



Annual Report 2021-22



PASSION

We inspire and influence by bringing pride, care and commitment to our work.

INNOVATION

We seek creative ways to achieve goals and turn ideas into reality by promoting a culture of learning and improving.

RESPECT

We respect individuals' values and encourage a culture of collaboration, diversity, listening and trust.

EFFECTIVENESS

We are accountable, focus on clearly defined goals and work as a team to turn words into action.

ENGAGEMENT

We create experiences and connections that make a positive difference.



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President and Chief Executive's report

As an organisation, Zoos SA has yet again proven itself to be nothing short of resilient, adaptable and committed; such is our dedication to conservation. Despite a number of challenges, including restrictions on the number of visitors allowed on site during the majority of the 2021 – 2022 period, and one week of state-enforced closure, we continued to deliver on our purpose of connecting people with nature and saving species from extinction.

During the financial period, we operated with a strict control on all budgets, avoiding any unnecessary spending while ensuring we were able to meet our high animal welfare standards.

Our focus throughout the financial year has been to build on the number of annual and lifetime memberships and to safely reintroduce some of the key animal experiences that offer a deeper connection with species; no mean feat when many species are susceptible to COVID-19.

March 2022 marked the opening of the new Visitor Centre at Monarto Safari Park. This world-class centre, partly funded by the Australian and State Governments, was the first of three phases that will see Monarto Safari Park transform into the largest safari experience outside of Africa. With a resort hotel and glamping facilities on the way, it is fair to say that the impact of opening the new Visitor Centre was felt around the entire region with locals and city-dwellers descending on Monarto to answer the 'call of the wild'.

With innovation as one of our key values, we were delighted to deliver the inaugural Light Creatures event with presenting partner SA Power Networks. Opening to the public through the evenings of July 2021 (as part of Illuminate Adelaide) Light Creatures presented large animal lanterns, soundscapes, light shows and animal feeds as well as being a cultural connector to Kurna Country, its people and their Dreamtime.



As an organisation, the entire team has faced challenges head-on, often needing to think outside the proverbial box to deliver results and to safely navigate COVID's choppy waters. With more native animal species than ever faced with the threat of extinction we have become more adaptable, embracing innovation and exploring opportunities some of which, are outlined below:

In 2021-22, Zoos SA continued to support 13 conservation projects in Australia and provided financial support to 12 field projects internationally across Africa, China, South East Asia and the Solomon Islands. We are proud of this continued commitment to conservation.

A number of key threatened conservation species were bred at both Zoos SA sites as part of release to the wild projects. This included 22 Greater Stick-nest Rats, 150 Mitchell's Hopping Mice, critically endangered Orange-bellied Parrots, Western Swamp Tortoises, Red-tailed Phascogales and Southern Purple-spotted Gudgeons.

In March 2022, work on the new Visitor Centre at Monarto Safari Park was completed. This build was made possible with \$15.8 million in funding from the Australian and State Governments.

Building of onsite accommodation of a 78 room hotel at Monarto Safari Park continued throughout the period. A private investor will build and operate this luxury resort and glamping facilities as part of a multi-million-dollar expansion.

We held out of hours events such as Zoo Nights, Light Creatures and Haunted Horizons Ghost Tours of Adelaide Zoo.

We welcomed a large, 2.75m Komodo Dragon to Adelaide Zoo, hand-raised two not-so-little giraffe calves, swapped a male Southern White Rhino for another to maximise genetic strength for the species, celebrated Year of the Tiger with the arrival of a critically endangered Sumatran Tiger and witnessed the birth of five cubs: three African Lion and two Cheetah.

We also continued to welcome life members to our wild family with life membership income up by 10% in 2021-22.

While COVID has stopped many things, it has not stopped the extinction rate of species. We therefore continue to focus on delivering conservation efforts that provide short and long-term solutions for the recovery and safeguarding of a number of different species and habitats.

While this report looks back over the past twelve months we are resolute to look forward. Our hope is that by following key priorities we will continue to serve conservation as it deserves: with expertise, collaboration and hope. Our Board and Leadership teams have therefore determined that Zoos SA will focus on the below for the next few years:

- Reviewing our Strategic Plan and Conservation Directions
- Financial sustainability and cash management
- Systems improvements
- Continued focus on our Master Plan to maintain momentum including developments at both Adelaide Zoo and Monarto Safari Park
- Implementing a Reconciliation Action Plan

As we continue to adapt to operating alongside and emerging from COVID-19, we continue to do so with the determination to make a difference. We'd like to put on record our sincere thanks to the amazing staff of Zoos SA who have shown such perseverance and commitment. While some periods of time have been extremely tough, they have risen to every challenge with good grace, humour and an absolute commitment to our purpose.

We also thank our board members for their dedication to Zoos SA over the past year and our incredible volunteers, members, corporate partners and supporters for their continued loyalty and support.



Julieann Riedstra
President



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 quarterly performance reports provided to the board from the Chief Executive.

Zoos SA Board Members



JULIEANN RIEDSTRA
PRESIDENT

Julieann has had a long career in the public sector in South Australia and most recently was the Deputy Chief Executive and Chief Operating Officer of the Department for Education.

Julieann is a Fellow of Certified Practicing Accountants (CPA) Australia and a Graduate of the Australian Institute of Company Directors (AICD). Julieann has been a member for many years and became a Life Member in 2008.



DR SUSIE ROBINSON
VICE PRESIDENT

Susie is the Executive Director of the Australian Plant Phenomics Facility, one of Australia's nationally designated research infrastructures. Susie has worked in government and university sectors in the UK and Australia, and has significant corporate governance experience. Trained in the sciences and business management, she holds a PhD from Cambridge University.



VALE BILL SPURR AO

Bill had an extensive career in the tourism, hospitality and event industries in South Australia. Bill was the former Chief Executive Officer of SA Tourism Commission and chair of the Board of Adelaide Venue Management Corporation. Bill sadly passed away in 2022 after serving as an appointed member of on the Royal Zoological Society of SA's Board for close to four years. He was committed to positive conservation outcomes and is sorely missed.



PETER MCCARTHY

Peter is a retired Clinical Biochemist. He and his colleague, Brian Rich, set up the laboratory in the Animal Health & Research Centre in late 1999. In 2019 Peter was part of the six person team who won "The Unsung Hero" Award of South Australian Science. Peter's interests lie in expanding the service that they currently offer and encouraging a greater commitment to research.



DAVID SANDERS ENDED TERM 16/11/21

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



KATE THIELE ENDED TERM 16/11/21

Kate is the Founding Director of Klarity and has more than 10 years of board and executive experience. Her experience in the not-for-profit sector and governance brings valuable skills to the Board.



PROF KRIS HELGEN

Kris is an expert on mammal evolution and conservation and serves as the Chief Scientist of the Australian Museum in Sydney. Kris was Curator in charge of mammals at the Smithsonian from 2008 – 2017.



ROD BUCHECKER CHAIR OF RZSSA RISK AND GOVERNANCE COMMITTEE

Rod is Chair of TEC 30 for The Executive Connection, the world's largest CEO network. He is a recognised executive mentor and business coach, specialising in leadership development and helping companies find the focus they need to succeed.



DENNIS MUTTON CHAIR OF RZSSA FINANCE AND AUDIT COMMITTEE

Dennis is an independent consultant in the fields of natural resource management, primary industries, regional growth initiatives and leadership development. He is a fellow of the AICD and holds a range of board directorships in government, business and not-for-profit organisations.



KATE HARTWIG BOARD SECRETARY/ PUBLIC OFFICER

Kate has had a long career in not-for-profit organisations having been CEO of a range of industry, professional and charitable organisations in Adelaide, Sydney and Melbourne. She was appointed as the Zoos SA Board Secretary and Public Officer in 2013. Kate is a Life Member and a Volunteer at Monarto Safari Park.

Board Meeting Attendance 2021 - 2022

BOARD MEMBER	POSITION HELD	NUMBER OF MEETINGS ELIGIBLE TO ATTEND	NUMBER OF MEETINGS ATTENDED	COMMENTS
Julieann Riedstra	President	9	9	Commenced as President 21/11/19
Susie Robinson	Vice President	9	8	Commenced as Vice President 16/11/21
Dennis Mutton	Board Member	9	9	Term ended as Vice President 16/11/21
Kris Helgen	Board Member	9	6	Re-elected at AGM 16/11/21
Peter McCarthy	Board Member	9	9	
David Martin	Board Member	6	6	
David Sanders	Board Member	3	3	Ended term 16/11/21
Rod Buchecker	Board Member Appointed	9	8	
Gavin Bates	Board Member Appointed	5	5	
Kate Thiele	Board Member Appointed	3	3	Ended term 16/11/21
Bill Spurr AO	Board Member Appointed	9	7	

Finance and Audit Sub-Committee Attendance 2021 - 2022

BOARD MEMBER	POSITION HELD	NUMBERS OF MEETINGS ELIGIBLE TO ATTEND	NUMBER OF MEETINGS ATTENDED	COMMENTS
Dennis Mutton	Chair	13	12	Commenced as Chair 23/11/2017
Julieann Riedstra	Committee Member	13	13	
Gavin Bates	External Member	13	12	Was External Member from 31/08/18 Commenced as Committee Member from 7/12/21
Ursula Bradshaw	External Member	10	10	Commenced 21/10/21
David Sanders	Committee member	4	4	Term ended 21/10/21
Rod Buchecker	Observer	1	1	27/07/21 meeting only

Risk and Governance Sub-Committee Attendance 2021 - 2022

BOARD MEMBER	POSITION HELD	NUMBERS OF MEETINGS ELIGIBLE TO ATTEND	NUMBER OF MEETINGS ATTENDED	COMMENTS
Rod Buchecker	Chair	4	3	Commenced 1/12/17 Commenced as Chair 17/03/20
Susie Robinson	Committee Member	4	4	
Julieann Riedstra	Committee Member	4	4	
Kate Hartwig	Committee Member	4	4	



Zoos SA purpose and aspiration

Our purpose is to connect people with nature and save species from extinction.

Our aspiration is to lead and inspire conservation action to support global biodiversity.

Strategic plan

**GOAL
1**

Connect people with nature: engage, inform and inspire people to act

**GOAL
2**

Save species from extinction: conservation, wildlife health and research

**GOAL
3**

Work in an ethical and sustainable manner, influencing others to follow our example

**GOAL
4**

Grow a sound and advancing organisation, applying an innovative business approach

Five-Year Business Plan

This financial year, Zoos SA tracked and reported progress against a set of activities outlined in its business plan. This plan is guided by our strategic plan and the activities span all areas of the organisation. Some of the tasks were not able to be progressed as we had hoped due to the business interruption caused by COVID-19. Out of a total of 58 individual tasks detailed in the business plan, 55 were completed and 3 partially completed.



Year in review

Key numbers

497, 639

people visited
Adelaide Zoo and
Monarto Safari Park

279, 374

followers on social
media (Facebook,
Instagram, LinkedIn,
Twitter and Youtube)

584

animals were born
during 2021-2022

301

employees across
both sites

13

conservation
projects in Australia
supported

440

registered volunteers
across both sites

\$27
MILLION

in free media
coverage attracted

4,465

life members

1.6
MILLION

million website visits
and sessions

OVER
46,000

annual members

12

field projects
internationally across
Africa, China, South
East Asia and the
Solomon Islands
supported

328
DAYS

days of COVID-19
restrictions on visitor
numbers

Year in review

Finance snapshot

2021-22 was another challenging year for the operations of Zoos SA. Whilst the organisation reports a net surplus of \$8,451,943, this includes \$9,559,000 in Government grant funding associated with the construction of the new Monarto Visitor Centre, and additional operating funding support of \$912,000.

Both of Zoos SA sites operated under a COVID-19 Management Plan during the majority of the financial year (COVID-19 Management Plan designation was lifted on 24 May 2022, however a mask mandate on buses at Monarto remained until September 2022). The impact of capacity restrictions to daily visitation as well as a mask requirement for buses has had a detrimental impact on direct cash revenue from admissions (including education), catering, and visitor experiences. While the restrictions were in place, we were unable to significantly reduce our operating costs. This is largely due to the fixed costs of maintaining our sites and ensuring the welfare of our animal collection.

We continue to work closely with the South Australian Government Department of Treasury and Finance, and the Department for Environment and Water and are grateful for the temporary funding support of \$912,000 provided during the year.

The operating result, after excluding the additional state government support and the capital grant funding for the Visitor Centre, was a loss of \$2,020,000.

Admissions for the 2021-22 financial year totalled to just under 498,000 visitors which was a 14% decrease on the prior year result. The two largest attendance months of December and January were significantly impacted by the COVID-19 community outbreak in South Australia. This had negative impact on our attendance, education and retail income streams.

Membership at Zoos SA continues to be quite resilient to COVID-19 impacts with overall member numbers being just over 46,000 members at the end of June 2022. This has meant membership income has remained relatively strong in both annual and life membership sales.

Tours income increased by 7%, due to lower revenue from animal experiences in the prior year. These income streams have been significantly impacted by COVID-19 restrictions and are still yet to recover to pre-COVID levels. Similarly, catering commission income has been significantly impacted by COVID-19 restrictions with very little opportunity for our caterers to generate function income.

Event income was significantly higher than the prior year which included the first year of the Light Creatures winter event put on in partnership with Illuminate Adelaide. The event generated over \$1,022,000 in income.

We received substantial bequest income of \$1,656,000 during the year. We also received corporate support from in-kind contributions and sponsorships of \$1,454,000. This was a 14% increase on the prior year result which was a great result given the current difficult corporate sponsorship market that existed during the pandemic.

Donations income amounted to \$738,000, with \$320,000 of this being used to support capital investment. This enabled us to fund several projects, and to continue our investment in our Wild Africa precinct.

Operating expenditure proved challenging to control, resulting in an increased focus on activity and expense management and restricting spending to only that which was essential.

Salaries and wage costs increased by 5% on the prior year which reflected staffing returning to normal levels as some COVID-19 restrictions eased.

Given the difficult trading conditions that were experienced during the year, management continued to limit as much discretionary expenditure as possible. Cost increases to note include an increase in maintenance expenditure which was largely a catch up on expenditure that was not incurred during 2021-22. Cost of sales increased in line with higher retail store sales, and tours and experiences cost increased due to the mandated capacity restriction on buses at Monarto Safari Park. Additional costs were also incurred for the extremely successful Light Creatures event held at Adelaide Zoo in July and August 2021.

We invested \$12,157,000 in capital during 2021-22 (\$9,113,000 in 2020-21). Of this \$9,626,000 was for the new Monarto Safari Park Visitor Centre, and \$1,201,000 was for ongoing development of our Wild Africa precinct. We continue to invest in maintenance and improvement capital, balancing the need for maintenance investment with the requirement to invest in new and exciting facilities.

We budget for capital investment each year, and where additional funds become available during the year, we assess how these funds are best applied. Due to the adverse trading conditions experienced this year, no additional capital expenditure was undertaken beyond that what was budgeted for.

Our investment portfolio returned dividends of \$36,000 during the financial year and the value of the portfolio reduced by \$33,000.

