

ANNUAL REPORT  
2022-2023

# HEALING *the* WILD



**TARONGA**   
CONSERVATION SOCIETY AUSTRALIA.

*For the Wild*

# ACKNOWLEDGEMENT OF COUNTRY

Taronga acknowledges and pays respect to Country on which we stand. We Acknowledge Country is and always will be Aboriginal land and honour the environments of the Cammeraigal and Wiradjuri people where we are able to conserve, learn and teach others about sustaining futures for wildlife and people.

Taronga shares a commitment to listen and learn from First Nations Peoples to deepen our appreciation and understanding of the environment, with this knowledge we can provide best welfare for the animals we care for. Conservation requires respecting a species' past, present and future in order to sustain populations, and the animals at Taronga are here to teach us this through their strength, resilience and diversity. At Taronga, we strive to understand the history and journey of the species we are so passionate about and to share this knowledge and understanding with others.

As a zookeeper, I'm appreciative of the opportunities to learn about the lesson of Lore from First Nations People that deepens my connection to the environment which I am now a part of.

Taronga is committed to understanding the land and the importance of consultation with Traditional Custodians as we care for the animals that now, and in future, share the land too. As Taronga continues to grow and build relationships with past, present and emerging Cammeraigal and Wiradjuri Elders, we will, as an organisation, work towards a stronger Commitment to Country.

*Penned by Christina Nicolas (Elephant Keeper at Taronga Western Plains Zoo, Dubbo), with knowledge shared from Wiradjuri Elder Aunty Yvonne Hill.*





WIRADJURI MAN, ROD PENRITH  
ON WOLGALU COUNTRY  
FOR THE GYAK PROJECT:  
CORROBOREE FROG CONSERVATION  
PHOTO BY HARRY VINCENT



# SECURING A SHARED FUTURE *for* WILDLIFE AND PEOPLE

At Taronga we believe that together we can find a better and more sustainable way for wildlife and people to share this planet.

Taronga recognises that the planet's biodiversity and ecosystems are the life support systems for the health and prosperity of all species including our own. At no time in history has this been more evident and urgent, with drought, bushfires, climate change, global pandemics, habitat destruction, ocean acidification and many other crises threatening natural systems and our own future.

Whilst we cannot tackle these challenges alone, Taronga is acting now and working to save species, sustain and rebuild ecosystems, provide experiences and create learning opportunities so that we act together. We believe that we all have a responsibility to protect the world's precious wildlife and take on new ways of living that have a positive impact on the planet. Not just for us in our lifetimes, but for generations into the future. Our Zoos create experiences that delight and inspire lasting connections between wildlife and people. We aim to create conservation advocates that value wildlife, speak up for nature and take action to help create a future where both people and wildlife thrive.

Our conservation breeding programs for threatened and priority wildlife help a myriad of species, with our program for 11 Legacy Species representing an increased commitment to six Australian and five Sumatran species at risk of extinction. In the last 12 months alone, Taronga has played a leading role in 23 state and national recovery programs and partnered with 22 organisations working on the front line of conservation across 14 countries.





SENIOR VETERINARIAN  
DR. LARRY VOGELNEST  
WITH KOALA, 'BAXTER',  
AT TARONGA WILDLIFE  
HOSPITAL, SYDNEY  
PHOTO BY TIM BAUER



## Overview

Taronga Conservation Society Australia (Taronga) operates Taronga Zoo in Sydney and Taronga Western Plains Zoo in Dubbo. Taronga is a leader in the fields of conservation, research, education and environmental sustainability, working across NSW, Australia and the globe. Taronga is constituted under the Zoological Parks Board Act 1973 as a statutory authority owned by the people of NSW and administered by the Minister for Environment and Climate Change. Amended legislation in 1992 defined Taronga's responsibilities in education, conservation, research and recreation (see Appendix 1). A minor amendment to the Act was undertaken in 2008 to formally recognise Taronga Conservation Society Australia as the official name, to better describe the work of the organisation.

## A letter to the Minister

### The Hon. Penny Sharpe MLC

Minister for Climate Change, Energy, Environment and Heritage  
Parliament House  
6 Macquarie St  
SYDNEY NSW 2000

Dear Minister,

It is with great pleasure that we present the 50th Annual Report of the Taronga Conservation Society Australia, which includes the statement of accounts, for your presentation to the NSW Parliament. This report covers in full the Taronga Conservation Society Australia's activities for the year ended 30 June 2023 in accordance with Sections 20 and 37 of the Zoological Parks Board Act 1973 (NSW) (as amended) and the Annual Report Statutory Bodies Act 1984 (NSW) (as amended).

Yours sincerely,



**Penny Bingham-Hall**  
Chair



**Cameron Kerr AO**  
Chief Executive Officer



Bradleys Head Rd, Mosman NSW 2088  
PO Box 20, Mosman NSW 2088  
Tel: 02 9969 2777 | Fax: 02 9969 7515  
Open 9.30am – 5.00pm (Sep – Apr)  
Open 9.30am – 4.30pm (May – Aug)  
[taronga.org.au](http://taronga.org.au)



Obley Rd, Dubbo NSW 2830  
PO Box 831 Dubbo NSW 2830  
Tel: 02 6881 1400 | Fax: 02 6884 1722  
Open: 9.00am – 4.00pm  
Open 8.30am – 5.00pm (during school holidays)  
[taronga.org.au/dubbo](http://taronga.org.au/dubbo)



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GREEN TURTLE '7HOOKS'  
RELEASED INTO THE WILD  
WITH TRACKER  
PHOTO BY HARRY VINCENT



# CHAIR'S REPORT

As Taronga enters its 107th year, it has been a privilege to watch Taronga continue to move boldly forward, embracing new ideas and opportunities to benefit wildlife and our planet, while retaining at its core, a unique and visionary mindset that has created lasting connections with people and wildlife for more than a century.

The past 12 months have seen Taronga continue to recover and return to business as usual after the significant impact of the pandemic. International guest visitation has increased steadily and our local and interstate Australian guests remained highly engaged with our experiences across both Taronga Zoo in Sydney and Taronga Western Plains Zoo in Dubbo.

These results put us in a good position to grow our conservation science work and is testament to some amazing new guest experiences on offer, from the new Wildlife Hospital at Taronga Western Plains Zoo to Nura Diya Australia at Taronga Zoo in Sydney.

As Taronga continues to make strides in its strategic pillar 'Commitment to Country', I felt humbled to stand alongside my colleagues, representatives from the Taronga Aboriginal Advisory Group, Cammeraiagal, First Nations artists and Minister Penny Sharpe MLC as we listened to three Indigenous students from Taronga's Schools Based Apprenticeship and Traineeships program acknowledge Country at the opening of Nura Diya Australia.

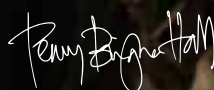
These three intelligent and articulate young women and their fellow trainees give me such hope for the future and I'm proud to lead an organisation that recognises and champions the importance of empowering Indigenous people and communities.

Taronga continues to be a leader in the environmental space. This year, Taronga Zoo and Taronga Western Plains Zoo became powered by 100 per cent renewable electricity. This landmark switch was made seven years ahead of Taronga's sustainability target, which was to be powered by renewable electricity before 2030. It means that every year from now on, approximately 7,000 tonnes of CO<sup>2</sup> are no longer being released into the atmosphere.

The year was not without its challenges. The identification and subsequent remediation of underpayments to some casual staff, and the temporary breach of five lions from their habitat tested us, however our organisation came together to respond decisively and with integrity.

I am very grateful to have been given the opportunity to Chair this inspiring organisation and it has been a privilege to be on the Taronga Board for over 10 years. I am proud not only of all that Taronga has achieved but also of how the teams responded in adverse situations – a true reflection of the fabric of this special organisation.

A heartfelt thank you to our Board members for their valued support, to the Environment Ministers that have supported Taronga and of course to the staff, volunteers, students and Taronga community at large. Taronga would not be what it is today without all of you.



Penny Bingham-Hall  
Chair

TARONGA BOARD CHAIR  
PENNY BINGHAM-HALL  
WITH 'SKY' THE KOALA







# OUR BOARD



THE BOARD OF TARONGA CONSERVATION  
SOCIETY AUSTRALIA (LEFT – RIGHT)  
BACK ROW: SARAH NORGATE,  
MICHAEL HERRING, KRISTIN STUBBINS AM.  
MIDDLE ROW: JOE DAVID,  
JENNIFER COWLEY OAM, MURRAY WOOD.  
FRONT ROW: PENNY BINGHAM-HALL,  
CATHERINE HARRIS AO PSM.  
NOT PICTURED: LAURA BERRY, IAN ROTH PSM



Section 6 of the Zoological Parks Board Act 1973 (NSW) stipulates the criteria under which the members are appointed to the Board. The Board met six times during the year and the number of available meetings attended by each member is shown in brackets.

### **Ms Penny Bingham-Hall (6/6)**

BA (Ind.Des), FAICD, SF(Fin)

Ministerial Appointee. Chair of the Taronga Conservation Society Australia Board. Member of the Performance, Audit, Risk and Safety Committee. Ms Bingham-Hall is a Non-executive director of Dexu Property Group, Fortescue Metals Group and Supply Nation. She also chairs Vocus Group and the Advisory Committee of the Climate Governance Initiative, Australia and is Deputy Chair of the Crescent Foundation. Ms Bingham-Hall has extensive experience in the building, construction and property industries and has been a vocal advocate for sustainability, workplace safety and ESG issues for more than a decade. She also spent 10 years as a Director and Deputy Chair of the Tourism and Transport Forum. A member since 2 September 2013. Reappointed 2 August 2021. Term expires 31 December 2023.

