for Onerous Lease	112,096	-
Employee Benefits	2,233,246	1,910,230
<b>Total Current Liabilities</b>	<b>9,197,195</b>	<b>7,908,805</b>
<b>Non Current Liabilities</b>		
Loans and Borrowings	8,160,727	8,656,744
Income in Advance	1,500,000	2,000,000
Provision for Onerous Lease	1,052,917	-
Employee Benefits	419,971	442,368
<b>Total Non Current Liabilities</b>	<b>11,133,615</b>	<b>11,099,112</b>
<b>Total Liabilities</b>	<b>20,330,810</b>	<b>19,007,917</b>
<b>Net Assets</b>	<b>32,185,855</b>	<b>35,119,623</b>
Reserves	79	111
Retained Funds	32,185,776	35,119,512
<b>Total Equity</b>	<b>32,185,855</b>	<b>35,119,623</b>

**Royal Zoological Society of South Australia Inc.**  
**Extracts from the Audited Financial Statements**  
**Statement of Cash Flows – Year Ended 30 June 2013**

	2013 \$ Inflows (Outflows)	2012 \$ Inflows (Outflows)
<b>Cash Flows from Operating Activities</b>		
Receipts		
Receipts from Customers	12,555,899	12,469,565
Donations, Bequests and Sponsorships	681,459	2,306,190
Payments		
Wages and Salaries	(11,554,371)	(12,370,871)
Suppliers	(6,448,378)	(8,254,783)
Conservation and Research Projects	(655,814)	(1,384,563)
Net Cash Provided by/(Used in) Operating Activities	(5,421,205)	(7,234,462)
<b>Cash Flows from Capital and Investing Activities</b>		
Purchase of Property, Plant and Equipment	(371,236)	(146,521)
Interest and Dividends Received	85,615	44,087
Net Cash Provided by/(Used in) Capital and Investing Activities	(285,621)	(102,434)
<b>Cash Flows from Financing Activities</b>		
Net State Government Grants Received	5,159,975	5,700,000
Net Other Grants Received	1,186,858	1,797,241
Term Deposit	100,000	(100,000)
Repayment of Borrowings	(317,878)	(2,754,917)
Proceeds from Borrowings	-	2,600,000
Payment of Interest	(414,906)	(589,538)
Net Cash Provided by Financing Activities	5,714,049	6,652,786
Net (Decrease)/Increase in Cash Held	7,223	(684,110)
Cash at the Beginning of the Year	658,358	1,342,468
Cash at the End of the Year	665,581	658,358

**Royal Zoological Society of South Australia Inc.  
Extracts from the Audited Financial Statements**

**Revenue and Expenses**

	2013						2012
	Adelaide Zoo	Monarto Zoo	Warrawong	Society	Fundraising	Total	
	\$	\$	\$	\$	\$	\$	\$
<b>Revenue</b>							
Admissions	4,790,042	1,523,414	-	-	-	6,313,456	6,090,121
Education	521,346	144,707	78,355	-	-	744,408	789,252
Sponsorship	-	-	-	-	993,823	993,823	1,031,873
Bequests	-	-	-	-	22,234	22,234	1,130,016
Donations	-	-	-	-	165,402	165,402	144,301
Membership/ Adoption	-	-	-	2,249,608	-	2,249,608	2,070,986
Retail Sales	942,300	276,606	36,132	-	-	1,255,038	1,231,023
Catering Sales	607,360	51,340	191,981	-	-	850,681	831,234
Tours Income	279,981	206,048	115,478	-	-	601,507	826,944
Events	201,551	-	-	-	-	201,551	172,042
Sundry Sales/ Income	127,053	62,505	-	205,866	5,208	400,632	293,677
Grants	42,981	12,000	-	7,296,658	-	7,351,639	7,531,176
<b>Total Revenue</b>	<b>7,512,614</b>	<b>2,276,620</b>	<b>421,946</b>	<b>9,752,132</b>	<b>1,186,667</b>	<b>21,149,979</b>	<b>22,142,645</b>
<b>Expenses</b>							
Salaries, Wages & On-Costs	5,572,781	2,289,844	456,647	3,317,412	243,282	11,879,966	12,482,348
Animal Care	231,166	274,230	8,593	96,821	-	610,810	628,227
Maintenance Consumables	683,413	291,873	12,487	34,429	-	1,022,202	1,212,321
Cost of Sales	512,601	127,896	139,512	-	-	780,009	807,813
Conservation & Research Projects	-	-	-	1,733,981	-	1,733,981	1,384,563
Utilities	528,003	172,634	49,273	-	-	749,910	643,215
Marketing & Promotion	471,594	-	-	18,734	-	490,328	457,593
Tours & Experiences	181,578	624,528	-	-	-	806,106	856,245
Depreciation	-	-	-	2,812,909	-	2,812,909	2,986,702
Impairment of Assets	-	-	-	-	-	-	1,846,338
Onerous Lease Expense	-	-	1,165,013	-	-	1,165,013	-
Other Expenses	291,565	110,449	176,642	1,075,246	49,288	1,703,190	1,816,477
<b>Total Expenses</b>	<b>8,472,701</b>	<b>3,891,454</b>	<b>2,008,167</b>	<b>9,089,532</b>	<b>292,570</b>	<b>23,754,424</b>	<b>25,121,842</b>