The ANZ debt remains with a balance at 30 June of \$2,550,000. Zoos SA negotiated with ANZ to suspend all loan principle repayments during 2021-22 financial year to ensure all available cash could support the operations of both sites as well as the capital expenditure needed to ensure key projects at Monarto Safari Park are completed.

In updating our rolling 5-Year Business Plan, we have prepared forward estimates that enable reduction of our ANZ loan from within our annual operating budget. This is forecasting that debt principle repayment will recommence in the 2023-24 financial year. The repayment schedule is regularly discussed with ANZ and the State Government.

Key achievements:

- Retained all employees despite ongoing COVID-19 disruption;
- Over \$12.15m invested in capital projects including the Monarto Safari Park Visitor Centre and the Wild Africa precinct;
- Controlled cash flow; and
- Maintenance and development capital expenditure in line with previous years.



Saving species inside our gates

Adelaide Zoo

From snakes and lions to monkeys and birds, Adelaide Zoo proudly houses over 2,500 animals representing over 250 different species. Over 40 percent of these species are threatened with extinction which makes our support critical for their survival in the wild

Despite the continuing challenges presented by COVID-19 during 2021-2022, Adelaide Zoo has continued its commitment to conservation and saving species.

Adelaide Zoo welcomed the arrival of two giraffe calves in 2019 and 2021, Nolean and Azizi. Both were hand-reared by Zoos SA keepers after a bond between the calves and their mother was not established. During 2022, Azizi was returned to Monarto, where he joined the large bachelor herd at the Safari Park and continues to grow and flourish. Nolean remained at Adelaide Zoo with our other female, Kimya. Both giraffe are thriving in their new homes thanks to the partnership of the ungulate teams at Adelaide Zoo and Monarto Safari Park.

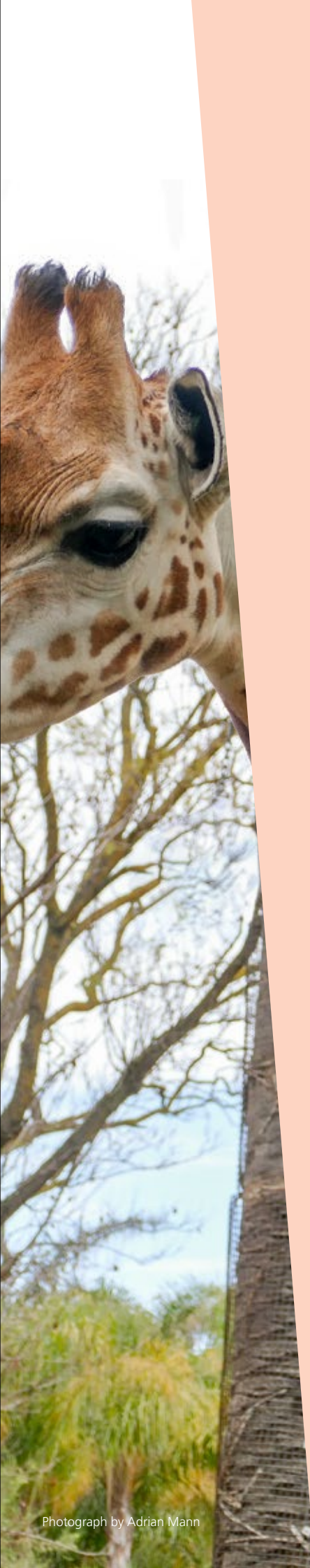
A number of species were added to our wild family, as part of our ongoing population sustainability and breeding efforts. These species have included: a female Sumatran Tiger, a male Komodo Dragon, Red-tailed Phascogales, Australian Little Penguins, and Southern Purple-spotted Gudgeons.

Breeding introductions have commenced between our two Sumatran Tigers, Delilah and Kembali, with promising signs. Our two Black and White Colobus Monkey troops were reconfigured to promote breeding between genetically suitable mates. A magnificent adult male Komodo Dragon, Naga, was transferred to Adelaide Zoo, from Taronga Zoo, with a view to breeding introductions with our female, Cecelia, in 2023.

During the year, there were also a number of notable births. Australian Little Penguin chicks were born and added to our rookery. The penguins at Adelaide Zoo are part of an insurance population and are regarded the most genetically valuable animals in human care in the Australasian region. We also welcomed Quokka joeys into the world, as well as a variety of managed bird species.

Our breed-for-release programs have continued successfully throughout 2021-2022, with Orange-bellied Parrots, Western Swamp Tortoises, Red-tailed Phascogales and Southern Purple-spotted Gudgeons, all breeding and providing offspring for release as part of their respective wild population re-wilding programs.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Throughout 2021-2022, despite COVID-related restrictions, Adelaide Zoo hosted numerous Brief Animal Encounters. The personal interactions between Zoo staff and visitors provided an exceptional opportunity for keepers to convey their passion for the animals within their care, as well as the conservation needs of the animals' wild counterparts. We added two new notable species to our Free Flight presentation, an Australian Buzzard and a Barking Owl, bringing a new dimension to the already excellent presentation. 2021 saw Adelaide Zoo present the first Light Creatures lantern and lights show; a novel and innovative approach to connecting visitors with nature. As well as animal lanterns, visitors experienced an Australian Pelican feed at night.

Goal 2 Save species from extinction: conservation, wildlife health and research.

Adelaide Zoo had a successful season breeding a number of species including Western Swamp Tortoises, Orange-bellied Parrots, Red-tailed Phascogales, Southern Purple-spotted Gudgeons and Quokkas. Western Swamp Tortoises and Orange-bellied Parrots are listed as critically endangered by the International Union of the Conservation of Nature and are part of multi-institutional collaborative recovery programs. Many of these animals have already been introduced to the wild as part of carefully-managed breed-and-release programs. Red-tailed Phascogales bred at Adelaide Zoo, in partnership with the Australian Wildlife Conservancy, were recently released into the wild at Mallee Cliffs National Park in NSW. This project is a proof of concept initiative to see if the species can be reintroduced to an area where they were formerly found, but are now regionally extinct. Trials of conservation tools (including telemetry tags on Regent Honeyeaters) were conducted at Adelaide Zoo to test whether they would be useful in the field, and research was conducted on species maintained at Adelaide Zoo to learn more about their basic biology (including gut motility in Echidna), adding to the body of knowledge that will help preserve these species.

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

Adelaide Zoo underwent the three yearly ZAA accreditation process in late 21/22 and awaits the final report, the process is largely based on animal welfare parameters.

This financial year, every animal enclosure across our site was tested using the multi-dimensional Five Domains model of animal welfare: physical, social, environment & management factors; mental and emotional state; health status/physical condition (including nutrition); natural behaviour patterns in zoo habitat conditions. A number of improvement areas identified during the survey process have been actioned through the renovation of habitats and others are planned for correction within the next 12 months. Adelaide Zoo has continued to find more sustainable husbandry techniques and advanced the nutrition of the animals by continual revision of their diets.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Keeping staff participated in a range of development opportunities including field work, mental health training, first aid and emergency training, animal transports and online conferences. An extension of the Red Panda habitat was constructed and opened in 2022, significantly extending the size of their enclosure, incorporating a tunnel complex and a giant fig tree. A new Australian Little Penguin exhibit was opened in 2022 near the entrance of the Zoo, providing a great introduction to visitors, and adding a secure support infrastructure for the ongoing breeding of the rookery. A new Komodo Dragon habitat, with climate control systems, was constructed and opened in 2022 to accommodate the large male transferred from Taronga Zoo. These renovations were made possible through the support of some generous gifts and the volunteer representative group..

Monarto Safari Park

With over 70 percent of the species that call Monarto Safari Park home threatened with extinction in the wild, our mission to protect them has never been more important. As we reflect on the past year, we're proud of our achievements.

It's been a year of new additions, wild releases and unfortunately the passing of some very well-loved, iconic individuals. These highs and lows are something with which we are familiar; part of what we do as a conservation organisation and what makes our dedication to protecting species from extinction so important.

Several new species were added to our collection with Aldabra Giant and Radiated tortoises moving from Adelaide Zoo into our purpose built tortoise facility to be part of our Ring-tailed Lemur walk-through experience. In addition, 52 Plains Mouse also known as Palyoora or Plains Rat were collected from the wild to begin another breed-for-release program late in the year. We hope to have a great result as this species is currently vulnerable to extinction in their natural habitat.

Our release to the wild programs saw several successes with an additional 22 Greater Stick-nest Rats released into Mallee Cliffs National Park. In April we released over 150 Mitchell's Hopping Mice that were bred at Monarto Safari Park into the same area, with keeper Courtney Barks assisting in releasing after spending much time taking care of the population. We also had our first successful breeding and hatching of a Plains Wanderer chick and contributed birds to be released back to the wild. We look forward to this program expanding in 2022/23.

Our Western Swamp Tortoise program produced multiple clutches of eggs of which six hatched at Adelaide Zoo and will contribute to future releases in Western Australia.

Our Waru (Black-flanked Rock-wallaby) program saw the return of a hand-reared joey to the Pintji (in the Anangu Pitjantjatjara Yankunytjatjara) and the further hand-rearing and fostering of two more joeys, who will return this year. These joeys were found during trapping (which is conducted for a variety of reasons through the year). Two keepers, Heidi Baker and Courtney Barks were able to assist with trapping at Wamitjara to see how the released population of Waru were doing in this area (which showed that the population is holding steady).

Four Greater Bilbies were born and will contribute their genetics to the regional population and may be release animals in future. This was the first year that our Tasmanian Devil program did not produce any joeys. Due to Covid, our facilities were very full; so we only attempted two pairings that incorporated two older females (both had never bred before). At this age they are highly unlikely to breed. However, we are happy to report that we have, with Covid-restrictions easing (enabling interstate transfers again), reduced our numbers and look forward to contributing to the program next season.





The breeding programs for our Australian Species Management Programs (ASMP) and other recovery plans were also successful this year.

Our exotic Australian Species Management Program (ASMP) saw the birth of 20 Scimitar-horned Oryx, an animal which is extinct in the wild. With the arrival of a new breeding male, Cheetah breeding was able to resume. We had a successful litter with one male and one female cub and an unsuccessful litter to a new mum, with one still born and another which had to be removed via caesarean. After many delays due to the impacts of Covid, we were able to import seven male Ring-tailed Lemurs from New Zealand and four female and five male lemurs from the United States. We will introduce some to our existing Conspiracy and look to start a second group in our new walk-through exhibit. Our original breeding group saw the birth of three pups; a first for us at Monarto Safari Park!

January saw the birth of lioness Husani's second litter, with three cubs surviving. Two new Nyala males were imported from New Zealand and four calves were born this year. Additionally, our breeding zebra herd grew to 12, producing four foals out in Etosha; part of our new Wild Africa development. The number of Blackbuck continues to grow, with 23 births and a total of 99 animals; many of which will stock Wild Africa areas. Satara, one of our Southern White Rhinoceros bulls was transferred to Taronga's Western Plains Zoo and in return, we received a male named Umfana.

Unfortunately, the pack of African Painted Dogs suffered the loss of two males from complications during anaesthetics and the loss of five pups when a subordinate female gave birth.

We welcomed giraffe male Azizi back to Monarto Safari Park after being hand-raised at Adelaide Zoo when mum Scarlett did not show enough maternal skills. Fortunately, we also got to welcome Scarlett's second calf which she has successfully raised.

We also saw the birth of two American Bison calves and the successful hatching of 16 ostrich chicks, which were sent to other zoos in the region.

This past year, our Life Sciences team had to say farewell to two aged giraffe; Tambo, who was the breeding male for many years and sired 26 offspring at Monarto Safari Park as well as Kinky, who was well-known by many for her crooked neck. She also was an excellent mum, providing many calves to our breeding program over her 22 years. Our Southern White Rhino calf, Eshe, died at 15 months of age with the cause currently being researched. Not as familiar with our public, we lost 33-year-old Przewalski's horse, Katya, who was born at Monarto in 1988!

In our chimp troop we were saddened by the death of Galatea's first offspring very shortly after birth. Veterinary investigation showed the female infant suffered birth defects which would have made her unlikely to survive long-term.



DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

With Covid restrictions easing and, the implementation of new safety measures, most of our animal encounters are again offered to visitors. The resumption of experiences is a great outcome after a couple of years of operating with limited capacity and availability. These experience and encounters are an amazing way to engage, inform and inspire our guests.

Our staff engage regularly via media and social media. Our team is extremely passionate and we hope this helps inspire our guests to act to save species.

Goal 2 Save species from extinction: conservation, wildlife health and research.

We bred a number of species ranging from Vulnerable to Extinct-in-the-Wild and contributed to the managed populations of ASMP and recovery programs. These include African Lion, Scimitar-horned Oryx, Greater Bilbies, giraffe, Mitchell's Hopping Mouse, Western Swamp Tortoise, Plains Zebra, Nyala, Cheetah, Plains Wanderer, Ring-tailed Lemur, Eland, Blackbuck, American Bison and Ostrich

We were proud to be part of the release of over 20 Greater Stick-nest Rats and 150 Mitchell's Hopping Mice bred at Monarto Safari Park into Mallee Cliffs National Park in partnership with Australian Wildlife Conservancy. Plains Wanderer and Warru were also returned to the wild in NSW and SA respectively.

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

Monarto Safari Park underwent the three yearly ZAA accreditation process in late 21/22 and awaits the final report, the process is largely based on animal welfare parameters.

Our teams continue to work on improving their husbandry, housing and care of the animals in their sections. This is evidenced through increased enrichment ideas; additions and alterations to housing to improve shelter or climbing opportunities.

Examples of this are new enrichment puzzle-feeders for our chimp group as well as an additional platform for their outdoor exhibit; increased shade for several areas, including giraffe and rhino; and completion of new Black Rhinoceros yards, allowing more space and opportunities for our two male black rhinos.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Our teams had the opportunity to participate in field work with Heidi Baker and Courtney Barks assisting with trapping in the APY Wamitjara site. While in the field, the pair assessed the population which has been released there. Courtney Barks also worked with the team releasing Mitchell's Hopping Mice into Mallee Cliffs National Park.

In addition, some team members received first aid, safety at heights, and biosecurity training.

Several members of the curatorial team attended the ZAA conference online.

Leading the way in animal care and research

Our Animal Health Department (AHD) is tasked with caring for the health of over 3,000 animals that live at both Adelaide Zoo and Monarto Safari Park. In addition to looking after the health of our animals, the AHD also functions as a critical hub for zoological research, teaching and training and in and ex situ conservation, while also attending to hundreds of emergency cases brought in by wildlife organisations, government agencies and the general public each year.

Key financial year highlights include the contract to monitor reproductive hormones of extant microbat populations as a means to mitigate the impact of mining activities undertaken near their breeding caves.

A significant accolade was the short-listing of Dianne Hakof, our Hospital Manager, who was nominated for Australian Vet Nurse of the Year award.