### **Ms Kristin Stubbins AM (5/6)**

BComm, BA, FCA

Ministerial Appointee. Deputy Chair and Chair of the Performance, Audit, Risk and Safety Committee. Ms Stubbins is an Executive Board member and Strategy & Transformation Leader for PwC Australia. She has previously held the roles of Acting Chief Executive Officer and Assurance Leader for the firm, as well as acting as the lead auditor for some of PwC Australia's largest audit clients. She has a passion for innovation and bringing together diverse groups of people to effect change. In 2023, Ms Stubbins was appointed as a Member of the Order of Australia (AM) for significant services to the financial sector, women and the community. Ms Stubbins was named as one of the Australian Financial Review's '100 Women of Influence' in 2019, having been nominated in the innovation category. She is a Board Member of Mindgardens (an innovative mental health alliance) and works with a group of senior female business leaders seeking to empower women in developing nations through education. Appointed 1 July 2021. Term expires 30 June 2024.

### **Ms Laura Berry (6/6)**

GradCert, MAICD

Ministerial Appointee. Chair of the Community Engagement and Sustainability Committee. Ms Berry's career has spanned both private and public sectors over two decades, most recently as the CEO of Indigenous business organisation, Supply Nation where between 2015 and 2022 she led the organisation through a significant period of growth. Ms Berry has extensive experience across stakeholder management, risk

mitigation and reputation management and working with Indigenous business and procurement. She is a founding director of the Global Supplier Diversity Alliance, and in 2018, Ms Berry was announced as one of the Australian Financial Review's '100 Women of Influence'. During 2020 she served as a Commissioner for the Prime Minister's National COVID-19 Commission. Laura is an advisory board member of Uniq You and a member of Chief Executive Women. Appointed 26 April 2022. Term expires 31 December 2025.

### **Ms Jennifer Cowley OAM (6/6)**

BA, Dip.Soc.Sci, Dip.Man

Nominated by an organisation involved in providing financial or other support to Taronga Western Plains Zoo. Member of the Wildlife Conservation Committee and Community Engagement and Sustainability Committee. Ms Cowley has built a career in regional media and community development over many years – she is a journalist, editor and published author of a number of non-fiction and children's books. She has significant experience working with at-risk youth, in the mental health, loss and grief spaces and has been involved with a number of humanitarian projects in Australia and around the world. She has also worked extensively with the remote Aboriginal communities of Central Australia and Western NSW. She is a devoted advocate for regional Australia, its communities and people. In 2019, Ms Cowley was awarded the Order of Australia Medal (OAM) for her services to regional communities through a range of organisations. Appointed 26 April 2022. Term expires 30 June 2025.

### **Mr Joe David (6/6)**

Dip Law

Nominated by an organisation involved in providing financial or other support to Taronga Zoo and representing Taronga's volunteer community. Member of the Performance, Audit, Risk and Safety Committee and Wildlife Conservation Committee. Mr David is a Special Counsel in the Property and Real Estate practice group of national law firm Corrs Chambers Westgarth. This role follows on from an extensive career in law, in private practice at other national and international law firms. He has also represented many of Australia's leading property developers. Mr David was named in the 2019, 2020, 2021, 2022 and 2023 editions of Best Lawyers in Australia in Real Estate. He has been an active volunteer at Taronga Zoo since 2017. Appointed 6 June 2022. Term expires 30 June 2025.



### Ms Catherine Harris AO PSM (6/6)

B. Com, Hon.DBus

Ministerial Appointee. Member of the Wildlife Conservation Committee and Community Engagement and Sustainability Committee. Ms Catherine Harris is Chairperson of Harris Farm Markets Pty Ltd. She is on the Board of The Australian School of Business UNSW and GreenCollar Pty Ltd. Until recently, Ms Harris was the Consul General for Bhutan and served as a Board Member of the Australian Ballet. Previous roles have included Federal Director of Affirmative Action and Deputy Chancellor of the University of New South Wales, NRL Commissioner, Trustee of the Sydney Cricket Ground Trust, the Australian Defence Force Academy, the National Gallery of Australia, Museum of Contemporary Art, the Sports Australia Hall of Fame and Chairperson of the Australia Japan Foundation. Ms Harris is an Officer in the Order of Australia and was awarded the Australian Public Service Medal, the Centenary Medal and has an Honorary Doctorate in Business from the University of New South Wales. Appointed 6 June 2022. Term expires 31 December 2025.

### Mr Michael Herring (2/2)

B Comm LLM

Ministerial Appointee. Member of the Performance, Audit, Risk and Safety Committee. Mr Herring spent 17 years as an Executive Director of Macquarie Group Limited, 12 years as Group General Counsel and five years as an investment banker with Macquarie Capital. Prior to his role at Macquarie Group, Mr Herring was a corporate partner and a managing partner at King & Wood Mallesons for over 16 years. He is a Director of ASX listed Region Group Limited. Mr Herring has also been a Director and Chairman of The Skin Hospital and a Director of Osteoporosis Australia Limited. Appointed 1 January 2023. Term expires on 31 December 2026.

### Ms Sarah Norgate (5/5)

BA LLM (UNSW); GradDip Applied  
Corporate Governance (GIA)

Representing Mosman Council. Member of the Performance, Audit, Risk and Safety Committee. Ms Norgate has been practising as a commercial and property lawyer in Sydney for many years. She currently manages the in-house legal team at Metcash, Australia's leading wholesale distribution and marketing company supporting food, liquor and hardware independent businesses. Ms Norgate regularly advises on risk and compliance issues, mergers and acquisitions, tendering, contracting, property development and disputes and litigation. Appointed 19 July 2022. Term expires 30 June 2024.

### Dr Ian Roth PSM (6/6)

BVSc, MANZCVs, GAICD

Ministerial Appointee. Chair of the Wildlife Conservation Committee and member of the Community Engagement and Sustainability Committee. Director on the Board of RSPCA NSW, life member of the Australian and New Zealand College of Veterinary Scientists, member of the Australian Veterinary Association, member of the Australian Veterinary Conservation Biology group and a graduate of the Australian Institute of Company Directors. Until January 2016, Dr Roth was the NSW Chief Veterinary Officer, Director of the Animal Welfare Unit within NSW Department of Primary Industries and a Director of Wildlife Health Australia. He has worked in the areas of animal health and animal welfare for more than 40 years and was honoured in the 2016 Australia Day Awards with a Public Service Medal "for outstanding public service to veterinary science, particularly animal welfare and biosecurity in NSW". Member since 2 September 2013. Reappointed 2 August 2021. Term expired 30 June 2023.

### Mr Murray Wood (5/6)

EnvSc&Mgt, MBA

Representing Dubbo Council. Member of the Performance, Audit, Risk and Safety Committee and Community Engagement and Sustainability Committee. Mr Wood is currently the Chief Executive Officer of Dubbo Regional Council, which has a population of approximately 55,000 people across an area of some 7,500km<sup>2</sup>, and maintains an annual budget of \$230 million. Mr Wood leads an organisation of 538 staff with a wide range of operations and services to the community within the Local Government Area. This role follows on from an extensive career in government at both state and local levels, affording him the opportunity to develop a wealth of industry experience and knowledge across regional NSW in addition to the establishment of national and international networks. Appointed 11 October 2021. Term expires 26 September 2023.

### Board Member Attendance

Member	Ordinary Meetings
Ms Penny Bingham-Hall	6 of 6
Ms Kristin Stubbins AM	5 of 6
Ms Laura Berry	6 of 6
Ms Jen Cowley OAM	6 of 6
Mr Joe David	6 of 6
Ms Catherine Harris AO PSM	6 of 6
Mr Michael Herring	2 of 2
Ms Sarah Norgate	5 of 5
Dr Ian Roth PSM	6 of 6
Mr Murray Wood	5 of 6



# OUR COMMITTEES

## Board Committees

### Performance, Audit, Risk and Safety Committee (6)

Monitors financial performance, work health and safety, human resource management, information technology, capital works programs and asset management. Monitors and covers issues relating to internal control systems, risk management systems, financial reporting and other financial responsibilities. Representatives from the NSW Audit Office and internal auditors KPMG attend meetings as required. Consists of selected Board members:

- Ms Kristin Stubbins AM – Chair
- Ms Penny Bingham-Hall
- Mr Joe David
- Mr Murray Wood
- Mr Michael Herring
- Ms Sarah Norgate

### Community Engagement and Sustainability Committee (6)

Monitors environmental, social and governance (ESG), environmental sustainability, Taronga Foundation, Commitment to Country, education, guest experience, community programs, communications and tourism development. Consists of selected Board members:

- Ms Laura Berry – Chair
- Dr Ian Roth PSM
- Ms Jennifer Cowley OAM
- Ms Catherine Harris AO PSM
- Mr Murray Wood

### Wildlife Conservation Committee (6)

Monitors strategic priorities – Wildlife Care and Welfare as well as Conservation Action. This includes husbandry and enrichment, preventative healthcare programs, population management, wildlife rescue and rehabilitation, conservation science and fieldwork, recovery programs, rewilding, conservation partnerships, biosecurity and veterinary services. Consists of selected Board members and external contributors from appropriate specialist fields:

- Dr Ian Roth PSM – Chair
- Ms Jennifer Cowley OAM
- Mr Joe David
- Ms Catherine Harris AO PSM
- Prof Richard Kingsford, University of NSW
- Ms Brooke Taylor
- Mr Steve Coleman, RSPCA NSW
- Dr Simon Longstaff AO, The Ethics Centre

## Other Committees

### Animal Ethics Committee (6)

Statutory committee through which all research projects involving animal research must be approved. Constituted in accordance with the Animal Research Act 1985 and consists of the following representatives:

- Dr Justine O'Brien – Chair
- Dr Monique Van Sluys (Researcher)
- Dr Jo Day (Researcher)
- Dr Frances Hulst (Veterinarian)
- Dr Peter Johnson (Veterinarian)
- Dr Benn Bryant (Veterinarian)
- Mr David Roden (Independent representative)
- Mr Harold Eagleton AM (Independent representative)
- Dr Catherine Brett (Animal welfare representative)
- Mr Aaron Purcell (Animal welfare representative)

The committee reviewed and approved 14 new projects. The committee also approved 32 ongoing projects and 14 amendment applications.