**Royal Zoological Society of South Australia Inc.**  
**Extracts from the Audited Financial Statements**  
**Net Financing Income**

	<b>2013</b>	<b>2012</b>
	<b>\$</b>	<b>\$</b>
Interest Income	85,615	38,775
Dividends, Distributions and Franking Credits	-	5,312
<b>Finance Income</b>	<b>85,615</b>	<b>44,087</b>
Interest Expense	(414,906)	(1,973,225)
<b>Finance Expenses</b>	<b>(414,906)</b>	<b>(1,973,225)</b>
Debt Forgiveness	-	13,216,968
<b>Debt Forgiveness</b>	<b>-</b>	<b>13,216,968</b>
<b>Net Finance Income/(Expense)</b>	<b>(329,291)</b>	<b>11,287,830</b>

The financial report for the year ended 30 June 2013 has been prepared in accordance with Australian Accounting Standards, (including Australian Interpretations) adopted by the Australian Accounting Standards Board ("AASB") and the Associations Incorporations Act.

\*Copies of the Audited Financial Statements and Audit Opinion for the year ended 30 June 2013 are available to members at the Annual General Meeting or on our website [www.zoossa.com.au](http://www.zoossa.com.au).

# Appendices

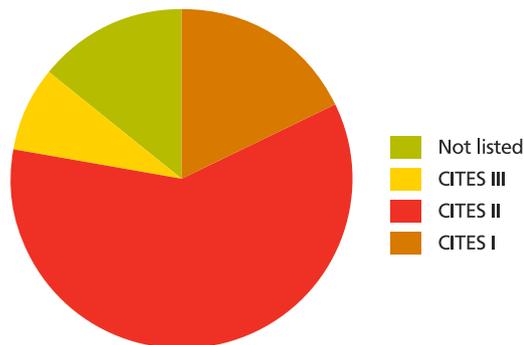
## Appendix A

### CITES Listed Species

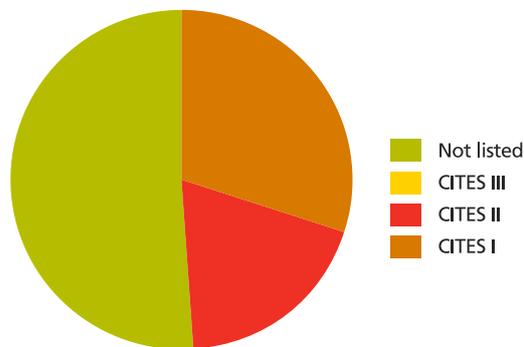
There are approximately 5,000 species of animals and more than 28,000 species of plants protected by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). These species are listed in one of three CITES Appendices, according to how threatened they are by international trade (CITES I being most threatened).

Animals listed under CITES Appendix I are those species threatened by extinction. The exchange of these species is permitted only in certain circumstances. These restrictions have implications for the maintenance of CITES I species in the zoo environment, as the import and export of such species can be a long and expensive exercise. These species, in particular, highlight the need for effective population management, with any CITES I species required to be managed under a Department of Environment, Water, Heritage and Arts approved Cooperative Conservation Program (CCP). Adelaide Zoo currently houses 25 species of CITES I listed animal, while Monarto Zoo maintains 11 CITES I species.