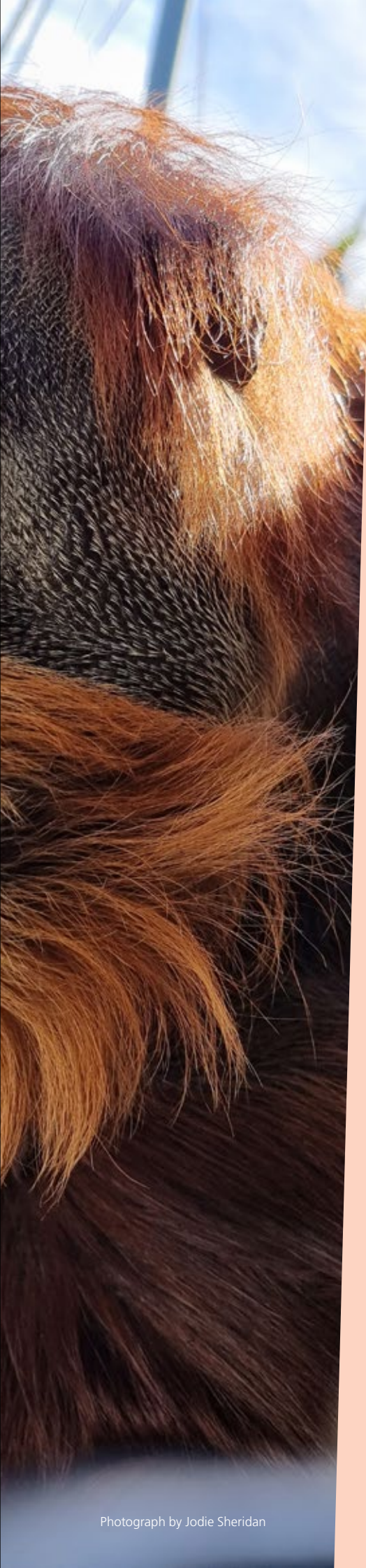
Noteworthy clinical activities included the investigation, including CT scan, and subsequent surgery to successfully resolve gallstones in Sumatran Orangutan Puspa, which brought together a large team including a number of human and veterinary specialists. Veterinary input into pasture management using pasture and innovative stocking density metrics, as well as streamlining browse use, has seen good improvements in animal health indices and monitoring of health changes due to these activities at Monarto Safari Parks Wild Africa precinct.

Our elective caseload continues to be managed under COVID-19 restrictions and protocols. The risk of COVID-19 to Zoos SA's animals was continually re-evaluated and managed accordingly as circumstances changed and new information or mitigation strategies became available.

In contrast to the highlights of the year, was the sad passing of Brian Rich, a supporter of Zoos SA and long-term volunteer researcher in the Animal Health Department laboratory at Adelaide Zoo. Brian will be sorely missed for his clinical pathology support, nutritional advice and pragmatic approach. In memory of his significant contribution, the research laboratory is being renamed in his honour and will be known as the B. G. Rich Laboratory. Vale Brian.

Zoos SA's Animal Welfare and Ethics Committee met twice during the financial year, with discussions including animal health, habitat designs and upgrades and welfare audit results and tools, further cementing our position as a leader in the animal welfare space.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Our interactive viewing area at the Adelaide Zoo Animal Health Centre, and associated discussions with members of the public, continues to showcase our activities. The AHD has been involved in a number of programs engaging the broader community, including heat stress events in Grey-headed Flying Foxes, conservation of Regent Parrots in the Riverland and, supporting the work of the Aboriginal community with endangered species in the APY lands.

Goal 2 Save species from extinction: conservation, wildlife health and research.

The AHD has been directly involved in a number of in situ and ex situ conservation programs, including Brush-tailed Bettongs, Burrowing Bettongs, Regent Parrots, Greater Stick-nest Rats, Mitchell's Hopping Mouse, Western Swamp Tortoise, Pygmy Bluetongue Lizards and Orange-bellied Parrots. We assisted the Department for Environment and Water and other organisations with field support and advice for marine animals. A number of research papers by AHD staff were published, and several others are in preparation or submitted for peer review. We continue to develop our approach to managing the health of many endangered African ungulate species in the new Wild Africa precinct.

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

The AHD was once again active on the South Australian Wildlife Ethics Committee, including the implementation of online ethics training for field researchers involved with wildlife. There has been significant student supervision, including numerous extramural placements, vet-nurse placements through TAFE, Clinical Research Project, Honours and PhD Project supervision, lectures and practicals in veterinary clinical skills, and providing caseload for rotation and elective veterinary students.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

We continue to cultivate partnerships that enhance our clinical, conservation and research activities. These partnerships span veterinary, human health, and ecology fields, and include specialist support in ophthalmology, surgery, dentistry, anaesthesia, behavioural medicine and, diagnostic imaging.

We continue to have close ties with many external agencies including Wildlife Health Australia, a number of universities, government departments, and a range of local and international organisations.

Conservation projects beyond our gates

Our conservation team proudly participates in wildlife conservation projects and initiatives that ensure the long-term security of species, both in Australia and around the world. Zoos SA has been working hard to protect wild spaces and the species within them.

Across Australia, we've continued to support our 13 domestic conservation priorities, and have reaffirmed our support for ecosystems around the world through our 12 international priorities in Africa, China, South East Asia and the Solomon Islands.

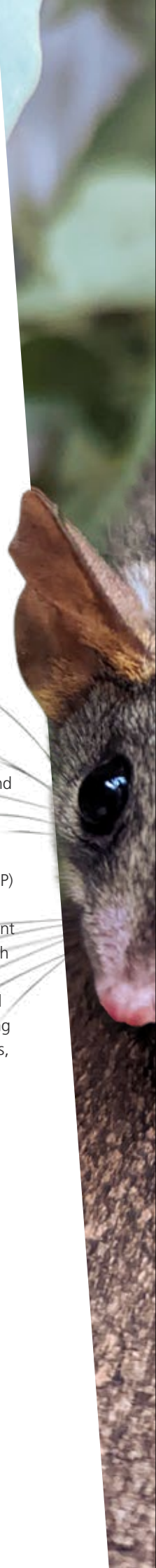
We continue to restore and protect vital habitat for the endangered South-eastern Red-tailed Black-Cockatoo, with over 12,500 trees planted at 45 sites across 17 properties in the south-east of South Australia. Our recovery work continues on Kangaroo Island, where we have been assessing the response of fauna to the 2019-20 bushfires. A key focus of this work has been the critically endangered Kangaroo Island dunnart. Commonwealth funding has supported the expansion of facilities to hold threatened species at Monarto Safari Park, increasing our capacity to respond to wildlife emergencies such as catastrophic bushfire events.

We have increased our holding for a number of threatened species. We house 10 critically endangered Plains Wanderers as part of an insurance population, with breeding recommendations for the upcoming season. There are less than 1,000 of these birds left in the wild, and our facilities are critical for their survival and recovery.

In partnership with the Australian Wildlife Conservancy, our ex situ breeding programs enabled the successful re-introduction of 165 Mitchell's Hopping Mice and 12 Red-tailed Phascogales to the Mallee Cliffs National Park, where the species had been regionally extinct. We continue to breed Red-tailed Phascogales.

We have continued to support rock-wallaby conservation, with a number of staff being involved in Warru (Black-flanked Rock-wallaby) trapping for population monitoring and translocation. In parallel, feral control at Aroona Sanctuary was undertaken quarterly, to help protect the reintroduced population of Yellow-footed Rock-wallabies.

Our international partners continue to be challenged by COVID-19, particularly where tourism revenue has been affected. Nevertheless, these conservation partners battle on, finding ways to work with community and achieve on-ground outcomes. In these challenging times, partnerships are more critical than ever. Working with The Australian Rhino Project (TARP) and Ambleside Distillery we were able to provide essential equipment (e.g., two-way radios) to the South African National Park Honorary Rangers. This equipment is critical to mitigating loss of life, facilitating responses to medical emergencies, alerting rangers to danger, and implementing rescue or support operations during their work in Kruger National Park.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

We worked closely with local communities, both locally and internationally. Community engagement was vital to our Conservation Priorities, from supporting Red-tailed Black-cockatoo recovery in South Australia, to community awareness campaigns and education in the Solomon Islands (Tetepare) and Sierra Leone (Tacugama).

Goal 2 Save species from extinction: conservation, wildlife health and research.

We're proud to protect many habitats and wild spaces, and the species within them. Across Australia and the world, we've continued to support our 25 Conservation Priorities. Working closely with our partners and recovery teams, we have translocated and reintroduced many species, bringing them back from local extinction and improving the viability of their wild populations. In addition, we have established important insurance populations of endangered species, and trialled a number of conservation technologies at Zoos SA (ex situ) that have been deployed in the wild (in situ).

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

We continue to expand our conservation breeding programs. We have upgraded holding facilities, with increased capacity and improved technology allowing us to grow and innovate our breeding programs. We honour our commitment to recovery and continue to respond to emerging species' crises and needs. Sales of bracelets and beads, as part of the Lions 360 program, have supported significant donations to the Zambian Carnivore Program and paid the Game Rangers Association of Africa (GRAA) memberships for 109 SERA Rangers. We have supported other international partnerships this year, including the Painted Dog Conservation Inc., the Giraffe Conservation Foundation, Tacugama Chimpanzee Sanctuary, Tetepare education scholarships, the Cheetah Conservation Fund and the Komodo Survival Program to ensure that their vital work in conservation can continue.

Connecting visitors with nature

In 2021-22, we welcomed 354,771 visitors to Adelaide Zoo and 142,868 visitors to Monarto Safari Park.

We are in an era of escalating climate change. The planet's changing environmental conditions are reflected across the globe and mean that more species and ecosystems are increasingly threatened. Our day to day efforts focus on connecting more visitors with nature and raising their awareness of the work we undertake.

Research shows that almost 9 out of 10 people who visit zoos intend to take action after their visit to help the environment. It's therefore more important than ever that we focus on initiatives to drive visitation and engage the public so they can help us save species from extinction.

Adelaide Zoo and Monarto Safari Park had a total of 497,639 visitors in 2021-22. This was a decrease of 14% from the previous year. Both sites closed from 19 July 2021 – 28 July (inclusive) due to COVID-19 but the on-going uncertainty around the Delta and then Omicron variants was felt most acutely across our peak visitation summer months. Our COVID capacity restrictions continued until 25 May 2022.

COVID-19 restrictions have continued to impact our operations and the way we deliver our visitor experiences. These impacts include, but are not limited to: event cancellations or restructuring of events and the modification or suspension of animal experiences and behind the scenes tours.

We successfully presented a sold-out season of Light Creatures at Adelaide Zoo as part of the inaugural Illuminate Adelaide festival. Over 28,000 guests experienced the zoo in a brand new light, connecting with nature through handcrafted, large format animatronic animal lantern installations created especially for the event.

Monarto Safari Park opened its new Visitor Centre to the public on 25 March 2022. The Centre opens an opportunity for visitors to visit the site and not necessarily access the Park each time. The centre is enhanced by a larger café facility, exhibition space and amazing retail outlet stocked with items supporting our conservation efforts and continuing the call to action with our visitors following their Park experience. The Visitor Centre is the first phase of three, that will see the opening of the Wild Africa safari experience and hotel and glamping accommodation (anticipated to open in mid-2023) and welcome an influx in visitation.

December 2021 marked 20 years of Southern White Rhino conservation at Monarto Safari Park and they remain central to Monarto's vision. Visitors fell in love with lion cubs Malkia, Chad and Ruka, with the cubs' names selected by popular vote.

TOTAL ATTENDANCES*

MONARTO SAFARI PARK	2020-21	2021-22	VARIANCE
Admissions	116,123	93,825	-19%
Education	14,410	12,832	-11%
Members	37,012	27,139	-27%
Free	12,313	9,072	-26%
Total	179,858	142,868	-21%

ADELAIDE ZOO	2020-21	2021-22	VARIANCE
Admissions	181,863	162,200	-11%
Education	35,719	29,287	-18%
Members	135,878	116,118	-15%
Other	44,823	47,166	5%
Total	398,283	354,771	-11%

*These numbers do not include function attendees



Photograph by Geoff Brooks

DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

We were able to operate a number of animal experiences across Adelaide and Monarto Safari Park as COVID-19 restrictions enabled their safe re-introduction to the daily offering at both sites. We reduced the number of participants in-line with social distancing requirements. There are still a range of behind the scenes experiences which we are unable to operate where COVID-19 poses a risk to animal welfare, but aiming for a return to full suite of experiences within 2023.

Adelaide Zoo's Red Panda habitat was expanded to provide access via an overhead tunnel to the historic Moreton Bay fig tree. The brand new Little Penguin and Komodo Dragon habitats have refreshed the visitor experience and brought new levels of excitement right up to the front entrance.

The lifting of travel restrictions has seen a gradual return of interstate and international tourism markets.

A broad range of special events, like school holiday programs and animal experiences were offered across Adelaide Zoo and Monarto Safari Park as part of a revised annual calendar.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

We continued to build on the range of experiences available by broadening our visitor markets and partnering with other tour operators, both locally and interstate. This included partnering with Langhorne Creek wineries, Prancing Pony brewery and Bike-about. Zoos SA launched its Wellness tourism offering with a range of products including Green Desking and themed trails at Adelaide Zoo and guided e-Bike experiences at Monarto Safari Park. Our Wellness tourism product continues to develop as are our partnerships with other Wellness Tourism operators.

Connecting children with nature

The Nature Theatre team offer unique opportunities for visitors to get up close to our animal ambassadors, to share animal experiences and connect children with nature.

Through educational and engaging presentations like our Free Flight show and Wild Show we are able to connect children with nature, share stories and experiences to inspire change.

Two new birds have been introduced into the Free Flight show to connect and engage with audiences of all ages. First, there's a barking owl which flies high into the air to catch food on the wing. Then, there is our new Black-breasted Buzzard which cracks eggs as large as an emu egg to showcase how its species has adapted.

The new addition of a Cat Pad to the Variety Children's Zoo nursery has been an engaging talking point for our presenters to discuss keeping cats as pets while also keeping our native wildlife safe. We have created new opportunities to connect with and inspire children by offering additional wild shows for private bookings such as children's birthday parties and special events.

DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

The amphitheatre area within the Variety Children's Zoo provides a space that celebrates our native species and informs and inspires visitors of ways they can care for Australian fauna in their own backyard. It also offers an opportunity for children to learn more about how to care for and enrich the lives of their domestic pets at home including rabbits, guinea pigs and chickens.

Goal 2 Save species from extinction: conservation, wildlife health and research.

The Nature Theatre team, in collaboration with the Conservation team, participate in current and new breeding programs. One example of this is the Red-tailed Phascogale breeding for release program, which saw 13 individuals released in March 2022 into the Mallee Cliffs National Park. We have also had good success in breeding programs for the Quokka and Brush-tailed Bettong.

We actively participated and supported research in the field.

We continue to care for wildlife in need, taking on a young Southern Hairy-nosed Wombat.