### Science Advisory Council (7)

Brings representatives of Taronga's academic, conservation and community partners to provide subject matter expertise and strategic input into Taronga's conservation science goals, research initiatives, grant opportunities and all matters relating to conservation science at Taronga.

- Prof Richard Kingsford, University of NSW - Chair
- Dr Ian Roth - Deputy Chair
- Pro Deputy Vice Chancellor Lesley Hughes, Macquarie University
- Prof Kathy Belov, The University of Sydney
- Dr Rebecca Spindler, Bush Heritage Australia
- Dr Kristofer M. Helgen, Australian Museum
- Dr Georgina Kelly (Government Partner)
- Ms Gretel Packer AM (Community Partner)
- Dr Justine O'Brien (Taronga representative)
- Mr Cameron Kerr AO (Taronga representative)
- Mr Nick Boyle (Taronga representative)

### Taronga Aboriginal Advisory Group, Cammeragal Country

As part of Taronga's commitment to Reconciliation, the Taronga Aboriginal Advisory Group (TAAG), on Cammeragal Country was established in 2019. The purpose of the group is to support and guide Taronga Zoo's journey to Cultural Excellence, building strength in relationships and providing advice, knowledge and truth of Aboriginal Culture at Taronga Zoo. The Taronga Aboriginal Advisory Group (TAAG), Cammeragal Country includes:

- Prof Dennis Foley
- Susan Moylan-Coombs
- Francis Bodkin
- Gavin Andrews
- Caroline Glass-Pattison
- Kerry Toomey
- Claire Beattie
- Gary Field
- Roxanne Saunders
- Daniella Dickson
- Paul Sinclair

Taronga Western Plains Zoo's Community consultation is facilitated through local Yarn Ups and Community team representation on relevant Community groups. Yarn Ups are facilitated by the Community team and aims to achieve proactive, respectful and authentic consultation with the Aboriginal Elders, Community and relevant groups in Dubbo.



# CHIEF EXECUTIVE REPORT

In all areas of our organisation, Taronga has an important vision: to secure a shared future for wildlife and people. We do this in a myriad of ways – from educating and inspiring the next generations of conservationists to breeding and releasing endangered animals back to the wild.

This past year has seen us reach some momentous milestones. We opened a new Wildlife Hospital at Taronga Western Plains Zoo, not only increasing our capacity to treat and rehabilitate native wildlife, respond in emergencies, and support conservation programs, but also providing a window to our guests as to how we heal the wild.

We've made great strides across our conservation breeding programs, including our first-ever release of Chuditch to the Vulkathunha-Gammon Ranges in South Australia, only months after the program was established.

In April, I was lucky enough to join our expert team and conservation partners as 10 Platypus were reintroduced into the Royal National Park, where they have been locally extinct for 50 years. The release marks the culmination of two years of collaborative, science-driven planning and was particularly poignant as we work across multiple projects and disciplines to protect our emblem species.

Taronga is well and truly making a global contribution to conservation, in so many ways. Thanks to a world-first reproductive treatment, critically endangered Black Rhinoceros 'Kufara' gave birth to a male calf 'Matabo' – the result of an international research partnership which has wide-reaching implications to help secure genetic diversity for this species on the brink.

In November last year, Taronga representatives attended the UN's 19th Conference of the Parties in Panama to meet with like-minded experts on the issue of wildlife trade. As part of the conference, they made interventions and supported the up-listing of the Pygmy Blue-tongue Lizard affording it the greatest level of protection from trade.

Taronga's commitment to embed a way of working that respects and includes Indigenous peoples has continued across all aspects of our organisation. The rescue of 130 Loggerhead Turtle eggs showcased how powerful the collaboration between Cultural and conservation teams can be, with the Darkinjung Local Aboriginal Land Council working with First Nations staff at Taronga to ensure the

Cultural safety of the eggs and hatchlings while at Taronga on Cammeraigal Country and their return to the ocean and Darkinjung Country.

Our education programs continue to champion a new generation of wildlife conservationists and I'm particularly proud of the growth of our School Based Apprenticeship and Traineeship program, which saw the employment of an additional 12 Indigenous trainees this year, bringing the total number to 19.

After a challenging few years with the impact of the pandemic, it was so rewarding to see Taronga prosper once again, with strong visitation throughout the year thanks to local and domestic support as well as the return of international tourism. This was spurred on with the opening of Nura Diya Australia – a state-of-the-art native wildlife experience that combines Culture and our iconic wildlife which has been a huge highlight for our guests.

These examples are just a snapshot of all that we have achieved this year. I am so proud of our teams, and I am grateful for their hard work and dedication. Everyone from volunteers and keepers to our administration staff and science and conservation teams play such an important role in driving us forward and the gains we have made this year would not have been possible without each and every one of them.

With so much momentum behind us, I'm more excited than ever to see what we will be able to achieve for our beautiful natural world over the coming years and the impact we can have to secure a shared future for wildlife and people.



Cameron Kerr AO  
Chief Executive Officer





CEO CAM KERR RELEASING PLATYPUS  
AT THE ROYAL NATIONAL PARK  
WITH DR PHOEBE MEAGHER,  
SAM BENNETT AND AMY GUILFOYLE  
PHOTO BY R. FREEMAN,  
UNIVERSITY OF NEW SOUTH WALES



# OUR ORGANISATION



RELEASE OF THE CRITICALLY  
ENDANGERED PLAINS-WANDERER  
AT OOLAMBAYAN NATIONAL PARK  
PHOTO BY ALEX PIKE, DPE

**Minister for Climate Change, Energy, Environment and Heritage**  
The Hon. Penny Sharpe MLC

**Taronga Conservation Society Australia Board**  
Chair Ms Penny Bingham-Hall BA FAICD SF Fin

**Chief Executive**  
Mr Cameron Kerr AO BSc (Hons), MCom, GAICD

## Executive Team

**Mr Simon Duffy AM**  
*BTeach, BEd, GAICD*  
**Executive Director,  
Taronga Zoo**

- Commercial
- Education
- Wildlife and Horticulture
- TZ Accommodation
- Guest Experience
- Asset Management

**Mr Steve Hinks**  
*DipMgmt, DipBus, MMgmt*  
**Divisional Director,  
Taronga Western  
Plains Zoo**

- Commercial
- TWPZ Accommodation
- Marketing and Communications
- Wildlife Operations
- Asset Management

**Mr Stuart Marshall**  
*BCom*  
**Divisional Director,  
People, Culture  
and Safety**

- Human Resources
- Work, Health and Safety
- Volunteer Programs
- Organisation Development and Learning
- Diversity and Inclusion

**Ms Leila Davis**  
*DipMktg, MFIA*  
**Divisional Director,  
Marketing,  
Communications  
and Fundraising**

- Marketing and Digital Communications
- Design Studio
- Tourism and Trade
- Fundraising and Membership
- Corporate Partnerships
- Contact Centre
- Data Management

**Ms Narelle Beattie**  
*BCom, MA, CA*  
**Divisional Director,  
Corporate Services  
and Governance**

- Finance
- Procurement and Legal
- Governance and Risk
- Information Technology
- Capital Programs

**Mr Nick Boyle**  
*BSc (Comms), LLB*  
**Divisional Director,  
Welfare, Conservation  
and Science**

- Conservation Science
- Animal Population and Welfare
- Taronga Wildlife Hospitals
- Animal Nutrition
- Recovery and Rewilding Programs
- Restoration Programs
- Environmental Sustainability



# OUR FOOTPRINT

## Taronga Zoo, Sydney

Located on the Sydney Harbour foreshore on Cammeragal Country, Taronga Zoo is a leading conservation zoo and tourism destination. Taronga Zoo supports breeding programs for critically endangered species such as Northern and Southern Corroboree Frogs, Regent Honeyeater and Christmas Island Blue-tailed Skink. With more than 20 keeper presentations each day, local and international guests develop a deeper understanding of wildlife and are inspired to take action. Taronga Zoo is home to the Taronga Institute of Science & Learning, which provides world-leading conservation education, research and science. Unique experiences like the Wildlife Retreat at Taronga, Roar and Snore, Vivid and Twilight at Taronga provide options for people wishing to engage with the Zoo in different ways.

## Taronga Western Plains Zoo, Dubbo

At Taronga Western Plains Zoo, guests observe wildlife in an open range environment. Taronga Western Plains Zoo is situated in Dubbo on Wiradjuri Country and has a global reputation for Rhino breeding programs and cares for other endangered and vulnerable species including the Sumatran Tiger, Siamang and African Lion. It is also home to the Taronga Wildlife Hospital, Dubbo – the only dedicated wildlife hospital west of the Blue Mountains. An increasing number of guests choose to experience the Zoo overnight by staying at Zoofari, the Savannah Cabins or Billabong Camp. These overnight offerings improve education and conservation outcomes through immersive experiences.