Adelaide Zoo



Monarto Zoo



CITES I species managed within Zoos South Australia collections (by Class, in alphabetical order by common name for easy reference).

### Reptilia

Fijian Crested Iguana	<i>Brachylophus vitiensis</i>
Madagascan Tree Boa	<i>Sanzinia madagascariensis</i>
Radiated Tortoise	<i>Geochelone radiata</i>
Western Swamp Tortoise	<i>Pseudemydura umbrina</i>

### Aves

Hyacinth Macaw	<i>Anodorhynchus hyacinthinus</i>
Nicobar Pigeon	<i>Caloenas nicobarica</i>
Orange-bellied Parrot	<i>Neophema chrysogaster</i>
Ostrich	<i>Struthio camelus</i>
Palm Cockatoo	<i>Probosciger aterrimus</i>

### Mammalia

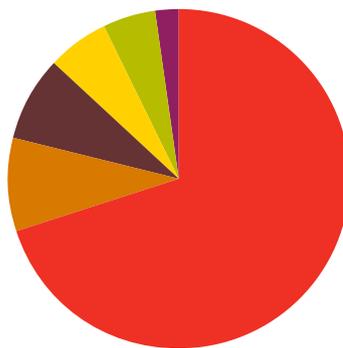
Addax	<i>Addax nasomaculatus</i>
Black Rhinoceros	<i>Diceros bicornis minor</i>
Brush-tailed Bettong	<i>Bettongia penicillata ogilbyi</i>
Cheetah	<i>Acinonyx jubatus jubatus</i>
Chimpanzee	<i>Pan troglodytes</i>
Cotton-top Tamarin	<i>Saguinus oedipus</i>
Giant Panda	<i>Ailuropoda melanoleuca</i>
Golden Lion-tamarin	<i>Leontopithecus rosalia rosalia</i>
Greater Bilby	<i>Macrotis lagotis sagitta</i>
Greater Stick-nest Rat	<i>Leporillus conditor</i>
Malayan Sun Bear	<i>Helarctos malayanus malayanus</i>
Malayan Tapir	<i>Tapirus indicus</i>
Mandrill	<i>Mandrillus sphinx</i>
Mesopotaminan Fallow Deer	<i>Dama mesopotamica</i>
Nepalese Red Panda	<i>Ailurus fulgens fulgens</i>
Przewalski's Horse	<i>Equus ferus przewalski</i>
Ring-tailed Lemur	<i>Lemur catta</i>
Siamang	<i>Symphalangus syndactylus</i>
Sumatran Orangutan	<i>Pongo abelii</i>
Sumatran Tiger	<i>Panthera tigris sumatrae</i>
White Rhinoceros	<i>Ceratotherium simum simum</i>
White-cheeked Gibbon	<i>Nomascus leucogenys</i>

**International Union for the Conservation of Nature Listed Species**

The International Union for the Conservation of Nature (IUCN) has been assessing the conservation status of animal and plant species on a global scale for more than forty years. The categories and criteria are intended to be an easily and widely understood system for classifying species at a high risk of extinction. Approximately a quarter of Adelaide Zoo’s fauna are IUCN listed.

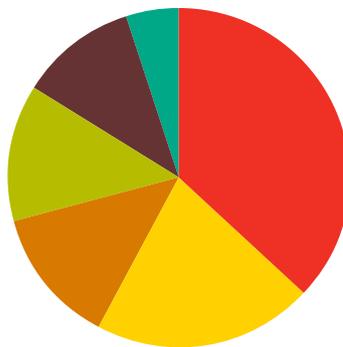
IUCN listed species are represented throughout most of the taxonomic groups currently held at Adelaide and Monarto Zoos. While the graph indicates the categories of IUCN listings throughout each these groups, it does not give a true representation of numbers within each group, but of a percentage within each group.