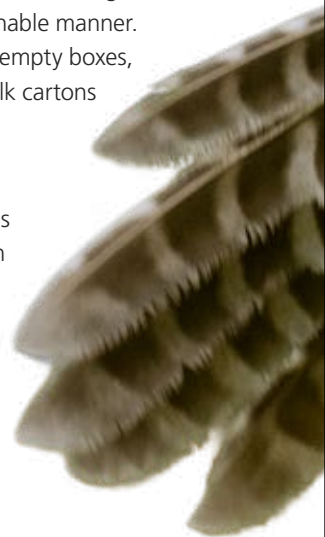
Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

Our team is keen to ensure we lead by example through our presentations, Wild Shows and animal encounters and by promoting ways to working in an ethical and sustainable manner. For instance, we utilise empty boxes, shredded paper and milk cartons for animal enrichment.

Wherever possible we recycle materials such as the corflute signs which act as excellent wind barrier for off-display animal exhibits.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Life Science teams thought innovatively to create an engaging 'Pelican feed at night' during the recent Light Creatures event. This involved the use of ultraviolet black lighting to show off the Pelicans' feathers.





Educating the conservationists of tomorrow

The Zoo Learning team designs and delivers curriculum-linked learning experiences for teachers and students of all ages.

Facilitated sessions designed to inform, inspire and connect people with nature have been delivered to preschool, primary and secondary students across the year. ACARA-linked, conservation-themed programs were delivered to a range of metropolitan and regional schools at both our sites as well as custom programs, tailored to teachers' programming-needs. Careers sessions have become increasingly popular with equity schools and external organisations that work with 'at risk' youth.

In 2021-22 the Zoo Learning team proudly opened The Outpost educational space in the former visitor centre at Monarto Safari Park, containing exhibits that connect people with species commonly found both in the park and in their backyards. Exhibits share information about species as small as fungi and earthworms and explain the importance of the leaf litter found under our feet for recycling and preservation of natives' habitats. Zoos SA's conservation priorities are shared with several life size animal cut-outs. The Outpost also contains a brand-new classroom, furnished to suit all year levels and a brand new kitchen, ready for self-catered and catered groups of all ages. This redevelopment was made possible through the support of a philanthropic foundation.

Duke at the Zoo finished its first year at the end of 2021 with three awards successfully completed. The award program entered its second year of funding with 18 enrolments to start the year and seven more participants joining later. Several students from the 2021 year retained their contact with the Zoo Learning team and have since completed their award. Service Saturdays often include working with the Monarto Safari Park Natives team, with the Duke participants helping with conservation projects such as Stick-nest Rats, Warru and cleaning in the Giraffe and Southern White Rhino yards.

The COVID restrictions on school groups at the beginning of the year had a significant impact on education bookings and Term 1 was completed without holding one ZooSnooze. Monarto Safari Park's camp numbers returned slower than Adelaide Zoo due to space restrictions. Bookings were quick to resume at the beginning of Term 2 with the return of camps occurring in week 3 of the term. During the downtime, the Zoo Learning team were able to refresh the current program offerings as well as design and test a new STEM program on our native (and local) ecosystem engineers.



DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Across the year, over 42,000 students from across South Australia attended our recently refreshed programs at Adelaide Zoo and Monarto Safari Park.

Education staff provided several opportunities to engage with teachers and pre-service teachers through a Flinders University student walk through at Adelaide Zoo and Citizen science and STEM orientations sessions.

Goal 2 Save species from extinction: conservation, wildlife health and research.

Our Duke at the Zoo team was involved in the cleaning of Stick-nest Rat enclosures as well as helping with odd jobs at Monarto Safari Park. All the activities undertaken promoted teamwork and a collective effort in learning about conservation in our own backyards.

Visitor experience and events

To live up to our mission of connecting people with nature, we inspire action through a range of experiences and events that increase knowledge and change people's attitudes and behaviours.

Our army of enthusiastic and highly-skilled visitor services, retail staff and volunteers showed great understanding, flexibility and resilience in managing visitor requests, and helping people get the most out of their visit.

Monarto Safari Park's new visitor center opened in March 2022 and we are now able to welcome guests 365 days of the year to enjoy world class catering, retail and exhibition facilities with or without, a paid visit. The Visitor Centre is a significant drawcard for the region and will help unlock new revenue streams as well increase visitation.

Work has continued on Monarto Safari Park's Wild Africa precinct with 38 Scimitar-horned Oryx released into Stage One of the expansion (which is set to also house other free-ranging species including Giraffe, Waterbuck, Bongo, Nyala, Eland, Zebra, Hippos and Southern White Rhino). Visitors will be able to experience a Wild Africa safari at the park from mid-2023, with construction of the accommodation resort well progressed.

We continued to innovate to find new ways to deliver events in the face of changing COVID-19 restrictions, and cemented the popularity of our experiences to connect people with nature and attract visitors to our sites.

Light Creatures at Adelaide Zoo, as part of the inaugural Illuminate Adelaide festival, saw over 28,000 guests experience the zoo in a brand new light, connecting with nature through handcrafted, large format animatronic animal lantern installations created especially for the event.

Our major car lottery and online auction event drew over 800 registered bidders raising \$63,658 for housing hippos in our Wild Africa development.

3,750 excited ghosts, ghouls and goblins attended the much-loved and highly-anticipated sold out return of the Boo at the Zoo Halloween event. Other highlights included our themed school holiday programs and five Zoo Nights at Adelaide Zoo events presented throughout December and January. These events gave our members and the public the unique opportunity to experience the Zoo during 'after' hours between 5.30pm – 8.30pm.

Despite our tourism trade from international and interstate visitors continuing to be impacted by COVID-19 travel restrictions, the Lions 360 experience, VIP Panda and Panda & Friends tours all saw significant growth. Their huge popularity in the South Australian Tourism Commissions Great State promotion cemented their place among the state's best tourism offerings, and underscored the conservation engagement opportunity these, and our many other animal experiences provide our visitors.

It is our hope that recovery from COVID-19 will continue and see us welcome back more visitors. In doing so, we will create more memorable opportunities and host unique corporate and private events in the next financial year.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Through the broad range of experiences and events offered across Adelaide Zoo and Monarto Safari Park as part of the annual calendar, as well as daily animal experiences, we've been able to connect and engage with tens of thousands of our visitors. Despite our tourism trade from international and interstate visitors continuing to be impacted by travel restrictions, the Lions 360 experience, VIP Panda and Panda & Friends tours all saw significant growth.

Connection to country and culture

Since 2010 the Aboriginal Learning on Country Program (ALoC) has provided employment and training to local Aboriginal people, supporting them to achieve accredited training outcomes while contributing to conservation at Monarto Safari Park and in other areas of South Australia.

While our long-term partnership with Santos came to a close at the end of 2021 our Aboriginal Learning on Country (ALOC) program continues with the valued support of the Murraylands and Riverland Landscape Board.

Key highlights over the past 12 months include a bumper harvest of Muntries at the native food garden in Wild Africa and collaborating with other Aboriginal rangers from across the state at a fauna survey on the Coorong.

Three school-based trainees completed a Certificate III in Conservation and Land Management in December 2021, celebrating their achievement at an event which showcased native foods they had grown and harvested. Another three school-based trainees were recruited and commenced two year traineeships in February 2022, and a full-time trainee commenced in March 2022.

In October 2021 Reconciliation Australia endorsed the first Zoos SA Reconciliation Action Plan (RAP). This is a 12 month 'Reflect RAP' which focuses on foundational actions on which Zoos SA can advance reconciliation using the core pillars of reconciliation – relationships, respect and opportunities. Progress has been made with the establishment of a Reconciliation Working Group (RWG) with external Aboriginal representation; a quarterly RAP reporting system is now tabled at Royal Zoological Society of South Australia Board and RWG meetings; and a Zoos SA vision for reconciliation has been drafted with significant staff input and endorsement by the Board.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

The ALoC program continues to increase the participation of Aboriginal people in nature conservation with ongoing accredited training, based on-site at Monarto Safari Park. ALoC has engaged with a variety of community groups and schools over the past 12 months, including local Aboriginal service groups, migrant groups and schools. The focus of this engagement has been building understanding of caring for Country practices and hands-on connection to native foods through involvement in planting, harvesting and processing.

Goal 2 Save species from extinction: conservation, wildlife health and research.

The ALoC Team continues its ongoing effort to protect our native plants and animals by addressing key threats such as weeds and feral animals on site at Monarto Safari Park. ALoC has also contributed to a range of conservation programs including assisting with the Mitchell's Hopping Mouse conservation program.

Inspiring visitation and influencing change

As South Australia continues to slowly emerge from COVID-19 restrictions, highlighting conservation and driving visitation have been the core foundations of communications over the last year. Still facing reduced capacities and reduced budgets, the Marketing and Public Relations departments continued to work creatively.

With visitation being slightly behind budget and lower than expected (partly due to public perception of COVID-19 concerns), the Marketing and Public Relations departments worked hard on new promotions and collaborations with local South Australian partners like Prancing Pony, to create a special beer in time for Father's Day.

Events that formed part of our promotions calendar included Light Creatures, Boo at the Zoo and celebrations of animal recognition days. Aside from additional ticket sales and audience engagement, events like these provide opportunities for our messaging and mission to reach new and existing audiences, invite others to connect with nature, and to showcase our sites as major tourism attractions.

The arrival of a new female Sumatran Tiger named Delilah in late 2021 aligned with the Lunar New Year and beginning of the Year of the Tiger. Auspiciously, New Year also aligned with Delilah's birthday and so a weekend of celebrations was held including collaboration with the China Town Association for a Dragon Dance and promotion visitation and membership. We also welcomed the Glenelg Tigers football team to the zoo for a publicity opportunity and a friendly tug-o-war with our keepers, plus giveaways and retail promotions. Attendance over the weekend was some of the highest throughout February, and Membership code promotions resulted in 55 new memberships valued at \$5557.50. Membership promotion through flyers in English and Mandarin were distributed throughout China Town, and a small campaign was run on WeChat to increase awareness and engagement with Australia-Chinese audiences.

Website visitation continued to grow, reaching a new record of 1.6 million sessions, proving an increased reach and audience engagement despite the pandemic and reduced advertising spend.

The Marketing team worked closely with creative agency The Rowdy Group to rebrand Adelaide Zoo, launching the new tagline 'Discover the wild

within' alongside a new visual brand identity. Further, the 'The wild is calling' campaign for Monarto Safari Park was used to help launch the opening of the new Visitor Centre.

The PR team continued to attract significant earned publicity through both traditional and online media. In 2021-2022, Zoos SA reached over 71 million people through earned coverage. This coverage was worth more than \$27million in advertising space rate. Continued use of frequent content releases has been appreciated by media locally, nationally and international, often providing a much-needed good news story after all of the negative stories about world news and COVID-19.



DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Despite two nights of weather cancellation and four nights of lockdown cancellation (due to seven day State-wide shut down) the Light Creatures event and campaign in July 2021 were a great success. Members were up to 45% of the audience, meaning new target markets were reached.

The opening of the Visitor Centre at Monarto Safari Park provided the perfect opportunity to showcase the new tag line and position Monarto Safari Park as 'the must do experience' in SA. In the lead-up to the Visitor Centre opening, digital promotions led to a 24.7% website traffic increase to Monarto Safari Park compared to March 2021. New visitors to the site also increased by 30.1%, showing that the promotion was engaging customers outside of the existing audience.

We reached over 71 million people through earned coverage in the 2021-2022 financial year. This coverage was worth more than \$27 million in advertising space rate.

We continued to bring nature and animals into people's homes through digital channels, growing the Zoos SA network and increasing both Electronic Direct Mail database and social followers. Content is always designed to engage, educate and entertain.

Goal 2 Save species from extinction: conservation, wildlife health and research.

We are proud to partner with six wineries from the Langhorne Creek region as part of the 'Grapes for good' initiative. Kimbolton Wines, Bleasdale, Bremerton, Lake Breeze, The Winehouse and Vineyard Road wineries have come together to create a unique mix of wines to further support our conservation efforts with part proceeds from the sale of these wines supporting Zoos SA's conservation mission.

To gain social media attention and publicity for our product offerings on Black Friday, Zoos SA launched the 'Conservation Uncovered' Calendar on the Thursday before the bumper sales weekend. Along with national press coverage and significant social media attention, the calendar sold 513 copies and generated \$12,260 in revenue. Over the entire Black and White Weekend period, our sales promotions generated \$166,000 in revenue.

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

Campaign messaging was engaging and featured strong call to actions to influence others to follow our example.

Publicity continued to broadcast the Sustainable Palm Oil policy to inspire followers to make more sustainable decisions in everyday shopping.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Marketing is continually running and reviewing tests on engagement and return on investment for campaigns. Implementing learnings to better maximise a reduced marketing budget and keep Zoos SA, Adelaide Zoo and Monarto Safari Park brands in market and engaging.

Zoos SA database has grown from approx. 60,000 to 140,000 subscribers with open rates increasing from an average 21-25% to 29-32%. Industry standard for electronic direct mail (EDM) open rate is 21.5%.



Fundraising to make a difference

As a conservation charity, Zoos SA once again enjoyed the support of donors, supporters and corporate partners from across Australia, resulting in a net income of \$4,021,057.

Corporate partnerships with like-minded organisations, individual philanthropy from major donors and a range of fundraising initiatives played a role in this success.

These contributions supported a range of habitat upgrades and capital development projects at both sites including further development in Wild Africa, Monarto pathways, Australian Natives and Komodo facilities. Through a partnership with SA Power Networks we were able to provide an exclusive Illuminate Adelaide Light Creatures Night at Adelaide Zoo for SA Power Network staff and their families. We welcomed 2,000 SAPN staff members and 500 charity partners.

We received support from over 18,218 households in 2021-22, including 7,364 new supporters.

Animal adoptions remained popular, with the four most popular animals being Meerkats, African Lions, Cheetah and Sumatran Orangutan – closely followed by Sumatran Tiger, Giant Panda and Tasmanian Devil.

Although we didn't host our annual Zoos SA Gala, we did hold our online auction and car raffle which is usually part of the Gala. The focus of the online auction was to raise funds for Hippo facilities at Monarto Safari Park. The total raised was just over \$63,000.

FUNDRAISING	2021-22	2020-21	VARIANCE
Corporate Sponsorship (cash)	\$657,002	\$474,942	\$182,060
Corporate Sponsorship (in kind)	\$797,078	\$816,515	(\$19,437)
Grants	\$81,300	\$11,375	\$69,925
Appeals and Donations	\$599,444	\$578,857	\$20,587
Animal Adoption	\$138,832	\$128,944	\$9,888
Gala Fundraising Dinner/Auction	\$91,020	\$30,985	\$60,035
Bequests	\$1,656,381	\$263,303	\$1,393,078
Total	\$4,021,057	\$2,304,921	\$1,716,136



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DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Our donors have been able to feel personally invested in the animals they are supporting through our animal adoption program. This keeps them engaged and helps us save these species from extinction!

Goal 2 Save species from extinction: conservation, wildlife health and research.

The funds raised from our collective fundraising efforts have been used for a variety of purposes, often with the end result being to assist with our conservation outcomes. We would have been unable to create our Anthony Taylor Rhino Management Facility, the Black Rhino exhibit expansion, upgrade the Southern White Rhino habitat and help to safeguard this precious species without the support of our donors and corporate partners.