## Taronga Sanctuary

Taronga Western Plains Zoo has become a threatened species conservation powerhouse in regional NSW with four successful breeding programs operating out of the Taronga Sanctuary. In 2019, this 110-hectare breeding hub was established behind-the-scenes at Taronga Western Plains Zoo. The semi-wild habitat is home to populations of Greater Bilbies and Chuditch (also known as Western Quolls), as well as breeding aviaries for Plains-wanderers and Regent Honeyeaters. The aim of the Taronga Sanctuary is to be an endangered species haven, where animals can live and breed in a wild manner, closely monitored by conservation officers and keepers, before being released to bolster wild populations.

## Taronga Box-gum Woodland Rewilding Sanctuaries

Announced in April 2022, this project will see more than 5,000 hectares of Koala habitat, targeting Box-gum Grassy Woodlands – a critically endangered ecological community – restored and revegetated in NSW to provide critical habitat for threatened species. The project forms part of the NSW Koala Strategy and will be a significant tool in protecting fragile Koala populations. This project will also provide vital climate resilient habitat for a wide range of other iconic species, such as Spotted-tail Quoll and Regent Honeyeaters, allowing for maximum return on conservation investment. As habitat condition improves through restoration, Taronga will pursue opportunities to reintroduce additional species to the area.

## Partners on the frontline

Taronga works closely with the NSW Government, the NSW Department of Environment, NSW National Parks and Wildlife and other government partners on many species recovery programs to prevent the extinction of native wildlife and to secure resilient ecosystems. The threats facing our native animals are complex and the only way we can succeed in preventing species' decline is to act together. It is through this combination of knowledge and action that we see glimmers of hope.





## New South Wales

**Marine turtle critical habitat identification**  
NSW

**Regent Honeyeater conservation breeding and translocation**  
NSW

**Conservation breeding and translocation of Greater Bilbies**  
Taronga Western Plains Zoo

**Comparing habitat preferences of Greater Bilby founder groups**  
Taronga Western Plains Zoo

**Conserving Koalas in peri-urban areas**  
Port Stephens

**Northern Corroboree Frog translocations and strategic biobanking**  
Brindabella Mountains

**Threatened frog surveys and reproductive research**  
NSW Northern Tablelands

**Post-fire and post-translocation monitoring of threatened marsupials**  
Booderee National Park

**Southern Corroboree Frog translocations and strategic biobanking**  
Kosciusko

**Seabirds to Seascapes - Understanding the impact of environmental change on food availability for marine predators to inform ocean policy and conservation strategies**  
NSW

**Shark neurophysiology and deterrents**  
NSW





Combating illegal trade  
of Australian wildlife

Australia (nationally)



Frog mass mortality  
investigation

Australia (nationally)



Restoring populations  
of endangered  
Great Desert Skinks at  
Newhaven Wildlife Sanctuary

Northern Territory



# OUR WORK ACROSS AUSTRALIA

Over the last 12 months, Taronga scientists, conservation team and partner organisations conducted multidisciplinary programs under our unified mission of leading and supporting effective conservation through innovative science that ensures species' survival and the long-term security of resilient ecosystems.

Taronga's programs and partnerships within Australia have been carefully selected to ensure effective, practical and timely outcomes that address urgent, current and future conservation challenges. Taronga plays a leading role in several national threatened species recovery programs and contributes to 27 state and national recovery programs. Together with partners in university, government and conservation groups, Taronga has secured scientific grants from donors, corporate partners and highly competitive funding bodies, including the Australian Research Council, to support these programs.

## Australia (Nationally)

**Marine turtle critical habitat  
identification**

NSW

**Regent Honeyeater conservation  
breeding and translocation**

NSW

**Conservation breeding and  
translocation of the Plains-wanderer**

Taronga Western Plains Zoo

**Conservation breeding and  
translocation of the Chuditch**

Taronga Western Plains Zoo

**Conservation breeding and  
translocation of Greater Bilbies**

Taronga Western Plains Zoo

**Comparing habitat preferences of  
Greater Bilby founder groups**

Taronga Western Plains Zoo





#### Forging new strategies for human-dingo coexistence

Myall Lakes National Park

#### Conserving Koalas in peri-urban areas

Port Stephens

#### Northern Corroboree Frog translocations and strategic biobanking

Brindabella Mountains

#### Threatened frog surveys and reproductive research

NSW Northern Tablelands

#### Post-fire and post-translocation monitoring of threatened marsupials

Booderee National Park

#### Southern Corroboree Frog translocations and strategic biobanking

Kosciusko

#### Seabirds to Seascapes -

Understanding the impact of environmental change on food availability for marine predators to inform ocean policy and conservation strategies

NSW

#### Platypus translocations and environmental surveys

NSW

#### Shark neurophysiology and deterrents

NSW

#### Understanding the impact of disease and pollution on Green Turtles and Fur Seals

Australia (nationally)

#### Animal welfare and veterinary ethics in wildlife emergency rescue

Australia (nationally)

#### Taronga's Australian Registry of Wildlife Health: Wildlife health preparedness and response including disease investigations to support One Health programs

Australia (nationally)

#### Uluru-Kata Tjuta National Park Mala Census; Fire Management strategies in Kakadu National Park

Northern Territory

### Field Grants

#### Restoring populations of endangered Great Desert Skinks at Newhaven Wildlife Sanctuary

Northern Territory

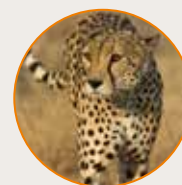
# OUR GLOBAL REACH

Taronga partners with 22 organisations working on the front line of conservation in 14 countries.

From Cambodia to Cameroon, and Botswana to Nepal, Taronga works with conservation experts in the field to protect priority species and habitats, facilitate ways that people can live and share environments with wildlife, and foster community and government support for conservation. With these close partnerships, we ensure that our contributions have long-term effects and outcomes for biodiversity that are measurable in the wild.

Mind the gap: protecting a cryptic population of jaguars in a reserve network in the Cerrado, Brazil.

Brazil



Cheetah Conservation

Botswana

## Conservation Partnerships 2022

### Save the Bilby Fund

Australia

### Save Vietnam's Wildlife

Vietnam

### International Rhino Foundation

Sumatra, Indonesia

### Department of Biodiversity, Conservation and Attractions (Chuditch)

Australia

### TRAFFIC

Asia

### Cheetah Conservation

Botswana

### Northern Rangelands Trust

Kenya

### Jane Goodall Institute Australia

Democratic Republic of Congo, Burundi

### Botswana Predator Conservation Trust

Botswana

## Field Grants

### New Nature Foundation

Restoring Habitat for Kibale National Park through Invasive Plant Biomass Briquette Production  
Uganda

### Endangered Wildlife Trust

Using dogs to detect snares and reduce poaching  
South Africa

### International Crane Foundation

Restoring the Kafue Flats floodplain in Zambia by preventing the return of an invasive plant  
Zambia

### Elephants for Africa

Installing a solar-powered cluster fence to prevent elephant crop-raiding in a village  
Botswana



**Endangered Wildlife Trust**

Protecting threatened species and their habitats in South Africa's Soutpansberg mountains

South Africa

**Conservation International**

Sea Turtle Conservation in the Nesting Capital of Fiji's Largest Seascape

Fiji

**The Soala Foundation**

Finding Soala to Save Soala

Vietnam

**Project Numbat**

Population survey and monitoring of Numbats in Boddington, Western Australia

Australia

**Birdlife Australia**

Tackling nest predation on Regent Honeyeaters: a new approach for bird conservation globally

Australia

**Wildlife Conservation Research Unit**

Mind the gap: protecting a cryptic population of jaguars in a reserve network in the Cerrado, Brazil

Brazil

**Giraffe Conservation Foundation**

Africa's wildlife conservation leaders – enhancing capacity, one veterinarian at a time

Namibia

**Banda Community Group at Nyungwe National Park**

Capacity building on family planning for sustainable conservation of Nyungwe National Park

Rwanda

**Woodland Park Zoo**

Applied Land Use Monitoring Technology for Community-Based Management of the YUS Conservation Area

Papua New Guinea





# IMPACT THROUGH EDUCATION *and* EXPERIENCE

Offering inspiring and fun experiences that connect people to wildlife, shaping wildlife friendly attitudes, beliefs and behaviours





POSSUM (BURUMIN,  
SYDNEY FIRST LANGUAGE;  
WILAY, WIRADJURI  
FIRST LANGUAGE)  
LANTERN ON THE WILD  
LIGHTS AT TARONGA TRAIL  
DESIGNED BY NATHAN PECKHAM  
OF YURANA CREATIVE  
PHOTO BY MATT DUNBAR





## Impact

### Community Conservation Programs

Taronga's community conservation programs aim to inspire and motivate individuals, schools, businesses and the community at large to choose behaviours that support wildlife conservation and environmental sustainability.



#### Fish for Good

Promoting a healthy future for marine life by encouraging sustainable seafood choices. Taronga's Seals for the Wild presentation continues to inspire guests to choose MSC-certified seafood. Taronga has partnered with Seafood Positive's OneFishTwoFish program to return two fish into the ocean for every fish consumed by Taronga's animals.



#### Litter Free Oceans and Rivers

Reducing single use plastics for the benefit of marine and freshwater species. The Litter Free community has reached 3,000 individuals, schools, and businesses, who are now all working to eliminate single-use plastics. These campaigns were promoted online and through bespoke stalls at Fair Day and through the All-At-Once community at the Jack Johnson concert to reach new audiences.