**Adelaide Zoo**



- Not listed .....70%
- Vulnerable ..... 9%
- Endangered..... 8%
- Near Threatened ..... 6%
- Critically Endangered..... 5%
- Least Concern ..... 2%
- Data Deficient..... 0%
- Conservation Dependand..... 0%
- Extinct in Wild ..... 0%

**Monarto Zoo**



- Not listed .....37%
- Near Threatened .....21%
- Vulnerable .....13%
- Critically Endangered.....13%
- Endangered.....11%
- Extinct in Wild ..... 5%
- Data Deficient..... 0%
- Conservation Dependand..... 0%

Species within Zoos SA's collection listed in IUCN categories of most concern.

### Extinct in Wild

Scimitar Oryx	<i>Oryx dammah</i>
Tammar Wallaby	<i>Macropus eugenii eugenii</i>

### Critically Endangered

Addax	<i>Addax nasomaculatus</i>
Black Rhinoceros	<i>Diceros bicornis minor</i>
Brush-tailed Bettong	<i>Bettongia penicillate ogilbyi</i>
Cotton-top Tamarin	<i>Saguinus oedipus</i>
Przewalski's Horse	<i>Equus ferus przewalski</i>
Sumatran Orangutan	<i>Pongo abelii</i>
Sumatran Tiger	<i>Panthera tigris sumatrae</i>
White-cheeked Gibbon	<i>Nomascus leucogenys</i>
Orange-bellied Parrot	<i>Neophema chrysogaster</i>
Aruba Island Rattlesnake	<i>Crotalus durissus unicolor</i>

Chinese Three-striped Box Tortoise	<i>Cuora trifasciata</i>
Fijian Crested Iguana	<i>Brachylophus vitiensis</i>
Radiated Tortoise	<i>Geochelone radiata</i>
Western Swamp Tortoise	<i>Pseudemydura umbrina</i>
Axolotl	<i>Ambystoma mexicanum</i>
Murray Cod	<i>Maccullochella peelii</i>

### Endangered

African Wild Dog	<i>Lycaon pictus</i>
Australian Sea-lion	<i>Neophoca cinerea</i>
Chimpanzee	<i>Pan troglodytes</i>
Giant Panda	<i>Ailuropoda melanoleuca</i>
Golden Lion-tamarin	<i>Leontopithecus rosalia rosalia</i>
Goodfellow's Tree Kangaroo	<i>Dendrolagus goodfellowi</i>
Malayan Tapir	<i>Tapirus indicus</i>
Matschie's Tree Kangaroo	<i>Dendrolagus matschiei</i>
Mesopotamian Fallow Deer	<i>Dama mesopotamica</i>
Siamang	<i>Symphalangus syndactylus</i>
Tasmanian Devil	<i>Sarcophilus harrisi</i>
Baudin's Black Cockatoo	<i>Calyptorhynchus (funereus) baudinii</i>

- Chattering Lory
- Gouldian Finch
- Hyacinth Macaw
- Regent Honeyeater
- Swift Parrot
- Elongate Tortoise
- Pygmy Blue-tongue Lizard
- Woma Python
- Southern Bell Frog

### Vulnerable

- African Lion
- Barbary Sheep
- Binturong
- Brazilian Tapir
- Cheetah
- Common Hippopotamus
- Ghost Bat
- Greater Bilby
- Greater Stick-nest Rat
- Long-nosed Potoroo
- Malayan Sun Bear
- Mandrill
- Nepalese Red Panda
- Oriental Small-clawed Otter
- Quokka
- Double-wattled Cassowary
- Green Peafowl
- Java Sparrow
- Malleefowl
- Superb Parrot
- Aldabra Tortoise
- Broad-headed Snake
- Madagascar Tree Boa
- Spur-thighed Tortoise

*Lorius garrulous*  
*Chloebeia gouldiae*  
*Anodorhynchus hyacinthinus*  
*Anthochaera phrygia*  
*Lathamus discolor*  
*Indotestudo elongate*  
*Tiliqua adelaidensis*  
*Aspidites ramsayi*  
*Litoria raniformis*