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

All fundraising campaigns and corporate partnerships are opportunities to help drive positive change for the environment and encourage more sustainable practices. By engaging donors and working with organisations, we can influence others to follow our example and dramatically increase the scale of our conservation efforts and impact.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Zoos SA has a very successful corporate partnerships program with various organisations, who provide both cash and contra items for projects, provision of services and infrastructure. We in turn provide many benefits to those partners so that the partnership are mutually beneficial. Many projects would be impossible without the support of our numerous partners, as well as funding provided by the South Australian Government; we greatly appreciate them.

Growing our membership base

At Zoos SA we're proud to be owned by our members. As a conservation charity, we rely on the support of our members to continue vital work connecting people with nature and saving species from extinction.

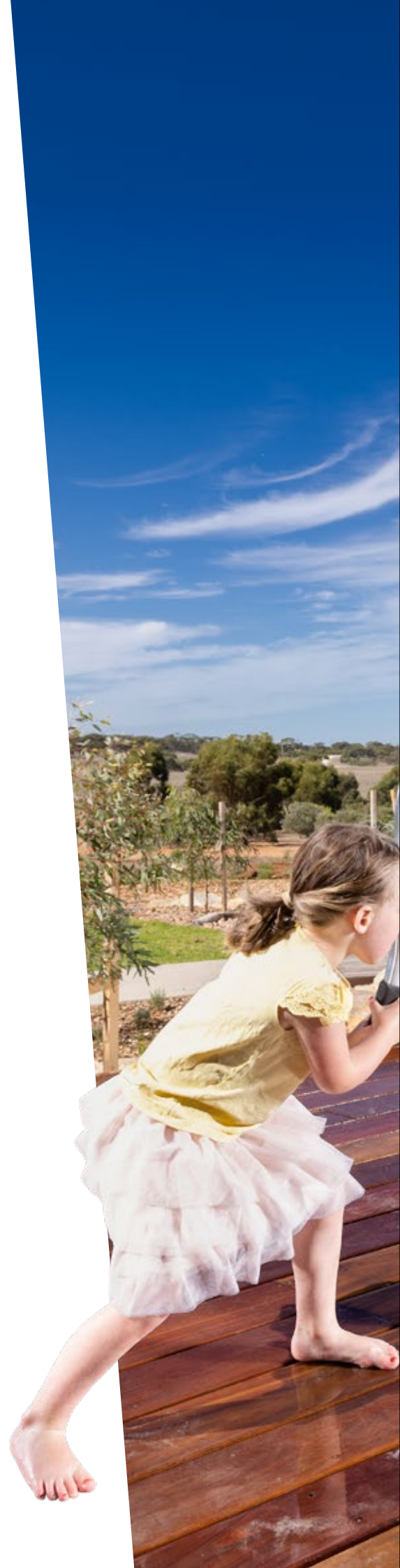
The support of our dedicated members helps us to not only care for the thousands of animals in our care but contributes to important breeding and conservation programs working to save species from extinction.

In 2021-22, more than 46,000 people were actively involved as a member of Zoos SA and 72% renewal rates show that they are committed to supporting

our work as a conservation charity. We welcomed 332 new life members during this financial year which increased the overall number of life members to 4,465 individuals.

As part of opening the new Visitor Centre at Monarto Safari Park, two special member days were held prior to access by the general public.

MEMBERSHIP INCOME	2021-22	2020-21	VARIANCE
Annual Membership	\$3,245,108	\$3,447,340	(\$202,232)
Life Membership	\$432,038	\$392,492	\$39,546
Total	\$3,677,146	\$3,839,832	(\$162,686)





Photograph by Dan Schultz

DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Our members are welcome to visit our two sites as often as they like, giving us endless opportunities for ongoing interactions that inspire the next generation of passionate conservationists. Members also receive discounts on some of Zoos SA's animal experiences and behind-the-scenes tours. We also give members exclusive access to ticket sales prior to general on sale dates.

Goal 2 Save species from extinction: conservation, wildlife health and research.

Our biannual Zoo Times publication is a great way to educate our members about the work they are helping us achieve in conservation. We hope that this will give them an understanding of how they are making a difference and help them see opportunities to continue their involvement.

With the financial constraints imposed by our closure and ongoing restrictions, we printed our November 2021 issue and released the May 2022 publication in a digital format.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Memberships provide a critical revenue source for Zoos SA, comprising over 10% of our annual revenue.

An advancing organisation

Our People and Performance team is committed to supporting Zoos SA's passionate and capable 300-strong workforce and 440 volunteers through a number of programs and initiatives.

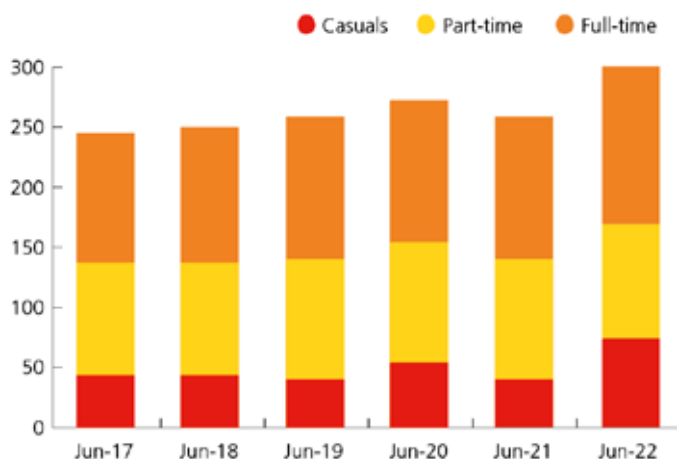
COVID-19 has continued to impact our operations and workforce. People and Performance has continued supporting the business and our workforce in these unprecedented times with industrial advice, employee relations and most importantly wellbeing advice and connections.

Our focus on wellbeing initiatives has included mental health support, engagement initiatives and financial information to support our workforce and their families

Amid the challenges and uncertainty COVID-19 as a crisis has presented our workforce and people, we have continued working on key projects including the planning, consultation and implementation on a number of exciting Monarto Safari Park development projects including the opening of the new Visitor Centre. We also continued our focus on safety and wellbeing across the organisation.

EMPLOYEES PER DEPARTMENT AS OF 30 JUNE 2022

	FULL TIME	PART TIME	CASUAL	TOTAL
Life Sciences	46	33	13	92
Community Engagement	24	29	53	106
Corporate Services	10	3	1	14
Executive	7	0	0	7
Monarto Safari Park	38	27	7	72
People and Performance	3	4	0	7
Property & Development	3	0	0	3
Total	131	96	74	301





DELIVERING ON OUR BUSINESS GOALS:

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

People and Performance has, through guiding conversations and consultation processes, positioned Zoos SA to best utilise its resources and build resilience with the future capacity to grow so that it is capable and ready to achieve our goals outlined in our Strategic and Master Plan. We approach system reviews with an openness to introduce change and use technology to add value and provide opportunity to grow our effectiveness to meet the needs of our stakeholders.

Innovation and information technology

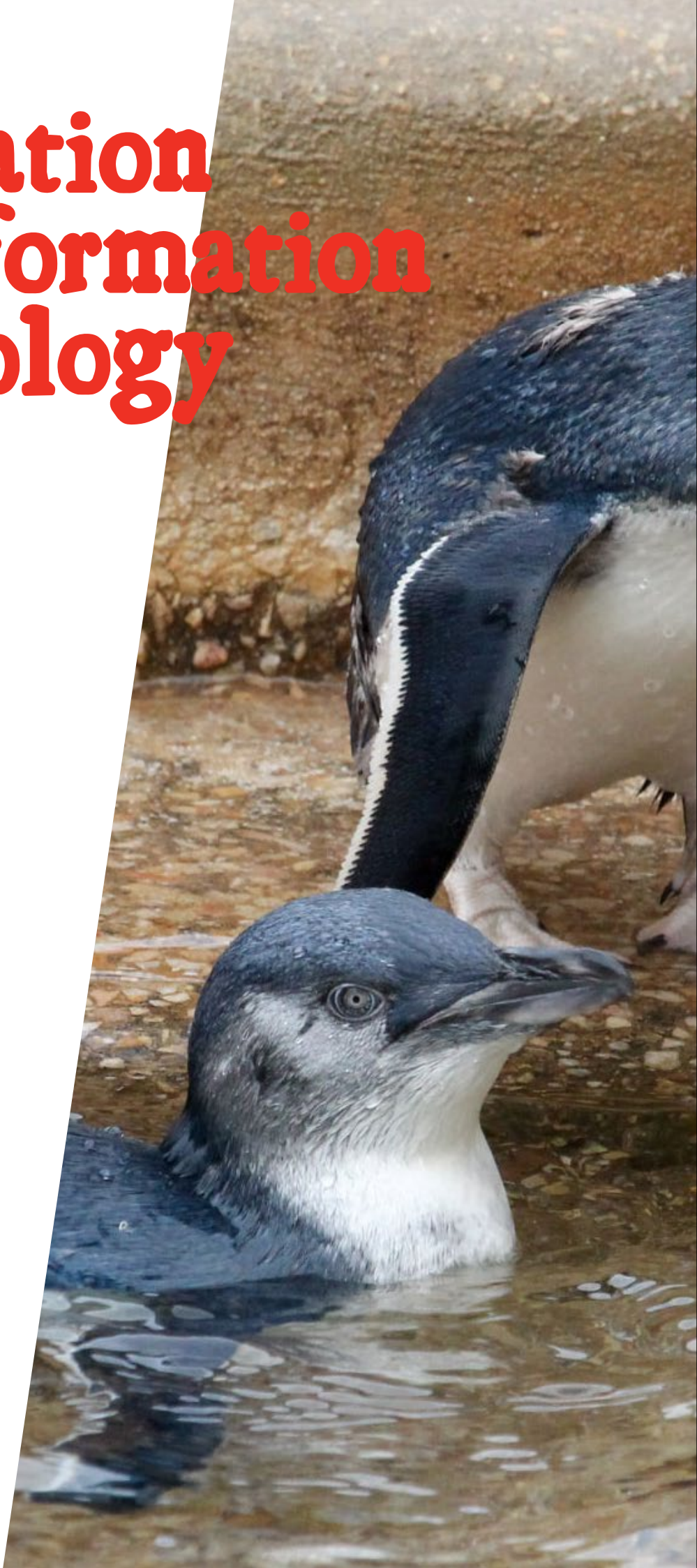
Information and communication technology continues to develop and strengthen with a focus on customer support, security, remote management, and disaster recovery.

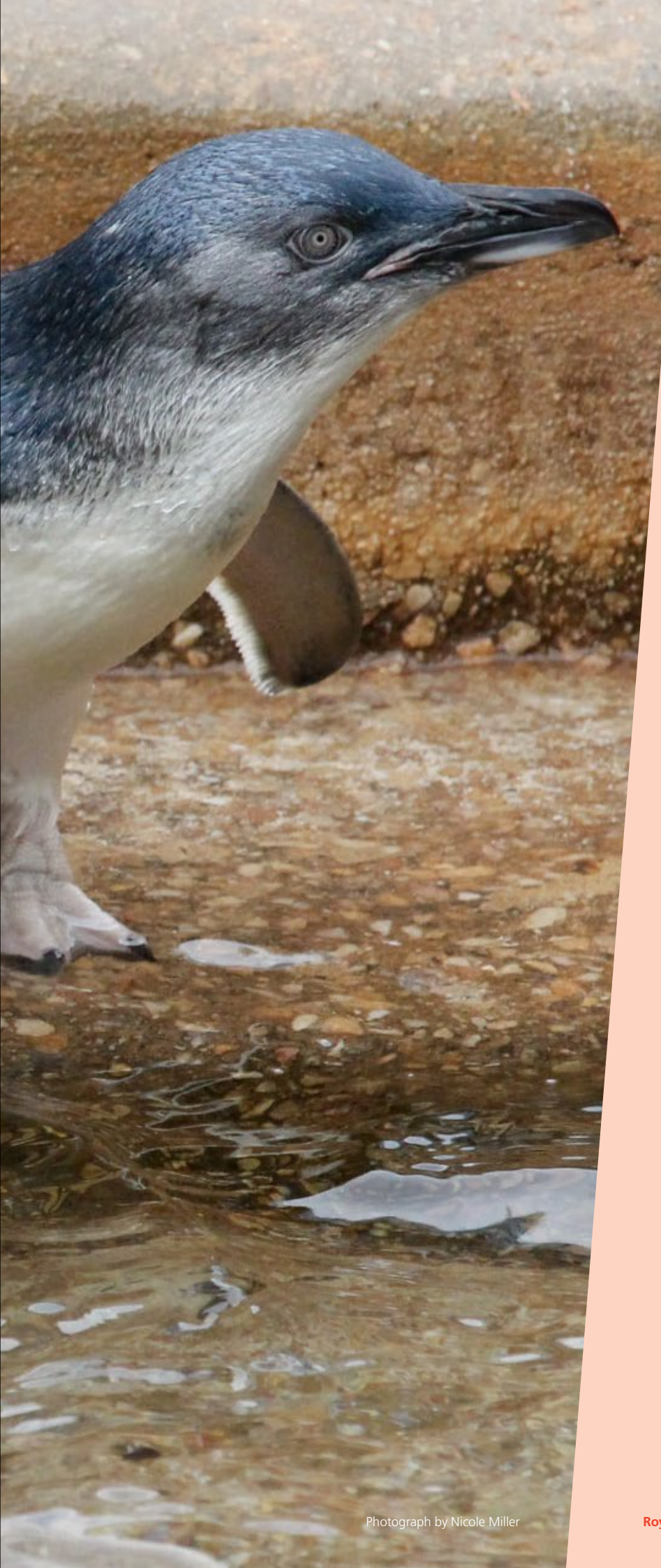
Improvements made to remote connectivity and security enable staff to work remotely and to seamlessly move between Adelaide Zoo and Monarto Safari Park.

We continued to review and implement additional web enabled cameras, increasing customers' engagement with our animals while improving security monitoring and safety.

Our booking system has continued to perform with upgrades for web store security being planned and implemented. Our Business Analysis team has been preparing the implementation of a new customer relationship management system.

Connecting Up have continued to be an exceptional partner in the acquisition of refurbished computer equipment, software licensing and general advice for the not-for-profit sector.





DELIVERING ON OUR BUSINESS GOALS:

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

We continued our use of recycled and refurbished equipment, not only reducing cost but also reducing the amount of computer equipment going to landfill. We're also continuing use of e-waste facilities at both sites for unusable equipment.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

We continue to build on the already excellent relationship established with our managed services providers for server, network and telecommunications.

Our volunteers

Zoos SA's more than 440 volunteers form an indispensable part of our zoo family and support a variety of activities within the zoo and beyond.

As a conservation charity, our volunteers play a vital role in helping us in our mission to connect people with nature and save species from extinction.

Volunteers at Zoos SA have contributed to 32 programs over the past twelve months with 72,641 hours of service.

This is outstanding given ongoing COVID-19 restrictions and represents \$1.55 million dollars in value to Zoos SA.