#### Raise Your Palm

Driving the transition towards a responsible palm oil industry. Taronga Zoo's Tiger Trek aims to raise awareness about the benefits of sustainable palm oil and leverage action from guests to encourage companies to transition to 100 per cent Certified Sustainable Palm Oil in their supply chains. Celebrating its fifth anniversary, Tiger Trek has welcomed over 4.3 million guests, of which more than 25 per cent have interacted with the Choice Mart supermarket activation. These guests have raised their palm for critically endangered Sumatran Tigers, sending 157,000 emails to 10 Australian retailers and manufacturers.



#### Wildlife Witness

Taronga's ongoing partnership with TRAFFIC Southeast Asia supports illegal wildlife trade monitoring and in partnership with Interpol and local enforcement agencies confiscation of illegally traded wildlife. In addition, Taronga supports a specialist Wildlife Crime Analyst based in Kuala Lumpur in an effort to tackle the ring leaders in the illegal wildlife trade.



#### Beads for Wildlife

This program supports people living side by side with wildlife in Northern Kenya through alternative and sustainable incomes. The sale of beadwork through the Zoos' retail outlets provides communities in Northern Kenya with a source of income, reducing human-induced pressures on wildlife such as poaching and habitat destruction. This year Taronga sold 17,252 beaded products across both Zoos with all profits returned to the craftswomen and their communities.



#### They're Calling on You

This program recycles mobile phones to reduce landfill and support primate conservation. Taronga has partnered with Mobile Muster and PhoneCycle to recycle and re-use mobile phones and divert them from landfill. More than 59,000 mobile phones have been reused and recycled through the campaign, which has now generated over \$95,000 in support of the Jane Goodall Institute Australia's primate conservation work in the Maiko-Tanya Kahuzi-Biega ecosystem in the Democratic Republic of Congo.





TARONGA'S HATCH ACCELERATOR  
PROGRAM 2023 FINALISTS  
PHOTO BY GUY DIXON

### HATCH: Taronga Accelerator Program

The third HATCH: Taronga Accelerator Program ran from February to June 2023 and supported seven passionate founders leading six innovative sustainability and conservation initiatives. The 2023 winner of the \$50,000 HATCH Grant was ReHabitat with their Habitat Pods concept. These lightweight, modular and biodegradable emergency refuges can be rapidly deployed to protect wildlife after natural disasters and environmental disturbances. ReHabitat also received the most votes for the \$5,000 People's Choice Award.

The other five teams included Scrunch (compression system to manage soft plastics), Reviving Cultural Practices (retainer and education service for traditional cultural burning), OneFishTwoFish – Seafood Positive (circular seafood economy), Be The Future (climate EDUtainment for kids) and LOWN (fashion rental platform tackling toxic fashion).

The program was supported by 30 mentors and subject matter experts, including industry professionals and not-for-profit and social enterprise leaders. HATCH judging was moderated by Cameron Kerr AO with a highly engaged judging panel including Ebony Gaylor, Andy Marks and Alexandra Holcomb. HATCH is proudly supported by BridgeLane Foundation, Wollemi Capital Group and Alexandra Holcomb.

A six-week online Pre-Accelerator Program also ran from October to November 2022. The program was designed to provide support for early-stage start-ups to kickstart their business journey.

### Taronga Documentary: Who's Who in the Zoo

The third season of Taronga: Who's Who in the Zoo, delivered in partnership with McAvoy Media, showcased Taronga's inner workings and conservation and science work to a global audience. The 16-episode season shot at Taronga's two Zoos and in the field focused on some remarkable stories, including the birth of five lion cubs, the breeding success of many critical conservation programs and countless wildlife rehabilitation stories from Taronga's Wildlife Hospitals. Locally, the series aired to great reviews from a loyal audience on the Nine Network, reaching a total of three million households nationally. Further afield, the series also aired in the US on popular network Nat Geo Wild as well as in 20 European countries. The success of the third series generated interest for a fourth series – filming took place January to April 2023. The 10-episode series captured 46 individual stories and will air in late 2023.

## Education

Education is at the core of Taronga's 360-degree approach to conservation, which targets wildlife as well as habitats and the community. Taronga offers a range of education and learning programs for primary and secondary school students through to tertiary, vocational and teacher professional development. These programs are delivered on various platforms, both onsite at Taronga's two Zoos, as outreach programs within the community, in other partner zoos and through digital platforms.

### School Education Programs

Taronga's school education programs aim to inspire the next generation of conservationists through curriculum-linked programs developed and delivered by qualified teachers, with several employed by the NSW Department of Education. Through this partnership, Taronga has access to curriculum experts who ensure all programs are of the highest quality. By providing access to incredible wildlife and environments, learning is brought to life through innovative and enriching opportunities for students.

#### On-site Experiences

At Taronga, students can engage in a variety of educational experiences both through a self-guided visit or when participating in a workshop. The high-impact and immersive learning workshops support students in deepening their understanding of content across multiple disciplines with a focus on STEM. Wildlife interactions in these workshops give students the opportunity to connect with a range of native and exotic species and enhance their knowledge of the curriculum. Through on-site presentations such as Seals for the Wild and Free Flight Birds, students can engage with Zoo experts, learn all about a variety of species and what they can do to become champions for the wild.

#### Teacher Engagement

This year, the Taronga Education Team has expanded its reach beyond its two Zoos, upskilling and empowering teachers to be advocates for the wild. The recognition of the team's expertise by various professional networks and associations resulted in the invitation to present at the NSW Science Teachers Association Annual Conference, Australian Independent Schools Science and Geography Conferences, COSI Network, Westies Conference and the NSW Annual STEM Conference. These presentations gave delegates the skills to authentically embed conservation, sustainability, biodiversity and appreciation of the local environment in the classroom.

#### ZooSnooz

This immersive overnight experience continues to be considered the 'wildest school sleepover' and has once again delivered strong results. This year more than 7,300 students embarked on this educational experience, which included exciting night-time discovery walks around the Zoo, early morning tours, behind-the-scenes encounters, and educator-led workshops. At Taronga Zoo, students can get up close and learn about a range of native wildlife and become advocates for the wild. At Taronga Western Plains Zoo, students are immersed in a Billabong Camp, an Australian bush tent site surrounding the waterhole.

#### Zoomobile and Regional Outreach Education

The Taronga Zoomobile continues to deliver exciting and enriching educational incursions to students in their schools. This metropolitan and regional outreach program has delivered quality curriculum-based experiences to more than 4,000 students this year and has travelled as far as Lake Cowal to deliver the Animals of the Dreaming program to remote schools. Taronga Western Plains Zoo's education team partnered with the NSW Department of Education's Environmental Education Centres, to deliver a three-day rural sustainability outreach event. This program saw more than 1,500 students from regional schools participate in engaging and practical activities focused on sustainability.

#### Project In-Situ

This year, Taronga's project-based conservation education program, Project In-Situ, engaged 1,130 students across 14 primary and secondary schools from the Northern Beaches and the Hay region. The target species for each region were the Little Penguin and Plains-wanderer respectively. Students were led through the design thinking process by Taronga's education curriculum specialists, with the support of their classroom teachers to create STEM-based conservation solutions specific to their local context. Working in-situ, students learnt about species through practical investigations and experiments – a key to the program's ongoing success is forging authentic connections to real world leaders in conservation.





STUDENTS IN THE  
RAINFOREST CLASSROOM  
AT THE TARONGA INSTITUTE  
OF SCIENCE & LEARNING  
PHOTO BY HARRY VINCENT

### Work Experience

School Work Experience at Taronga remains a competitive choice for secondary students in Years 10, 11 and 12. Both Zoos host students from across NSW, as well as students who travel interstate to help inform their choices to consider a career in conservation or STEM. Senior students utilise the immersive, week-long placement as an opportunity to guide their critical pathways as they look beyond school. This popular program empowers students in making informed vocational choices and has delivered strong learning outcomes. The School Work Experience Program hosted 272 students across both Taronga Zoo and Taronga Western Plains Zoo in 2022/23.

### HSC Depth Studies

Taronga continues to be a location of choice for authentic programming for HSC Depth Studies, with all formal Sydney events booking out within weeks of opening. The events held at Taronga provide an opportunity for Zoo Education Officers to build capacity of teachers and give students access to experts in the field of conservation and animal behaviour. The learning opportunities from the students' time at the Zoo provides stimulus for their further study upon return to school, laying the foundation for authentic learning that extends beyond the classroom and empowers them to be community leaders and advocates for the wild.

### Community Education Programs

#### Youth at The Zoo

Taronga's Youth at the Zoo (YATZ) program provides opportunities for young people at Taronga Zoo and Taronga Western Plains Zoo to participate in a range of onsite activities, gaining practical skills and industry experience while volunteering and interacting with Taronga staff and guests. There are currently 531 active YATZ members who contributed 15,488 hours to the Zoo in volunteer time, which would equal 17 full-time staff. In the past year, YATZ leaders received specialised leadership training and mentored newer members. These leaders are trained in access and inclusion, with guest trainers from ASPECT and the Sunflower Scheme, and leadership and communication skills from Taronga's own Organisational Development and Learning Team.

#### Keeper for a Day

Taronga's Keeper for a Day program gave more than 1,000 children, young people and adults the chance to work with keepers to learn how to best care for Taronga's animals and their habitats. In the past 12 months, Taronga's three Keeper for a Day programs have been modified to accommodate bespoke requests and unique learning opportunities for various education and community groups to connect with Taronga's staff and wildlife. More recently, our various programs have been adapted to better suit participants by including future pathway resources for those wanting to support Taronga in achieving positive outcomes for wildlife and conservation.

### Zoo Adventures 'Wild Squad'

The Wild Squad Zoo Adventures program continued to deliver a popular and exciting holiday adventure for more than 1,300 five to 12-year-olds at Taronga Zoo and Taronga Western Plains Zoo. This exciting education program immersed children in daily missions, craft activities and behind-the-scenes experiences with keepers.