*Panthera leo senegalensis*  
*Ammotragus lervia*  
*Arctictis binturong*  
*Tapirus terrestris*  
*Acinonyx jubatus jubatus*  
*Hippopotamus amphibious*  
*Macroderma gigas gigas*  
*Macrotis lagotis sagitta*  
*Leporillus conditor*  
*Potorous tridactylus*  
*Helarctos malayanus malayanus*  
*Mandrillus sphinx*  
*Ailurus fulgens fulgens*  
*Aonyx cinerea*  
*Setonix brachyurus*  
*Casuaris casuaris johnsonii*  
*Pavo muticus*  
*Padda oryzivora*  
*Leipoa ocellata*  
*Polytelis swainsonii*  
*Geochelone gigantean*  
*Hoplocephalus bungaroides*  
*Sanzinia madagascariensis*  
*Testudo graeca*

## Appendix B

### Memberships

Gert Skipper - ASMP committee and  
Convenor Animal Records Keeping  
Specialist Advisory Group

Peter Clark and Beth Pohl - Ungulate  
Taxon Advisory Group Convenors

Dr Ian Smith, Dr David McLelland,  
Gayl Males and Dr Lynley Johnson -  
Wildlife Ethics Committee members

Liberty Olds - Australian Mammal Society

Dr Wendy Foster - Conservation Breeding  
Specialist Group

Elaine Bensted and Vicki-Jo Russell -  
Conservation SA Councillors for Zoos SA'

## Appendix C

### Studbooks Managed by Zoos SA

Studbooks are used worldwide to effectively manage ex-situ animal populations of wild animals. Studbooks contain details of each animal of a particular species in captivity, including the animals' sex, parents, birthdate, and genetic profile. Studbook keepers maintain these databases and with the species coordinator make specific recommendation regarding pairings. Zoos SA currently manages the following studbooks:

### ASMP species studbooks managed by Zoos South Australia employees

Species		TAG	Employee	Position
Black-winged Stilt	Himantopus himantopus leucocephalus	Birds	Vaughan Wilson	Species Coordinator
White-browed Woodswallow	Artamus superciliosus	Birds	Vaughan Wilson	Species Coordinator
Brush-tailed Bettong	Bettongia penicillata	Native Fauna	Vaughan Wilson	
Greater Bilby	Macrotis lagotis sagitta	Native Fauna	Jodi Buchecker	Species Coordinator
SA Mainland Tammar Wallaby	Macropus eugenii eugenii	Native Fauna	Jodi Buchecker	Species Coordinator
Yellow-footed Rock Wallaby	Petrogale xanthopus xanthopus	Native Fauna	Heather Guy	Species Coordinator
Southern Hairy-nosed Wombat	Lasiorhinus latifrons	Native Fauna	Gert Skipper	Species Coordinator
Ghost Bat	Macroderma gigas gigas	Native Fauna	Lucy Catt	Species Coordinator

## Appendix D

### Conservation Recovery Teams

Recovery teams are critical collaborations of government and non-government stakeholders and experts with a shared interest to develop and implement a recovery plan for a nationally listed species and/or an ecological community. Zoos SA is contributing both to captive and wild conservation efforts across many of these teams.

### Zoos South Australia staff representatives on Species Recovery Teams

Species		Region	Staff Member
Pygmy Blue-tongue Lizard	<i>Tiliqua adelaidensis</i>	State	T. Morley
Western Swamp Tortoise	<i>Pseudemydura umbrina</i>	WA state	T. Morley
Orange-bellied Parrot	<i>Neophema chrysogaster</i>	National	C. Romer
Malleefowl	<i>Leipoa ocellata</i>	National	J. Buchecker
Greater Bilby	<i>Macrotis lagotis sagitta</i>	State	I. Smith, J. Buchecker, P. Clark
S.A. Mainland Tammar Wallaby	<i>Macropus eugenii eugenii</i>	State	I. Smith, J. Buchecker, P. Clark, W. Foster
Black-flanked Rock Wallaby	<i>Petrogale lateralis lateralis</i>	State	I. Smith, W. Foster, M. Post
Brush-tailed Rock Wallaby	<i>Petrogale p. penicillata</i>	State	D. Schultz
Murraylands Threatened Flora		State	B. Horner
SA Red Tailed Black Cockatoo	<i>Calyptorhynchus banksii graptogyne</i>	National	V. Russell
Mt Lofty Southern Emu Wren & Fleurieu Swamps	<i>Stipiturus malachurus</i>	State	V. Russell
Southern Brown Bandicoot	<i>Isodon obesulus</i>	State	V. Russell