Volunteers at Monarto Safari Park have returned to the site, to raise awareness through hosting fundraising events that continue to drive and support the work of Zoos SA.

During National Volunteer Week, South Australia's prestigious Premier's Award was presented to five Zoos SA recipients for their leadership and volunteer contributions. The awards went to Edna Wilson, Debra Jakes, Ruth McEwin, Erik Strauts and Lesley Westbrook. The Zoos SA President's Award was also bestowed to Janet Lowe for her outstanding contributions to Monarto Safari Park – Wild Africa program.

Volunteer Programs continue to recruit, develop and support our volunteers with specific efforts in 2021-22 focusing on meeting our increased requirements at Monarto Safari Park along with ensuring Adelaide Zoo volunteer programs continue to be supported and effective.



Photograph by Aleisha Young



DELIVERING ON OUR BUSINESS GOALS:

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

Achieved through the development and ongoing refinement of program specific training modules for our new volunteers. This involves a combination of class based and on the job learning as well collaboration with staff across the organization to present specialist information. This ensures our new volunteers are well prepared and supported in their various roles. They are given ample opportunities for ongoing professional development and cross program activity which also helps for volunteer engagement and retention.

Working ethically and sustainably

As a conservation charity, we are committed to working ethically and sustainably while influencing others to do the same. With our business' reliance on natural resources and as leaders in species conservation and environmental education, we are in a unique position to highlight environmental sustainability and inspire our visitors to take action in their own lives.

Monarto Safari Park has continued its partnership with Peats Soil, which allows us to compost the large stockpile of manure and animal bedding materials on the Monarto Safari Park site. This is reused as a soil enhancer around the entire park and in all newly developed garden beds. This material has been used extensively in the development of new plantings at the Visitor Centre's front entrance to enhance soil properties with an organic product developed using 100% zoo manure and composted animal bedding.

Adelaide Zoo uses a similar process to recycle its green waste including all green waste, manures and animal bedding that is collected in bulk and transferred to Peats Soil weekly. Waste then undergoes a composting process turning raw material into a product called Zoo Poo. Negotiations are underway to re-launch the product with the hope that it will be taken up by a major retailer to sell to the public and landscape industry.

As part of our Environmental Management Plan (EMP), we have developed a single-use plastic policy based on an audit conducted in late 2020. Since the resumption of unrestricted visitor access, further progress has been made on the elimination of single-use plastic. Some items of food dispensing that were reverted to single use (to prevent risk of spreading infection during COVID-19 restrictions) have now been phased out.

Zoos SA continues to work with Plastic Free SA to gain accreditation for both sites as Plastic Free Precincts. An announcement by the South Australian Environment Minister that Adelaide Zoo and Monarto Safari Park are plastic free precincts is expected shortly.

Water and Electricity usage across both sites continues to be monitored by staff using remote monitoring portals set up by utilities companies. These portals allow us to track usage and proactively assist with identification of leakages for water and areas of high energy use. Remote monitoring has been critical in early identification of issues with early intervention saving the organisation significant cost.

We have improved facilities management processes through the introduction of performance based and financially incentivised contracts with service providers. New contracts have allowed us to claw back money from the scheduled payments if a service is non-compliant under its provisions - this helps us better manage our resources and maintain compliance.



DELIVERING ON OUR BUSINESS GOALS:

Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

Zoos SA's EMP has a strong focus on sustainable resource consumption and corporate responsibility with advanced ethical social considerations. This focus has been championed across both sites and further supported through waste management with practices underpinned by an integrated waste management and cleaning contract.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

We have improved facilities management processes by introducing performance based/ financially incentivised contracts with service providers.

Transforming our facilities

Zoos SA owns and operates millions of dollars' worth of infrastructure and facilities across both Adelaide Zoo and Monarto Safari Park.

Our 20-Year Master Plan sets our vision for the transformation of both Adelaide Zoo and Monarto Safari Park over the next two decades. An extensive organisational-wide capital works program will represent significant investment on the corporate balance sheet.

Development, supported by \$15.8 million of external funding from the Australian Government and South Australian Government, saw the official opening of the new Visitor Centre in March 2022. The project has delivered a world class building with multipurpose functions to enable the expected increase of visitation to transition safely into the park and enjoy the upgraded retail, exhibition space and cafe facilities.

Master Planning at Adelaide Zoo continues with concept designs for the major projects already developed. Several smaller projects to facilitate the movement of existing animal habitats and infrastructure have been planned to start prior to the commencement of major developments.

Work continues in preparation on delivering the next major phase of the Master Plan, which will provide opportunity to connect with Adelaide's Riverfront precinct. 250 metres of river frontage, currently occupied by aging back of house infrastructure, will be transformed into valuable animal habitat space-connecting directly with

the public realm and provide a point of destination from both inside and outside the Zoo, reinforcing our goal to connect people with nature. Funding needs to be secured for this to commence.

Throughout 2021-2022 we delivered a number of smaller capital projects thanks in part to donations and bequests. We are very grateful we could complete them thanks to this support.

Some key projects delivered in the past financial year at Adelaide Zoo were the construction of Komodo Dragon and Little Penguin habitats at the entrance of the zoo, installation of a Pig-nosed Turtle habitat in the Envirodome, weather-proofing of the Orange-bellied Parrot facility, installation of internal weight scales and resurfacing of floor at the Sumatran Tiger off-limit areas and painting of the internal walls at Plane Tree Drive Centre.

At Monarto Safari Park we delivered a new Southern White Rhino shelter and concrete flooring, completion of the Black Rhino habitat and holding facility and the Cheetah bus stop shelter.

Additionally, minor works completed including the installation of emergency escape units to fridge and freezer units at both sites and, the purchasing of seven replacement motor vehicles and three tip trailers for Monarto Safari Park and Wild Africa sites.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

We delivered developments that provide visitor enjoyment in a wide range of weather conditions, catering for the needs of all ages, cultures and abilities. There was a strong focus on accessibility as part of the new Visitor Centre development at Monarto Safari Park.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

We continue to develop concepts for priority development projects as part of the 20-Year Master Plan. The concepts are developed with costed project briefs so the Zoo is in a position to be project ready and actively leverage external funding as opportunities arise.

Wild Africa and Monarto Safari Park's expansion plans

The construction of the Wild Africa Safari Project continues to progress with the project's staff and volunteers working hard to bring the experience on line to coincide with the opening of the accommodation planned to be finished by mid-2023.

Over the last twelve months, significant progress has been made in many areas, notably the animal night quarters' handling facility construction and the installation of rhino-proof fencing. The task of erecting over 20 kilometres of fencing to the four main paddock sections is well underway, with both the largest sections ('Samburu' and 'Chobe') over half complete. Etosha section fencing is already complete and the area now holds animals. We have continued work on feral-proofing our perimeter security fence and on progressing the 2.2km raceway which connects all four main areas.

Construction of an assortment of animal handling facilities has continued with completion of a new giraffe shed and holding yards adjacent to the 'Etosha' section being a major milestone. Next to this we are building rhino and ungulate holding facilities. Work on planning and construction of further rhino yards and associated facilities for other sections along the raceway has begun. These facilities will assist in the management and welfare of each of the species we plan to hold in the safari area.

'The Land of the Lemurs' experience is nearly ready to open to visitors. We have installed outdoor heated shelters, laid lawn into various sections, carried out weed control, built a new tented

airlock to serve as the visitor entrance and planted a variety of aquatic and terrestrial vegetation.

The construction of a new climate controlled tortoise breeding facility has been completed; this facility gives us the opportunity to house three species of large land tortoises (Aldabra Giant, Leopard and Radiated) with access to spacious outdoor habitat for the animals.

Staff and volunteer groups (internal and external) have assisted in planting aquatic species within our eight waterholes. We also are working closely with Landscape SA and Aquasave to explore the possibility of utilising some of the waterholes as sites for populations of threatened small bodied native fish.

We continue to carry out many more general land management and conservation activities. These include revegetation and regeneration work, endangered plant species protection (Monarto Mint Bush and Silver Leaf Daisy), pest and weed control, fire break maintenance and biotic surveys. We work closely with Landscape South Australia Murraylands and Riverland on the protection of endangered plant species through joint planting programs to increase populations.





DELIVERING ON OUR BUSINESS GOALS:

Goal 1 Connect people with nature: engage, inform and inspire people to act.

Working with external project partners, we're utilising the Wild Africa Project to promote the plight of Southern White Rhinos in the wild. Wild Africa will be pivotal to the building of a viable insurance population of rhinos in our region. The creation of special visitor experiences will provide visitors with many exciting and immersive ways to learn more about species and conservation issues in their range states.

Goal 2 Save species from extinction: conservation, wildlife health and research.

The Wild Africa Project, will increase Zoos SA's capacity to improve both native and exotic endangered animal breeding programs and house more animals. The project site also has important patches of local native vegetation housing a number of critically-endangered plant species which we protect through regeneration practices and propagation programs.

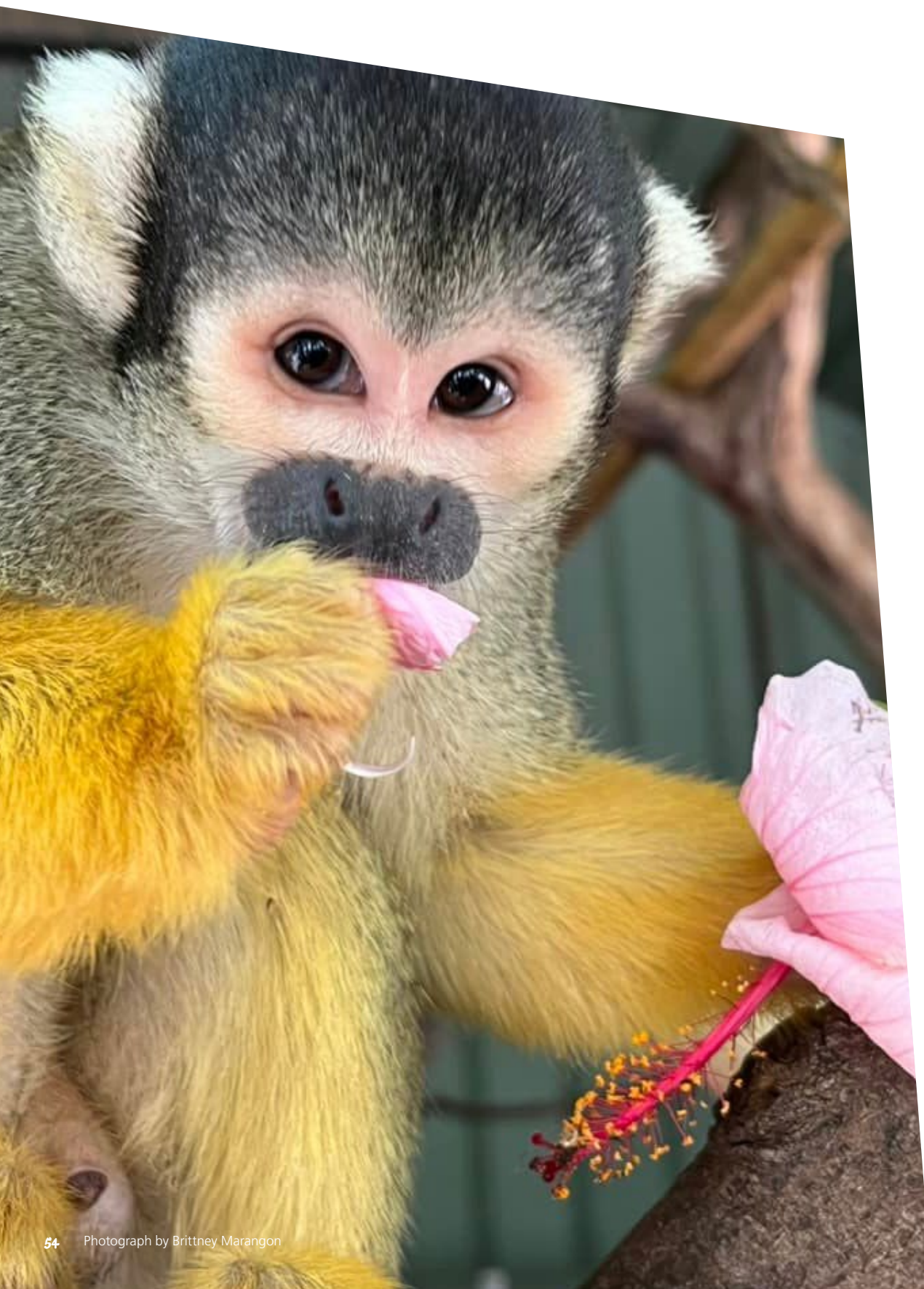
Goal 3 Work in an ethical and sustainable manner influencing others to follow our example.

All planning and construction activities on the Wild Africa Project site are approached with animal welfare and sustainability best practice in mind. In collaboration with both internal and external industry peers, the designs of animal facilities are reviewed to ensure all aspects of animal welfare are considered. When planning for the Wild Africa Project's new infrastructure we address and apply sustainable design criteria to ensure we minimise and, where possible, improve Zoos SA's impact on the natural environment while ensuring protection from natural risks.

Goal 4 Grow a sound and advancing organisation, applying an innovative business approach.

The Wild Africa Project has given the opportunity for staff and volunteers to improve their skills as new tasks are undertaken; this comes from being involved with new animal habitat and facility planning and construction. Both animal handling and construction staff are involved with planning and problem-solving activities, and those involved in construction are trained to use a variety of machinery and equipment to ensure we are carrying out all activities with WHS best practice in mind..