### WINGS Program

WINGS is a supported work experience program for adults with intellectual disabilities. Currently, Taronga Zoo Sydney hosts crews from two agencies – Windgap Foundation and Avenue Coworking. Groups of five participants and their support team take on regular and adjusted tasks in a real-life work setting in the Zoo. The WINGS participants are supported by experienced staff and build a strong connection to the work they complete and the animals in Taronga's care.

### Aged Care and Dementia Program

The Community Programs team has continued to provide meaningful experience for aged care residents with the establishment of an on-site program with St Luke's Aged Care. Participants with dementia take part in enrichment building, meet with keepers after the Seals for the Wild and Free Flight Bird presentations and learn about Taronga's work. The response has been overwhelmingly positive, with some caregivers stating their loved one opened up and talked in a way they hadn't heard in many years.

### Taronga Training Institute

The Taronga Training Institute (TTI) is a Registered Training Organisation and delivers accredited certificate courses in Animal Care and Management. Training is delivered at five sites nationally: Taronga Zoo, Taronga Western Plains Zoo, Perth Zoo, Melbourne Zoo and Adelaide Zoo. In 2022/23, TTI enrolled 563 students nationwide.

TTI continues to deliver exceptionally high-quality training. In a survey of students who completed their ACM20121 Certificate II in Animal Care or ACM30321 Certificate III in Wildlife and Exhibited Animal Care training in 2022, 100 per cent were satisfied with the training. Furthermore, 97 per cent of survey respondents 'strongly agreed' that trainers had an excellent knowledge of the subject content, 100 per cent would recommend the training to others and 98 per cent said the training prepared them well for work.



### Taronga – University of Sydney Education Alliance

The Education Alliance with Taronga and the University of Sydney continues to have a global impact by providing training to the next generation of conservationists. Students undertaking the Bachelor of Science/Bachelor of Advanced Studies in Taronga Wildlife Conservation degree are given access to learn from Taronga and university experts, researchers, practitioners and dedicated teaching staff and make use of facilities at the university and at Taronga Zoo and Taronga Western Plains Zoo. In their fourth year of study, students spend a week in the Taronga Sanctuary immersed in conservation and practicing essential field skills, setting them up for the future career in conservation.

There are currently about 240 domestic and international students studying the degree. Taronga also provides training to 3,000 university students per year who are studying a different degree but take one or more of units of study offered by Taronga.

The degree has now seen two cohorts of graduating students. Alumni students have applied their degree far and wide with careers in ecology, local council policy writing, sustainability, biosecurity and bush regeneration, continued their training through post-graduate studies and even completed internships with Australian Wildlife Conservancy, and overseas in Africa.

This unique degree has been the recipient of two teaching awards, winning the University of Sydney Vice Chancellor's Award for Excellence in Teaching and silver at the international Reimagine Education Awards for the Power of Partnerships.



## Experience

### Inspiring our guests

#### Taronga Zoo

Inspiring connections with wildlife and expert staff and volunteers remains at the core of Taronga Zoo's operations. Throughout 2022/23, Taronga launched new initiatives and in person experiences to increase the value proposition for guests.

Launching in July 2022, the Centenary Theatre played host to three immersive, educational and engaging presentations – Reptiles Alive, Spiders Alive and Aussie Animals Alive. Running throughout the school holidays, these hosted presentations showcased an array of wildlife and used technology to take guests behind-the-scenes and see and learn about animals from across the Zoo. The presentations were exceptionally well-received and were regularly at capacity.

Collaborations with corporate partners provided guests new pop-up experiences. In partnership with Hasbro, two six-metre-tall transformer statues became the newest Zoo residents to mark the launch of Transformers: Rise of the Beast, with the popular characters providing a great photo opportunity for fans. In the April school holidays, a collaboration between Taronga's Zoo Friends and Red Energy saw the installation of a pop-up obstacle course, jumping castle and face-painters on the concert lawns much to the delight of parents and kids alike.

The opening of Nura Diya Australia was an overwhelming highlight of the year, proving particularly popular with both international and domestic visitors eager to learn more about Australian wildlife. The concurrent opening of the ngunuuy nara - Cultural Garden also provided an important space for guests and Community to come together on Country to share knowledge and connect.

Animal encounters continued to delight guests looking to extend their Zoo experience, with the returning Penguin Encounter a hit while the return of Wild Ropes in April delighted guests seeking a dose of adrenaline.

Over the course of the year, a full major events calendar was delivered with more than 70,000 attendees across NYE, Twilight at Taronga and Wild Lights at Taronga. Wild Lights at Taronga saw more than 100 new lanterns produced with this year's theme focused on collaborations with Indigenous artists and inclusivity.

By expanding the guest experience throughout the year, Taronga Zoo's Net Promotor Score (a measure of guest satisfaction) and visitor satisfaction surveys ended on a high.

#### Taronga Western Plains Zoo

Off the back of a record in 2021/22, Taronga Western Plains Zoo continued to provide its guests with unforgettable experiences to connect with both native Australian wildlife and some of the world's most iconic megafauna in an open range setting.

Lion Pride Lands proved to be one of the most popular wildlife experiences throughout the year, with 'Marion', 'Lwazi' and their three cubs delighting guests as they ventured into and began to explore the main habitat.

Over summer, the launch of a new, family-friendly pedal boat experience at Savannah Lake was a great success, giving guests a new way to marvel at Spider Monkeys and Black and White Ruffed Lemurs on the Primate Islands.

Taronga Western Plains Zoo has long been seen as a leader in conservation science and wildlife health care, and the opening of the new Taronga Wildlife Hospital, Dubbo allowed this previously behind-the-scenes work to be brought to the fore for guests to see and connect with on their visit. The interactive discovery garden has also proved to be very popular and engaged younger generations with Taronga's work for the wild.

Boo at the Zoo was a new event added to the calendar in October 2022, giving 1,000 guests a wild way to celebrate Halloween with a costume parade, wildlife experiences, keeper talks and even an extinct animal graveyard, which shared a powerful conservation message.

“

Guests can now see firsthand how Taronga heals the wild with previously 'behind-the-scenes' hospital activities now front and centre.

”



DINGOES 'KEP KEP'  
AND 'WARADA' IN  
NURA DIYA AUSTRALIA  
PHOTO BY  
HARRY VINCENT



## Spotlight

### Nura Diya Australia

Taronga Zoo's new immersive experience, Nura Diya Australia, brings together Country, Culture and conservation like never before. The name Nura Diya is from Sydney First Language and means 'This Country'; these words have been gifted to Taronga through ongoing and respectful consultation with First Nations People, including Taronga's Aboriginal Advisory Group, Cammeraigal and First Nations staff.

Nura Diya Australia combines four unique landscapes: buru nura – Kangaroo Country, gulamany nura – Koala Country, wuragal nura – Dingo Country, and nguwing nura – Nocturnal Country, home to a variety of native nocturnal species. Nura Diya Australia is now home to Wallabies, Koalas, Dingoes, Emus and Kangaroos.

This truly unique, intimate animal experience brings together remarkable and rare iconic Australian wildlife and state-of-the-art habitats, creating a rich, multi-sensory experience for guests that encourages exploration, reflection, and a desire to connect with nature, spirit, and Culture.

With powerful storytelling and contemporary Cultural visual language from First Nations artists guided by an ancient wisdom, Nura Diya Australia leaves guests with an understanding of the role they can play in speaking for the trees and protecting biodiversity for the health of the planet.

Nura Diya Australia features a new campaign, ReWild Your Life, that seeks to reduce deforestation and restore Australian biodiversity through the power of choice. The campaign focuses on improving recognition of the FSC ecolabel, switching to bamboo or recycled toilet paper, and planting native plants at home.



“

Into the wild I go, learning through the landscape,  
there is stillness through movement... I am part of this.

”

## Wild Lights at Taronga

With a strong focus on caring for Country and driving change, this year's Wild Lights event as part of Vivid Sydney debuted new breathtaking lanterns that shone a light on some of the country's most iconic species such as the Emu, Possum, Echidna, Dingo, Platypus, Kangaroo and Koala and the landscapes they call home. These lanterns were created by contemporary Aboriginal artist Nathan Peckham of YURANA CREATIVE and were part of a successful collaboration between precinct director Nicholas Tory and his technical and creative team at Ample Projects. Wild Lights at Taronga welcomed more than 49,000 guests across 18 nights and was once again supported by access and inclusion partner, Cushman & Wakefield. With a focus on building accessibility across the event as well as holding two dedicated access and inclusion nights.

## Twilight at Taronga

With unrivalled views of sunset over Sydney Harbour, the quintessential Twilight at Taronga 2023 Summer Concert Series returned after a two-year hiatus to deliver back-to-back weekends of live music from some of Australia's finest artists at one of Sydney's most picturesque locations. Guests enjoyed a picnic on the Concert Lawns and soaked up the last rays of a summer's day while watching, listening and dancing to the beats of their favourite artists. The line-up had something for everyone.

Twilight featured 14 concerts over five weekends and welcomed more than 24,000 guests through the gates. This year saw the introduction of two new types of shows – Lil' Twilight shows, morning shows aimed at kids to capture a new generation of Twilight fans and the inaugural Drag Gala that was part of Sydney World Pride.

## Building a Zoo for the future

Taronga continues to deliver several capital projects that transform the facilities for wildlife in our care, provide opportunities to expand Taronga's capacity for the treatment and rehabilitation of wildlife and deliver education and conservation programs. The delivery of current capital projects is coupled with a new project to produce a long-term master plan for both Zoos, which imagines Taronga in the year 2050.