## Appendix E

### Staff Publications

- Antiabong, J., Boardman, W., Smith, I., Brown, M., Ball, A., Goodman, A. "Prevalence and cluster analysis of *Fusobacterium necrophorum* encoded leukotoxin (lktA) gene in the oral cavity of captive macropods". *Veterinary Microbiology*. IN PRESS.
- Antiabong, J., Boardman, W., Smith, I., Brown, M., Ball, A., Goodman, A. (2013). "A molecular survey of a captive wallaby population for periodontopathogens and the co-occurrence of *Fusobacterium necrophorum* subspecies *necrophorum* with periodontal diseases". *Veterinary Microbiology* (<http://www.sciencedirect.com/science/article/pii/S0378113513000643>)
- Antiabong, J., Boardman, W., Smith, I., Brown, M., Ball, A., Goodman, A. (2012). "'Cyliplex PCR' confirmation of *Fusobacterium necrophorum* isolates from captive wallabies: a rapid and accurate approach". *Anaerobe*.
- Funnell, O., Johnson, L., Woolford, L., Boardman, W., Polkinghorne, A., McLelland, D.J. "Conjunctivitis associated with *Chlamydia pecorum* in three koalas (*Phascolarctos cinereus*) in the Mount Lofty Ranges, South Australia". *Journal of Wildlife Diseases*. IN PRESS.
- Litchfield, C.A. (2013). "Rhino poaching: apply conservation psychology". *Science*, 340: 1168.
- Litchfield, C.A. (2013). "Do chimps and bonobos go ape when risk goes wrong". *The Conversation* ([theconversation.com](http://theconversation.com)).
- McLelland, D.J., Reardon, T., Bourne, S., Dickason, C., Kessell, A., Boardman, W. "Outbreak of skin nodules associated with *Riouxgolfmania beveridgei* in the southern bentwing bat (*Miniopterus schreibersii bassanii*) South Australia". *Journal of Wildlife Diseases*. IN PRESS.
- McLelland, D.J., Smith, I., Olds, L., Myers, C., Skerratt, L.F. (2013). "*Batrachochytrium dendrobatidis* not detected in anurans in the northern Kimberly region of Western Australia". *Herpetological Review*, 44 (1).
- Pearson, E.L., Dorian, J., Litchfield, C.A. (2013). "Measuring zoo visitor learning and understanding about orang-utans: evaluation to enhance learning outcomes and to foster conservation action". *Environmental Education Research*.
- Potter, S., Eldridge, M.D.B., Cooper, S.J.B., Paplinska, J.Z., Taggart, D.A. (2012). "Habitat connectivity, more than species' biology, influences genetic differentiation in a habitat specialist, the short-eared rock-wallaby (*Petrogale brachyotis*)". *Conservation Genetics*, 13 (4).
- Russell, V. (2013). "Grasping the nettle: role of NGOs in plant conservation". *Australasian Plant Conservation*, 21 (4).
- Ruykys, R., Rich, McCarthy (2012). "Hematology and biochemistry of warru (*Petrogale lateralis* MacDonnell Ranges race) in captivity and the wild". *Australian Veterinary Journal*, 90 (9).
- Ruykys, L., Breed, B., Schultz, D., Taggart, D. (2013). "Effects and treatment of sarcoptic mange in southern hairy-nosed wombats (*Lasiorhinus latifrons*)". *Journal of Wildlife Diseases*, 49 (2).
- Szokalski, M.S., Foster, W.K., Litchfield, C.A. (2013). "Behavioural monitoring of big cats involved in 'Behind the scenes' zoo visitor tours". *International Journal of Comparative Psychology*, 26 (1).
- Szokalski, M.S., Litchfield, C.A., Foster, W.K. (2013). "What can zookeepers tell us about interacting with big cats in captivity?". *Zoo Biology*, 32 (20). B