Financial statements



Statement of Profit or Loss and Comprehensive Income

FOR THE YEAR ENDED 30 JUNE 2022

	2022 \$	2021 \$
REVENUE		
Admissions, Membership and Other Revenue	20,330,605	19,673,386
Grants	17,310,076	16,403,510
Gain on Sale of Land	-	14,651
Insurance Recoveries	912,467	1,677,273
Sundry Sales/Income	426,993	293,164
Bequests	1,656,381	263,303
Total Revenue	40,636,522	38,325,287
EXPENSES		
Salaries, Wages & On-Costs	(17,748,984)	(16,915,288)
Animal Care	(1,181,067)	(1,155,172)
Maintenance Consumables	(2,327,346)	(2,003,654)
Cost of Sales	(1,119,420)	(1,086,164)
Conservation & Research Projects	(1,478,848)	(1,337,724)
Utilities	(791,828)	(745,396)
Marketing & Promotion	(781,850)	(477,973)
Tours & Experiences	(2,370,786)	(1,578,907)
Depreciation	(2,614,658)	(2,581,298)
Other Expenses	(1,706,380)	(1,530,446)
Total Expenses	(32,121,167)	(29,412,022)
Surplus from operating activities	8,515,355	8,913,265
Finance Income	42,605	18,739
Finance Expenses	(106,017)	(137,799)
Net Financing Expense	(63,412)	(119,060)
Surplus for the Year	8,451,943	8,794,205
OTHER COMPREHENSIVE INCOME/EXPENSE		
Items that will never be reclassified to profit or loss		
Change in fair value of financial assets at fair value through other comprehensive income	(33,404)	69,514
Total Other Comprehensive Income / (Loss) for the year	(33,404)	69,514
Total Comprehensive Income for the year attributable to members	8,418,539	8,863,719

Statement of Financial Position

FOR THE YEAR ENDED 30 JUNE 2022

	2022 \$	2021 \$
CURRENT ASSETS		
Cash and Cash Equivalents	4,160,172	1,576,436
Receivables and Prepayments	3,092,048	7,610,709
Inventories	457,386	376,793
Total Current Assets	7,709,606	9,563,938
NON CURRENT ASSETS		
Financial Assets at Fair Value	380,356	449,619
Property, Plant and Equipment	64,807,995	55,265,844
Total Non Current Assets	65,188,351	55,715,463
Total Assets	72,897,957	65,279,401
CURRENT LIABILITIES		
Sundry Creditors	3,439,407	4,783,976
Income in Advance	7,269,818	6,559,802
Loans and Borrowings	155,227	3,016,497
Employee Benefits	3,992,632	3,869,626
Total Current Liabilities	14,857,084	18,229,901
NON CURRENT LIABILITIES		
Loans and Borrowings	2,741,160	343,551
Income in Advance	3,979,621	3,736,002
Employee Benefits	292,870	361,264
Total Non Current Liabilities	7,013,651	4,440,817
Total Liabilities	21,870,735	22,670,718
Net Assets	51,027,222	42,608,683
Reserves	27,169	60,573
Retained Funds	51,000,053	42,548,110
Total Equity	51,027,222	42,608,683

Statement of Cash Flows

FOR THE YEAR ENDED 30 JUNE 2022

	2022 \$ INFLOWS (OUTFLOWS)	2021 \$ INFLOWS (OUTFLOWS)
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts		
Receipts from customers	23,981,257	19,710,658
Donations, Bequests and Sponsorships	3,856,257	2,262,771
Payments		
Wages and Salaries	(17,730,598)	(16,855,825)
Suppliers	(14,928,908)	(8,530,900)
Conservation & Research Projects	(1,478,848)	(1,337,724)
Net Cash Provided by/(Used in) Operating Activities	(6,300,840)	(4,751,020)
CASH FLOWS FROM INVESTING ACTIVITIES		
Purchase of Property, Plant and Equipment	(12,156,809)	(6,128,288)
Proceeds from Sale of Land	-	14,651
Sale/(Purchase) of Shares and Investments	35,859	(2,012)
Interest and dividends received	42,605	18,739
Net Cash Provided by/(Used in) Capital and Investing Activities	(12,078,345)	(6,096,910)
CASH FLOWS FROM FINANCING ACTIVITIES		
Net State Government Grants Received	6,146,592	6,036,026
Net Other Grants Received	15,386,007	5,552,028
Net Repayment of Borrowings	(463,661)	(1,298,152)
Payment of Interest	(106,017)	(137,799)
Net Cash Provided by Financing Activities	20,962,921	10,152,103
Net (Decrease)/Increase in Cash Held	2,583,736	(695,827)
Cash at the Beginning of the Year	1,576,436	2,272,263
Cash at the End of the Year	4,160,172	1,576,436

Revenues and Expenses

FOR THE YEAR ENDED 30 JUNE 2022

				2022	2021
	ADELAIDE ZOO \$	MONARTO SAFARI PARK \$	SOCIETY \$	TOTAL \$	TOTAL \$
REVENUE					
Admissions	5,192,033	2,983,463	-	8,175,496	8,856,706
Education	495,241	227,268	-	722,509	845,731
Sponsorship	91,765	117,020	1,245,295	1,454,080	1,291,457
Bequests	-	-	1,656,381	1,656,381	263,303
Donations	-	-	738,276	738,276	707,801
Membership	-	-	3,677,146	3,677,146	3,839,832
Retail Sales	1,343,213	856,474	-	2,199,687	2,072,879
Catering Sales	301,943	131,044	-	432,987	326,204
Tours Income	344,118	1,270,223	-	1,614,341	1,501,755
Events	1,225,063	-	91,020	1,316,083	231,021
Sundry Sales/Income	163,802	31,626	231,565	426,993	293,164
Gain on Sale of Land	-	-	-	-	14,651
Insurance Recoveries	-	-	912,467	912,467	1,677,273
Grants	161,420	73,436	17,075,220	17,310,076	16,403,510
Total Revenue	9,318,598	5,690,554	25,627,370	40,636,522	38,325,287
EXPENSES					
Salaries, Wages & On-Costs	7,273,765	4,375,024	6,100,195	17,748,984	16,915,288
Animal Care	437,551	614,024	129,492	1,181,067	1,155,172
Maintenance Consumables	1,369,124	840,768	117,454	2,327,346	2,003,654
Cost of Sales	665,204	454,216	-	1,119,420	1,086,164
Conservation & Research Projects	-	-	1,478,848	1,478,848	1,337,724
Utilities	399,526	392,302	-	791,828	745,396
Marketing & Promotion	42,452	96,151	643,247	781,850	477,973
Tours & Experiences	1,041,274	1,326,347	3,165	2,370,786	1,578,907
Depreciation	-	-	2,614,658	2,614,658	2,581,298
Other Expenses	268,085	122,353	1,315,942	1,706,380	1,530,446
Total Expenses	11,496,981	8,221,185	12,403,001	32,121,167	29,412,022

Statement of Changes in Equity

FOR THE YEAR ENDED 30 JUNE 2022

	FAIR VALUE RESERVES \$	RETAINED FUNDS \$	TOTAL EQUITY \$
Balance at 1 July 2020	(8,941)	33,753,905	33,744,964
Profit/(Loss) for the year	-	8,794,205	8,794,205
OTHER COMPREHENSIVE INCOME			
Change in fair value of financial assets at fair value through other comprehensive income	69,514	-	69,514
Total Other Comprehensive Income/(Loss) for the year	69,514	-	69,514
Total Comprehensive Income/(Loss) for the year	285	47,036	47,321
Balance at 30 June 2021	3,136	35,701,902	35,705,038
Balance at 1 July 2021	60,573	42,548,110	42,608,683
Profit/(Loss) for the year	-	8,451,943	8,451,943
OTHER COMPREHENSIVE INCOME			
Change in fair value of financial assets at fair value through other comprehensive income	(33,404)	-	(33,404)
Total Other Comprehensive Income/(Loss) for the year	(33,404)	-	(33,404)
Total Comprehensive Income/(Loss) for the year	(33,404)	8,451,943	8,418,539
Balance at 30 June 2022	27,169	51,000,053	51,027,222

Appendices



APPENDIX A

CITES Listed Species

There are approximately 5,600 species of animals and more than 30,000 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. 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 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 the Department of Agriculture, Water and the Environment's cooperative conservation program. Adelaide Zoo currently houses 28 species of CITES I listed animals, while Monarto Safari Park maintains 13 CITES I listed animals.

CITES I SPECIES MANAGED WITHIN ZOOS SA COLLECTIONS

(By class, in alphabetical order by common name for easy reference)

Reptilia

Komodo Dragon	<i>Varanus komodoensis</i>
Radiated Tortoise	<i>Astrochelys radiata</i>
Rhinoceros Iguana	<i>Cyclura cornuta cornuta</i>
Western Swamp Tortoise	<i>Pseudemydura umbrina</i>

Aves

African Grey Parrot	<i>Anodorhynchus hyacinthinus</i>
Blue-winged Macaw	<i>Ara maracana</i>
Hyacinth Macaw	<i>Anodorhynchus hyacinthinus</i>
Nicobar Pigeon	<i>Caloenas nicobarica</i>
Orange-bellied Parrot	<i>Neophema chrysogaster</i>
Palm Cockatoo	<i>Probosciger aterrimus</i>
Scarlet Macaw	<i>Ara macao</i>
Timney African Grey Parrot	<i>Psittacus timneh</i>
Yellow-naped amazon	<i>Amazona auropalliata</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</i>
Greater Bilby	<i>Macrotis lagotis</i>
Greater Stick-nest Rat	<i>Leporillus conditor</i>
Malayan Tapir	<i>Tapirus indicus</i>
Mandrill	<i>Mandrillus sphinx</i>
Mesopotamian fallow deer	<i>Dama mesopotamica</i>
Oriental Small-clawed Otter	<i>Aonyx cinereus</i>
Przewalski's horse	<i>Equus ferus przewalskii</i>
Red Panda	<i>Ailurus fulgens fulgens</i>
Ring-tailed Lemur	<i>Lemur catta</i>
Scimitar-horned Oryx	<i>Oryx dammah</i>
Siamang	<i>Symphalangus syndactylus</i>
Southern white rhinoceros	<i>Ceratotherium simum ssp. simum</i>
Sumatran Orangutan	<i>Pongo abelii</i>
Sumatran Tiger	<i>Panthera tigris sumatrae</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. IUCN listed species are represented throughout most of the taxonomic groups currently held at Adelaide Zoo and Monarto Safari Park.

SPECIES WITHIN ZOOS SA COLLECTION LISTED IN IUCN CATEGORIES OF MOST CONCERN

Extinct in Wild

Scimitar-horned Oryx	<i>Oryx dammah</i>
----------------------	--------------------

Critically Endangered

Addax	<i>Addax nasomaculatus</i>
Aruba Island Rattlesnake	<i>Crotalus durissus unicolor</i>
Black rhinoceros	<i>Diceros bicornis minor</i>
Brush-tailed Bettong	<i>Bettongia penicillata ogilbyi</i>
Cotton-top Tamarin	<i>Saguinus oedipus</i>
Eastern bongo	<i>Tragelaphus eurycerus isaaci</i>
Elongated Tortoise	<i>Indotestudo elongata</i>
Orange-bellied Parrot	<i>Neophema chrysogaster</i>
Plains wanderer	<i>Pedionomus torquatus</i>
Radiated Tortoise	<i>Astrochelys radiata</i>
Regent Honeyeater	<i>Xanthomyza phrygia</i>
Sumatran Orangutan	<i>Pongo abelii</i>
Sumatran Tiger	<i>Panthera tigris sumatrae</i>
Western Swamp Tortoise	<i>Pseudemydura umbrina</i>
White-cheeked Gibbon	<i>Nomascus leucogenys</i>

Endangered

African Wild dog	<i>Lycaon pictus</i>
African Grey Parrot	<i>Psittacus erithacus</i>
African Spurred Tortoise	<i>Centrochelys sulcata</i>
Australian Sea-lion	<i>Neophoca cinerea</i>
Chimpanzee	<i>Pan troglodytes</i>
Golden Lion-tamarin	<i>Leontopithecus rosalia</i>
Goodfellow's Tree-kangaroo	<i>Dendrolagus goodfellowi</i>
Java Sparrow	<i>Padda oryzivora</i>
Malayan Tapir	<i>Tapirus indicus</i>
Mesopotamian fallow deer	<i>Dama mesopotamica</i>
Pit-shelled Turtle (Pig-nosed Turtle)	<i>Carettochelys insculpta</i>
Przewalski's horse	<i>Equus ferus przewalskii</i>
Pygmy Blue-tongue Lizard	<i>Tiliqua adelaidensis</i>
Pygmy Hippopotamus	<i>Choeropsis liberiensis</i>
Red Panda	<i>Ailurus fulgens fulgens</i>
Ring-tailed Lemur	<i>Lemur catta</i>
Siamang	<i>Symphalangus syndactylus</i>
Sun Conure	<i>Aratinga solstitialis</i>
Swift Parrot	<i>Lathamus discolor</i>
Tasmanian Devil	<i>Sarcophilus harrisii</i>
Timney African Grey Parrot	<i>Psittacus timneh</i>
White-bellied Caique	<i>Pionites leucogaster</i>
Woma	<i>Aspidites ramsayi</i>
Yellow-naped Amazon	<i>Amazona auropalliata</i>

Vulnerable

African Lion	<i>Panthera leo</i>
Aldabra Giant Tortoise	<i>Aldabrachelys gigantea</i>
Barbary sheep	<i>Ammotragus lervia</i>
Binturong	<i>Arctictis binturong</i>
Black-footed Rock wallaby (Black-flanked rock wallaby)	<i>Petrogale lateralis</i>
Brazilian Tapir	<i>Tapirus terrestris</i>
Broad-headed Snake	<i>Hoplocephalus bungaroides</i>
Chattering Lory	<i>Lorius garrulus</i>
Cheetah	<i>Acinonyx jubatus</i>
Crimson-bellied Parakeet	<i>Pyrrhura perlata</i>
Dingo	<i>Canis lupus dingo</i>
Giant Panda	<i>Ailuropoda melanoleuca</i>
Giraffe	<i>Giraffa camelopardalis</i>
Greater Bilby	<i>Macrotis lagotis</i>
Hyacinth Macaw	<i>Anodorhynchus hyacinthinus</i>
Komodo Dragon	<i>Varanus komodoensis</i>
Malleefowl	<i>Leipoa ocellata</i>
Mandrill	<i>Mandrillus sphinx</i>
Plains mouse	<i>Pseudomys australis</i>
Pygmy Marmoset	<i>Cebuella pygmaea</i>
Quokka	<i>Setonix brachyurus</i>
Rhinoceros Iguana	<i>Cyclura cornuta</i>
Small-clawed Otter	<i>Aonyx cinereus</i>
Spur-thighed Tortoise	<i>Testudo graeca</i>

APPENDIX B

Professional memberships

American Association of Zoo Veterinarians – Dr David McLelland

American College of Zoological Medicine – Dr David McLelland (Diplomate)

Aquatic Water Quality and Water Treatment in Zoos and Aquariums, Convener – Mark Smith

Association of Avian Veterinarians – Dr David McLelland, Dr Lynley Johnson and Dr Kathryn Johnson

Association of Avian Veterinarians Australasian Committee- Dr Kathryn Johnson

Association of Reptilian and Amphibian Veterinarians – Dr Ian Smith and Dr Kathryn Johnson

Association of Zoos and Aquariums (AZA) – Mark Smith

Association of Zoos and Aquariums (AZA) Nutrition Advisory Group (NAG) - Mark Snowball (Affiliate Member)

Association of Zoos and Aquariums (AZA) SAFE Sharks Advisory Board – Mark Smith

Association Zoo Horticulturists (AZH) Jeff Lugg

Australian and New Zealand College of Veterinary Scientists – Dr Ian Smith, Dr David McLelland, Dr Lynley Johnson, Dr Jenny McLelland, Dr Kathryn Johnson

Australian Mammal Society – Dr Liberty Olds

Australian Society of Herpetologists – Dr Phil Ainsley

Australian Veterinary Association – Dr Jenny McLelland and Dr Kathryn Johnson

Children's University Advisory Board – Board member – Elaine Bensted

Coast 4Cs, Founding Board Member – Mark Smith

Comparative Nutrition Society – Mark Snowball

Conservation Centers for Species Survival (C2S2) and Steering Committee – Peter Clark

Conservation Council of South Australia – Zoos South Australia

Conservation Planning Specialist Group (International Union for the Conservation of Nature Species Survival Committee) – Peter Clark

Ecological Society of Australia – Dr Liberty Olds

Elasmobranch Husbandry Initiative, Convener – Mark Smith

Environment Institute Advisory Board – Board member – Elaine Bensted

European Association of Zoos and Aquaria (EAZA) Nutrition Group (ENG) - Mark Snowball

European Association of Zoo and Wildlife Veterinarians – Dr Ian Smith

European College of Zoological Medicine – Dr David McLelland (Diplomate - Zoo Health Management; Member of ECZM Scientific Committee and Examinations Committee)

Fellow of the Royal Entomological Society of London – Peter Clark

International Union for the Conservation of Nature Special Survival Commission Tortoises and Freshwater Turtle Specialist Group – Dr Phil Ainsley

Marna Banggara – Executive Committee – Peter Clark

Nutrition Society of Australia – Mark Snowball (Registered Animal Nutritionist)

Oceanario de Lisboa, Board Advisory Committee – Mark Smith

Regional Development Australia Murraylands and Riverland (RDAMR) – Board member – Elaine Bensted

Society for the Study of Amphibians and Reptiles – Dr Phil Ainsley

South Australian Herpetology Group – Dr Phil Ainsley

Species 360 Board Selection Committee – Mark Smith

The Australian Rhino Project (TARP) – Board Member – Elaine Bensted

The Australian Rhino Project (TARP) – Operations Group – Peter Clark

Thylation Ltd Board – Board member – Elaine Bensted

Turtle Survival Alliance – Dr Phil Ainsley

University of South Australia (UniSA) Business School Program Advisory Committee – Committee member – Elaine Bensted

Veterinary Nurses Council of Australia – Dianne Hakof

Veterinary Surgeons Board of South Australia – it is compulsory for all Zoos SA veterinarians to hold this.