## Taronga Zoo

### Amphibian and Reptile Conservation Centre

The Amphibian and Reptile Conservation Centre will be a world-class facility, connecting guests with important and fascinating species and breeding programs while raising awareness of the impacts of climate change on wildlife. It will be a multi-layered educational experience for guests that showcases the beauty and diversity of some of the most misunderstood and most imperilled creatures on the planet under threat from climate change, disease and habitat loss. Funding for the Conservation Centre comes from the Wild Futures Initiative and the NSW Government. Construction commenced in September 2022 and the experience is expected to open in 2024.

### Taronga Wildlife Hospital, Sydney

The Taronga Wildlife Hospital, Sydney is a key component of the Wild Futures initiative. The new hospital will provide new state-of-the-art facilities to match the world-leading expertise of the hospital team, expand capacity for wildlife treatment and conservation programs, provide larger facilities to provide best-practice training in wildlife health and provide interactive experiences to connect guests with the work of the hospital. Core veterinary treatment rooms, laboratories, and wildlife rehabilitation facilities, including a prominent marine wildlife rescue and rehabilitation centre, will be visible to guests from the public plaza and meeting place. The project is currently in the planning approval phase, with construction set to commence in early 2024 and be completed by late 2025.

### Platypus Refuge and Rehabilitation, Sydney

The Platypus Rescue and Rehabilitation Centre in Sydney comprises two facilities to support Platypus rescue, rehabilitation and research. The first facility was completed in May 2022 and can hold up to 10 Platypus for rehabilitation prior to reintroduction to the wild. This facility was recently used in the first translocation of Platypus in NSW, which saw 10 individuals released into the Royal National Park. The second facility, which is in the design phase, will be a hub for our wildlife and conservation team, allowing them to expand their understanding of Platypus reproduction and behaviour and support breeding. The conservation centre was completed in early 2023, with the Research Centre expected to be completed in 2024.



JANE BURGESS AND  
SENIOR VETERINARIAN DR. ALISA  
WALLACE PERFORMING KOALA  
HEALTH CHECK AT TARONGA  
WILDLIFE HOSPITAL, DUBBO  
PHOTO BY RICK STEVENS



## Spotlight

### Taronga Wildlife Hospital, Dubbo

The new Wildlife Hospital is the largest and most ambitious project in Taronga Western Plains Zoo's history. The \$14.6 million project opened on 7 December 2022 and was funded by the NSW Government and philanthropic donations.

The new hospital increases Taronga Western Plains Zoo's capacity to treat and rehabilitate native wildlife, improve its ability to act as first responders in emergencies and play a pivotal role in conservation programs for critically endangered species such as Greater Bilbies, Plains-wanderers, Chuditch and Regent Honeyeaters.

Excitingly, the new Wildlife Hospital is now on the circuit as the final stop for guests. It showcases advanced and purpose-built facilities where guests can see wildlife experts from multiple disciplines in action.

Guests can now see firsthand how Taronga heals the wild with previously 'behind-the-scenes' hospital activities now front and centre. Animal treatments, surgeries and research can be viewed as they happen via windows and TV monitors – a unique offering of education and awareness to guests on our world class animal care, conservation in action, and threats to our precious wildlife.

The Wildlife Hospital guest experience is brought to life by an extensive interpretation package. It showcases Taronga's extensive conservation, science and research efforts through a colourful and purpose-driven welcome and entry, engaging signage at each viewing window, small screens, and a large digital display for live and recorded emotive storytelling. There is also an array of exciting science and nature play-based learning installations like an interactive lab table, bilby ear inspired listening dishes and interactive wheel signs that explore the world of animal poo, and the way scientists use it to help conserve wildlife.



### Bellinger River Turtle Conservation Centre

The Bellinger River Turtle centre allows for the rescue and breeding of critically endangered Bellinger River Turtles, with the first phase of the project delivered in early 2023. The facility contains 14 tubs with state-of-the-art life support systems for rearing up to 150 juvenile turtles. A secondary facility which is due to be completed in late 2023 includes an aquarium with a hatching room and 40 tanks for the rearing of turtles before they can be moved into the external facility. With less than 200 Bellinger River Turtles left in the wild, this facility is critical to the species' survival.

### Sky Safari Revitalisation

Taronga Zoo's famous Sky Safari will be transformed into an unforgettable and accessible family experience thanks to a major investment from the NSW Government. The revitalised Sky Safari will provide accessible and efficient transport across the Zoo as well as a sensational sightseeing experience over Sydney Harbour. The project team has now commenced design, planning and consultation, with the upgraded Sky Safari expected to open in 2026.

### Taronga Western Plains Zoo

#### Platypus Rescue HQ

Construction of the Platypus Rescue HQ – a dedicated rescue and rehabilitation centre – continued throughout the year. The unique facility will provide future refuge for drought-threatened wild Platypus populations, and allow for ongoing research to study Platypus behaviour, a public Platypus habitat with an interpretative and educational overlay, and a pre-release area comprising a naturalistic creek line to prepare rehabilitated Platypus for release back into the wild. The project will be completed in late 2023.

#### Serengeti Plains

In partnership with Dubbo Regional Council, Taronga was successful in receiving a \$20 million grant from the NSW Government's Regional Tourism Activation Fund. This investment will go towards the development of the Taronga Western Plains Zoo's Serengeti Plains Visitor Experience and Eco-Accommodation Projects. This investment is supplemented by a \$10 million investment from Taronga. The project will include a new 55-hectare open range, multi-species exhibit, 20 two-bedroom cabins all with prime exhibit frontage, a large billabong-style pool and recreation area, a restaurant overlooking the exhibit, a casual dining area and a seated event space. The development application will be submitted in mid-2023 with the project set for competition in late 2025.

## Education and Experience Snapshot

7,300



students participated  
in Taronga's ZooSnooz  
wild overnight educational  
experience at both sites.

49,000+

guests were welcomed  
across 18 nights of  
Wild Lights at Taronga.



531 active YATZ members  
who contributed

15,488

hours to the Zoo  
in volunteer time.



17,252



beaded products from the  
Beads for Wildlife campaign  
were sold across both Zoos with  
all profits returned to the craftswomen  
and their communities.

STRATEGY



# WILDLIFE CARE *and* WELFARE

Global industry leader in wildlife care  
and continuous improvement in welfare







GIRAFFE NURSERY  
HERD AT TARONGA  
WESTERN PLAINS  
ZOO DUBBO  
PHOTO BY  
RICK STEVENS



## Animals in our Care

### Taronga Zoo

Taronga Zoo saw significant milestones in its wildlife operations, demonstrating its continued commitment to conservation, education, and animal welfare. Throughout the year, Wildlife Operations focused on breeding programs, research and conservation initiatives, and the opening of a new experience, Nura Diya Australia.

Nura Diya Australia is a world-class experience that was designed to share an Australian journey and story, and to provide habitat for several rare, vulnerable and endangered native species, such as the Bilby, Platypus, Ghost Bat and Chuditch (Western Quoll). The precinct was also designed with a First Nations' lens, to allow guests to learn about Cammerigal and the importance of these species to First Nations people, while also learning how best to support Taronga's ongoing conservation efforts.

The exhibits were designed to provide native wildlife with complex environments while also meeting high standards of welfare. The habitats in Nura Diya also promote an inspiring guest experience by enabling wildlife staff to tell the story of Taronga's conservation work through guided tours and informative Keeper talks that highlight the importance of biodiversity and the role that guests can play in safeguarding our natural world.

Nura Diya saw the reintroduction of Dingoes to Taronga for the first time in a decade. 'Kep Kep' and 'Warada' are now at home in a thoughtfully designed exhibit which includes many key features to ensure positive animal welfare.

This year the Wildlife Operations team has continued to play a significant role in contributing to Taronga's conservation breeding and recovery programs. This included the first reintroduction of the critically endangered Booroolong Frog to the Northern Tablelands in NSW and the birth of a Long-nosed Fur Seal pup in December 2022. Several Squirrel monkey babies were also born and successfully raised to be included in the group and Taronga Zoo also celebrated the birth of a healthy Chimpanzee baby.

### Taronga Western Plains Zoo

The Wildlife Operations team at Taronga Western Plains Zoo is responsible for the care of 57 species and saw several highlights throughout the year. Across the Zoo, new arrivals included Spider Monkeys, Ring-tail Lemurs, Tasmanian Devils, Giraffes, Addax, Blackbuck, Plains Zebra and a Black Rhinoceros calf. These births are testament to the teams who provide diligent care and

ensure optimal conditions. These new arrivals were very popular with guests, with the five Giraffe calves providing excellent viewing opportunities with one calf even born on exhibit in front of delighted guests.

Female Asian Elephant 'Anjalee' was successfully integrated to the herd of females as well as breeding bull 'Gung' following her arrival from Auckland Zoo. Recently, the team have worked diligently on introductions with the younger bulls 'Pathi Harn' and 'Sabai'. It is hoped that following these successful interactions, 'Anjalee' will be able to breed by the end of the year – key to her physical and social health.

While there were many highlights throughout the year, Taronga Western Plains Zoo and its community also farewelled several iconic and well-known animals. This included the loss of elderly Siamang pair 'Saudara' and 'Puteri', and 'Kani', a male Common Hippopotamus who was euthanised due to significant health issues in May 2023. 'Kani' had been receiving ongoing treatment for a leg injury, with a post-mortem revealing a complex break from which he would not have been able to recover.

Taronga Western Plains Zoo is renowned for its White Rhinoceros population and this year, adult female 'Mopani' gave birth to a young male calf 'Jabulani'.