## Appendix F

### Conference Presentations and Workshop Attendance

- Gert Skipper was invited to speak on behalf of Zoos SA experiences in deploying ZIMS at the ISIS user conference 2012.
- Gert Skipper attended the European Association of Zoos and Aquaria Conference 2012, Workshopped with the European Marsupial TAG conditions for importing YFRW.
- Chicago Zoological Society: Southern Hairy-nosed Wombat Symposium (SHNW). As Invited guest speakers Gert Skipper spoke on SHNW's in Australian institutions and options for international corporations for the captive populations, and Dr Elisa Sparrow spoke on SHNW ecology, animals in the wild and Zoos SA's conservation program.
- Anna Bennett attended the 4th International Congress on Zookeeping in Singapore, presenting "Training and Conditioning for Improved Management and Enrichment of Hyena".
- Nicky Tomkinson and Gale Akerman attended the 6th Training and Conditioning Workshop held at Auckland Zoo in New Zealand. Gale presented a poster which gave an overview of the training and conditioning programs at Monarto Zoo and Nicky gave her presentation: The Parsnip Principle: Adaptive Training Techniques for Monarto Zoo's Chimpanzee (*Pan troglodytes*) Troop.
- Laura Hanley and Beth Pohl attended a Chimp Husbandry Workshop hosted by the Houston Zoo in Texas, USA in May 2013. Beth gave an update on the regional priorities for the Australasian region as well of the success of our program due to these priorities and Laura gave an overview of our Chimp Training and Conditioning program and some of our fundraising/conservation initiatives.
- The Australasian Society of Zoo Keeping Conference at Auckland Zoo was attended by Anna Bennett and Claire Geister. They did a joint presentation, The caesarean birth of a Spotted Hyena cub and subsequent clan re-introduction.
- In June, Beth Pohl and Peter Clark attended a one day workshop for Taxonomic Advisory Groups (TAG) Convenors, as Ungulate TAG convenors.
- Alison Hassel attended the 2012 Zoo and Aquarium Association conference along with Sarah Brown and Peter Clark and presented a paper on The Power of Social Media.
- David McLelland gave a talk to the Australian Society of Cytology at their 42nd Annual Scientific and Business meeting on panda reproduction.
- Ian Smith gave two presentations to the South Australian division of the Australian Veterinary Association at their Rural Vets meeting on Animal Restraint & Selected Zoo Cases.
- Dianne Hakof and Paula Modra both presented at the Veterinary Nurses Conference of Australasia on Hand-rearing Giant Pandas and Vitamin E supplementation, respectively. Dianne also co-chaired a workshop on zoo related issues at the same conference.
- Jeff Lugg attended the 2012 National Green Roof Conference in Melbourne and presented a paper "Bio Diversity and Green Roofs".
- Australian Network for Plant Conservation, National Conference, Canberra; plenary presentation delivered by Vicki-Jo Russell titled "Grasping the Nettle: The role of environmental NGOs in plant conservation".
- In April 2013 Adelaide Zoo hosted 20 Charles Stuart University from the Zoo Curatorship Residential School who were trained in various aspects of zoo curatorial duties via lectures performed by eight zoo staff.



## Appendix G

### Zoos SA Volunteer Award and Long Service Acknowledgment

#### Premier's Award

Hans Rosenboom  
Stephanie Eastick  
Kathy Raftery  
Sally Boxall  
Jenny Soulsby  
Clive Watts

#### Presidents Award

Sally Boxall  
Hans Rosenboom

#### 20 year Service Award

Alan Bohn  
Lachlan Graham  
Joan Torode  
Peggy Whitson

#### 10 Year Awards

Rosemary Bonner  
Brian Matthews  
Claire Brown  
Emily Brown  
Gary Kubank  
Susan Kubank  
Lynn Hedley  
Kathy Keech  
Brian Kuss

#### 5 Year Award

Kathryn Conlin  
Alison Dall  
Alexandra Fowler  
Fiona Hill  
Craig James  
Simon Leese  
Jo Nykiel  
Adam Pape  
Vicky Sanderson  
Christopher Seidel  
Judy Tink  
Cynthia Whitbread  
Mike Gibson  
Allan Goodall  
Ruth Keogh  
Ian Scott  
Robert Wagner  
Faye Ward

**Zoos SA is a charitable  
conservation society that  
exists to save species from  
extinction and to connect  
people with nature.**



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