Wildlife Disease Association – Dr Ian Smith, Dr David McLelland, Dr Jenny McLelland (Council Member-at-Large), Dr Lynley Johnson, Dr Jerome Kalvas and Dr Kathryn Johnson

Wildlife Ethics Committee – Dr Ian Smith, Dr David McLelland, Dr Lynley Johnson, Deb Barry and Michelle Birkett

Wildlife Health Australia – Dr Ian Smith, Dr David McLelland, Dr Jenny McLelland, Dr Lynley Johnson and Dr Jerome Kalvas

World Association of Zoos & Aquariums (WAZA) – Committee member Conservation and Environmental Sustainability Committee – Elaine Bensted

World Association of Zoos and Aquariums - Zoos South Australia

ZAA Australian Species Management Program - Gert Skipper (Animal Management Committee member, Carnivore and Small Exotic Mammal TAG Co-convenor) and Jodi Buchecker (Australian Mammals TAG Co Convenor), Mark Smith (Animal Management Committee member)

Zoo and Aquarium Association – Sarah Brown, Beth Pohl

Zoo and Aquarium Association (ZAA) Vice President and Board Member, Chair Finance, Audit & Risk Committee – Elaine Bensted

Zoo and Aquarium Association, Horticulture SAG Chair - Jeff Lugg

Zoo and Aquarium Associations Ethics Committee, Chair – Dr Phil Ainsley

Zoo and Aquarium Association Veterinary Specialist Advisory Group (VetSAG) – Dr Ian Smith, Dr David McLelland (VetSAG Co-Convenor), Dr Lynley Johnson, Dr Jenny McLelland, Dr Jerome Kalvas, Dr Oliver Funnell, Dr Kathryn Johnson, Mark Snowball.

Zoo Animal Health Reference Group Chief Veterinary Officer appointee – Dr Ian Smith

APPENDIX C

ZAA Species Management program holders by Zoos SA employees

SPECIES		STAFF MEMBER	POSITION
Black-flanked Rock-wallaby	<i>Petrogale lateralis</i>	Jodi Buchecker	Species Coordinator
Black-winged Stilt	<i>Himantopus himantopus</i>	Vaughan Wilson	Species Coordinator
Brush-tailed Bettong	<i>Bettongia penicillata</i>	Dr Liberty Olds	Species Coordinator
Chimpanzee	<i>Pan troglodytes</i>	Beth Pohl	Species Coordinator
Fennec Fox	<i>Vulpes zerda</i>	Arliah Hayward	Studbook Keeper
Greater Bilby	<i>Macrotis lagoti</i>	Jodi Buchecker	Species Coordinator South Australia
Greater Stick-nest Rat	<i>Leporillus conditor</i>	Jodi Buchecker	Species Coordinator
Mainland Tammar Wallaby	<i>Macropus eugenii eugenii</i>	Jodi Buchecker	Species Coordinator
Southern Hairy-nosed Wombat	<i>Lasiorhinus latifrons</i>	Dr Rachel Robbins	Species Coordinator
Spotted Hyena	<i>Crocuta crocuta</i>	Anna Bennett	Species Coordinator
White-browed Woodswallow	<i>Artamus leucorhynchus</i>	Vaughan Wilson	Species Coordinator
Yellow-footed Rock-wallaby	<i>Petrogale xanthopus xanthopus</i>	Jodi Buchecker	Species Coordinator

APPENDIX D

Zoos SA staff representatives on species recovery teams and other key conservation stakeholder groups

Adjunct positions at the School of Animal and Veterinary Science, University of Adelaide: Senior Lecturer- Dr I. Smith and Dr D. McLelland; Lecturer Dr J. McLelland, Dr L. Johnson, Dr K. Johnson, Dr O. Funnell and Dr J. Kalvas

Academic Associate at the Faculty of Veterinary & Agricultural Sciences, University of Melbourne: Dr I. Smith

Arid Recovery, veterinary support (AHD)

Australian Wildlife Conservancy, veterinary support (AHD)

Birdlife Australia Hooded Plover Monitoring Program, veterinary support (Dr D. McLelland, Dr J. Kalvas, Dr A. Kokosinska)

Black-flanked Rock-wallaby, *Petrogale lateralis lateralis*, State: B. Pohl, L. Olds, Dr I. Smith, L. Stockburger

Bushfire Recovery Wild Welfare Response Working Group: Dr P. Ainsley

DEW Marine Mammal Response, veterinary support (AHD)

Greater Bilby, *Macrotis lagotis*, State: J. Buchecker

Kangaroo Island Dunnart, *Sminthopsis aiteni*, State: Dr L. Olds

Marna Bangarra Bettong Translocation Steering Committee: Dr L. Olds

Marna Bangarra Executive Steering Committee: P. Clark

Marna Bangarra: P. Clark, Dr L. Olds and Dr I. Smith

Murraylands Threatened Flora Multiple spp., State: Dr P. Ainsley

Orange-bellied Parrot, *Neophema chrysogaster*, National: C. Crittle (Chair of Captive Management Group), Dr D. McLelland (Veterinary Technical Reference Group)

Plains Wanderer, *Pedionomus torquatus*, National: P. Clark, Dr L. Olds

Pygmy Blue-tongue Lizard, *Tiliqua adelaidensis*, State: Dr P. Ainsley

Regent Parrot, *Polytelis anthopeplus*, State: Dr D. McLelland

SA Mammal Translocation Working Group: Dr L. Olds

South Australian Nature Alliance: Dr L. Olds

Southeast Red-tailed Black-cockatoo, *Calyptorhynchus banksii graptogyne*, National: Dr L. Olds

Threatened Mallee Bird Steering Committee Multiple spp., National: Dr L. Olds

Western Swamp Tortoise, *Pseudemydura umbrina*, WA State: Dr P. Ainsley

APPENDIX E

Research

We consider it a core part of our organisational activities to conduct research that seeks to advance and inform the goals of Zoos SA. Be it captive breeding, captive management, welfare, wildlife health, zoological medicine, ecology, or education, our research activities provide outcomes both for Zoos SA and the broader conservation community. In many instances, we partner collaboratively with external organisations, and many projects are conducted by undergraduate and post-graduate research students. The volunteers in the Animal Health Centre Laboratory provide support and services to a range of conservation and research projects within and beyond Zoos SA.

The Wildlife Ethics Committee (WEC) is convened jointly by the SA Department of Environment and Water, the South Australian Museum and Zoos SA. A number of Zoos SA staff members serve on the WEC, including Dr I. Smith, Dr D. McLelland, Dr L. Johnson, Deb Barry and Michelle Birkett.

RESEARCH PROJECTS

Projects that Zoos SA has been, or continue to be, involved with are listed below under each major collaborator. Students' names, if indicated, are included before the project title and supervisors' names bracketed afterwards.

Zoos SA Lead Partner

Infectious disease surveillance in bushfire affected koalas on Kangaroo Island

Prognostic factors in bushfire-affected koalas on Kangaroo Island

Total body surface area of koalas calculated by computed tomography for evaluation of burn injuries

SA Department of Environment and Water

Health monitoring and biotelemetry of Regent Parrots (*Polytelis anthopeplis*) in the SA Riverland.

University of Adelaide

Alexandra Wilson and Emma Agardi: Investigation of *Corynebacterium ulcerans* infection in ringtail possums (RTP, *Pseudocheirus peregrinus*) (Dr D. McLelland, Dr A. Kokosinska, Dr J. McLelland)

Alex McEvoy and Claire Bensted: SW Rhino coagulopathy investigation. (Dr L. Johnson, Dr O. Funnell)

Emily Edwards and Ella Hodgen: Tasmania Devil heart function (Dr L. Johnson)

Erin McGilvray – The antimicrobial effect of pH-neutral electrochemically activated solution on soaked seeds for psittacines (Dr D. McLelland)

Evie Dunston, Honours Candidate: Kangaroo Island bushfire affected koalas: an analysis of demographic and triage health data (Dr O. Funnell, Dr J. McLelland)

Hombsch: Evaluation of ascorbate (vitamin C) levels in wild and captive macropods (Dr D. McLelland, Mark Snowball)

Iolanthe Lo and Mark Kernick: Captive giraffe haematuria (Dr N.i Anderson, Dr L. Johnson)

Jacob Maher, Honours: The changing conservation role of zoos through time.

Jade Wastell-Stevens; Clinical Research Project Extension: Hormonal cyclic profiling using non-invasive sampling techniques in Southern White Rhinoceros. (Dr L. Johnson, Dr N. Anderson)

Joanna Nelson: The role of antipsychotic tranquilizers in wildlife and zoo medicine – a critical review of the literature (Dr D. McLelland) Katrina Kovac and Caitlin Lawless: Faecal microbiome of golden lion tamarins (GLT, *Leontopithecus rosalia*) (Dr D. McLelland) Marina Smith and Amelia Blacketer: Blood indices comparisons between hand-reared and free-ranging Grey Headed Flying-fox (Dr I. Smith)

Narelle Jones and Jessica Turner, Honours Candidates: Evaluating the validity of a taxon-tailored welfare assessment tool for Testudinidae. (Dr D. McLelland)

Niv Verco: Microchip-associated sarcoma in two Amazonia tree boas (Dr D. McLelland, Dr A. Kokosinska)

Paul Christensen: Serum cell free DNA levels as a prognostic indicator of bushfire affected wildlife (Dr I. Smith)

Rachael Thompson; Clinical Research Project Extension: Causes and patterns of mortality in zoo birds at Adelaide Zoo (Dr D. McLelland, Dr A. Kokosinska)

Suwen Simon Pok: Investigating the causes of neonatal mortality in grey-headed flying foxes (*Pteropus poliocephalus*) in Adelaide (Dr D. McLelland, Dr A. Kokosinska)

Flinders University

Tara Daniels, PhD Candidate: What makes for a good translocation: A case study of the Pygmy Bluetongue –completed and degree awarded (Dr P. Ainsley)

Vaccination of zoo animals for SARS-CoV-2 in Australia (Dr D. McLelland, Dr I. Smith)

Murdoch University

Claire Sharp, PhD Candidate (Dr T. Hyndman): Paramyxoviruses in non-domestic cats in Australian Zoos (Dr D. McLelland)

Jessica Rendle, PhD Project completed: Epidemiology of the clinical syndrome lumpy jaw in captive macropods: influence of housing and husbandry.

University of Wisconsin - Madison

Graham Banes: The Orangutan Conservation Genetics Project

PUBLICATION LIST

Dunstan, E.; Funnell, O.; McLelland, J.; Stoeckeler, F.; Nishimoto, E.; Mitchell, D.; Mitchell, S.; McLelland, D.J.; Kalvas, J.; Johnson, L.; Moore, C.; Eyre, L.J.M.; McLune, A.; Hough, I.; Valenza, L.; Boardman, W.S.J.; Smith, I.; Speight, N. An Analysis of Demographic and Triage Assessment Findings in Bushfire-Affected Koalas (*Phascolarctos cinereus*)

on Kangaroo Island, South Australia, 2019–2020. *Animals* 2021, 11, 3237. <https://doi.org/10.3390/ani11113237>

Jones, N.; Sherwen, S.L.; Robbins, R.; McLelland, D.J.; Whittaker, A.L. Welfare Assessment Tools in Zoos: From Theory to Practice. *Vet. Sci.* 2022, 9, 170. <https://doi.org/10.3390/vetsci9040170>

Whittaker, A.L.; Golder-Dewar, B.; Triggs, J.L.; Sherwen, S.L.; McLelland, D.J. Identification of Animal-Based

Welfare Indicators in Captive Reptiles: A Delphi Consultation Survey. *Animals* 2021, 11, 2010. <https://doi.org/10.3390/ani11072010>

Yip, S., Dehcheshmeh, M.M., McLelland, D.J. et al. *Porphyromonas* spp., *Fusobacterium* spp., and *Bacteroides* spp. dominate microbiota in the course of macropod progressive periodontal disease. *Sci Rep* 11, 17775 (2021). <https://doi.org/10.1038/s41598-021-97057-1>

APPENDIX F

Conference presentations and workshop attendance

July 2021 Zoo Exotic Wildlife Nurses Conference. Dianne Hakof; Operational Management of Wildlife and personnel during Bushfires.

28 July 2021 World Aquarium and Zoo Association Webinar on Sustainable Forest Products Guide, online presentation by Elaine Bensted

3-5 August 2021, Zoos and Aquarium Association conference, online attendance, Elaine Bensted

31 August-2 September, WDA/EWDA joint virtual conference. Jenny McLelland

2 September 2021, SA Local Government Financial Management Group, keynote presentation by Elaine Bensted

10-14 October 2021, World Aquarium and Zoo Association Conference, online attendance and presentation on the Short Guide on FSC Materials by Elaine Bensted

October-November 2021 – Joint Conference, American Association of Zoo Veterinarians and European Association of Zoo and Wildlife Veterinarians, online, David McLelland

21 November 2021, Wildlife Disease Association, Australasian section, South Australian conference, Santos Conservation Centre. Organising committee - Jenny McLelland. Attendees, Jenny McLelland, David McLelland, Ian Smith

26-27 April 2022 – European College of Zoo Medicine Annual General Meeting and Specialty/Committee Meetings, online, David McLelland 12 May 2022, Parks and Leisure Australia Annual Conference, keynote presentation by Elaine Bensted

23-25 June 2022, Australian and New Zealand College of Veterinary Scientists Annual 'Science Week' conference, Gold Coast, David McLelland



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