### ZAA Accreditation

Taronga Western Plains Zoo demonstrated its commitment to positive animal welfare and this year was re-accredited by the Australasian Zoo and Aquarium Association (ZAA), the peak body that represents the collective voice of the zoos, aquariums, sanctuaries and wildlife parks across Australasia operating to the highest standards.

The ZAA Welfare Accreditation program is progressive, science-based and champions welfare from the animal's perspective. The framework considers not just the absence of negative welfare but the promotion of positive welfare. Welfare assessments were conducted for key species based on the five animal welfare domains.

During accreditation, Taronga Western Plains Zoo was required to provide compelling evidence for set criteria on both its operations and the experiences of its animals. This validated Taronga Western Plains Zoo's commitment to positive animal welfare, but also broader commitments to safety, biosecurity, conservation and sustainability. ZAA-accredited zoos and aquariums are assessed every three years to retain accreditation.





BLACK RHINOCEROS  
CALF 'MATABO'  
PHOTO BY  
RICK STEVENS



## Spotlight

### Black Rhinoceros Birth

Taronga Western Plains Zoo celebrated the birth of 'Matabo', a male critically endangered Black Rhinoceros calf in April 2023 who was born to mother 'Kufara' using a world-first reproductive treatment. This special birth was the result of an international research partnership in Black Rhinoceros conservation and represents the fifth calf born into the conservation breeding program in the last eight years.

With more than four years passing after 'Kufara's' last gave birth, Taronga's keepers, veterinarians and conservation scientists began efforts to address 'Kufara's' infertility as part of a collaborative Rhinoceros research program with Omaha's Henry Doorly Zoo and Aquarium, SeaWorld USA's Species Preservation Lab, biotech company STGenetics®, along with other conservation partners, funded by the Institute of Museum and Library Services and the Taronga Foundation.

Knowledge of the species' biology generated from our current and previous research was integrated into a clinical treatment program with 'Kufara' receiving a series of hormone treatments, ultrasound exams, along with blood and faecal hormone analyses, and finally conceiving naturally. With less than 6,500 Black Rhinoceros remaining in the wild due to habitat loss and poaching that supplies the illegal Rhinoceros horn trade, the birth of this Southern Black Rhinoceros is an important one. It also shines new light on the maximum gestation length the species can experience, with 'Kufara's' calf born 490 days after mating. This exceeds that of the longest reported gestation period for Black Rhinoceros of 486 days.



127



**Loggerhead Turtles**

released back to the wild  
on Darkinjung Country

LOGGERHEAD  
TURTLE HATCHLING  
BEING RELEASED  
TO THE WILD  
PHOTO BY  
HARRY VINCENT



## Spotlight

### Loggerhead Turtle Incubation and Release

On 9 January 2023, a Loggerhead Turtle nested on Shelly Beach on the NSW Central Coast, setting a new, southernmost nesting record. The nest was carefully managed and monitored however when the sand temperature dropped to 22°C on 29 March, the nest was excavated, and 134 eggs were transported to Taronga Zoo where a Cultural handover from Darkinjung to Cammeraigal Country was conducted on arrival. The hatching process began on 1 April, resulting in 93 healthy turtles fit for release out of the initial 130 eggs. These turtles were transported back to Shelly Beach on 9 April, where a welcome to Country and smoking ceremony took place before their release.

Volunteers, NSW National Parks and Wildlife Service representatives and Taronga teams patrolled the beach after dark, recovering 31 washback turtles due to the high swell and cool sand temperatures. These turtles, along

with two more found the following day, were returned to Taronga Zoo for care. All 33 turtles received fluids and critical care. On 12 April, the washback turtles, along with 25 recent hatchlings, were released two nautical miles offshore into the warm East Australian Current.

The rescue's success surpassed expectations, with an impressive 94.6 per cent of eggs hatching and turtles released. This achievement highlighted the collaborative efforts of NSW National Parks and Wildlife Service, Darkinjung Local Aboriginal Land Council, Central Coast Council, NSW TurtleWatch, Marine Wildlife Rescue Central Coast and Taronga. The release received significant media attention, with almost 200 media stories reaching 40 million people, fostering awareness and admiration for Leatherback hatchlings and Green Turtles.



## Animal Welfare

### Welfare

Taronga promotes positive animal welfare for all animals, both in human care and in the wild. Inherent within that, is caring for and portraying wildlife with the greatest dignity and respect, whilst delivering engaging and transformational guest experiences. Taronga's Animal Welfare Committee is charged with guiding our Animal Welfare Program to ensure standards are exceeded, continuous improvement is achieved, and contemporary welfare science incorporated into our framework. Taronga is committed to providing excellent care, health management, housing and species appropriate behavioural opportunities that promote positive experiences for all animals in our care.

### Research

Understanding of animal welfare is continually evolving. Taronga is continually engaging in research to deepen its knowledge and implement new approaches. This outlook on welfare research involves scientists, population managers, keepers, vets and nutritionists. Taronga's Conservation Behaviour Laboratory works collaboratively across both Zoos to conduct scientific research and disseminate findings to ensure we remain at the forefront of industry and community standards. Taronga's welfare research encompasses all animals in its care, from informing the design of future Zoo experiences to the rearing of animals bred for release to ensure success in the wild.

### Welfare on Display

Artificial intelligence (AI) has the potential to reshape our daily lives, and Taronga is harnessing the power of AI to explore animal behaviour and welfare. Researchers in the Conservation Behaviour Laboratory are developing tools and algorithms to identify and track individual animals throughout their daily lives. Over the past year, a pilot project has been conducted to observe Taronga's Giraffe herd using computer vision and AI. This data-driven understanding of animal behaviour can assist optimising enrichment programs, habitat designs and feeding strategies. While providing valuable information to keepers, vets and scientists, a major aim is to put this information on display to guests to enable a deeper understanding of the daily lives of these animals and an appreciation of our ongoing focus on the welfare of the individuals in our care.

## Taronga Wildlife Health and Rehabilitation

### Taronga Wildlife Hospitals

Taronga's veterinary teams are dedicated to delivering the highest standard of healthcare for the animals and wildlife under their care. They are committed to promptly responding to wildlife crises and actively sharing their expertise nationwide to enhance knowledge and capabilities in wildlife crisis management. Taronga places great importance on a comprehensive veterinary health program, which plays a vital role in upholding best-practice animal welfare, biosecurity, conservation and scientific endeavours.

The Wildlife Hospitals in Sydney and Dubbo follow a preventive medicine calendar, prioritising the health and wellbeing of the animals. They develop and implement programs for quarantine, vaccination and disease surveillance. Regular health assessments are conducted at different stages of an animal's life, with particular emphasis on critical phases such as growth and aging. Additionally, Taronga provides consultancy services to support other zoos, wildlife organisations and welfare agencies.

### Wildlife Nutrition

Taronga's nutrition department plays a crucial role in ensuring the animals receive nutritionally balanced and sustainable diets, promoting their health and welfare. Maintaining a consistent and high-quality food supply poses challenges due to adverse weather, disruptions in the supply chain and increasing costs, but Taronga remains steadfast in upholding the highest dietary standards and advancing the sustainability of animal feed, even in challenging circumstances.

Taronga's dedication to nutrition goes beyond its own facilities. Taronga takes a leading role in both in-situ and ex-situ nutrition research, which is integral to conservation efforts. Collaborating with manufacturers, Taronga actively contributes to the development of diets that can be used internationally and actively seeks out programs and partnerships to reduce waste and improve sustainability.

Furthermore, Taronga serves as a valuable resource for consulting and education, offering expert advice on nutrition for breeding and conservation programs throughout the region and providing mentorship for aspiring zoo nutritionists. Through these efforts, Taronga contributes to the overall welfare and conservation of wildlife by promoting optimal nutrition practices.



VETERINARIAN DR. SARAH  
ALEXANDER PERFORMING  
HEALTH CHECK ON RESCUED  
WEDGE-TAILED EAGLE  
AT TARONGA WILDLIFE  
HOSPITAL, DUBBO  
PHOTO BY RICK STEVENS



## Spotlight

### Taronga Wildlife Hospital, Dubbo

Taronga's new specialist Wildlife Teaching Hospital in Dubbo officially opened on 7 December 2022, marking a new era in wildlife care for Taronga's animal populations, conservation breeding programs and native wildlife treatment and rehabilitation. Treatment rooms, surgical facilities and laboratories are now on display, showcasing to Zoo visitors critically important clinical care and conservation science that has traditionally been done behind the scenes.

Jointly funded by the NSW Government and philanthropic donations, the new \$14.6 million hospital is a regional hub for the treatment of native animals such as Koalas, Platypus and raptors. This cutting-edge veterinary teaching hospital provides increased capacity to respond to wildlife emergencies and new educational opportunities for students, veterinary professionals and wildlife rehabilitators. The hospital also hosts a Cryodiversity Bank, an extension of Australia's first biobank holding living samples from endangered wildlife for active species recovery.





## Wildlife Rehabilitation

Taronga's two Wildlife Hospitals received 1,505 sick, injured or orphaned native animals for treatment and rehabilitation in the last year. The Taronga Wildlife Hospital, Dubbo received 620 native animals: 344 birds, 169 mammals, 104 reptiles and three amphibians. The Taronga Wildlife Hospital, Sydney received 885 animals: 419 birds, 237 mammals, 214 reptiles (including 130 Loggerhead Turtle eggs/hatchlings), and 15 amphibians. Overall, 316 native animals were released, comprising of 100 birds, 52 mammals, 138 reptiles and one amphibian. The hospitals hand-raised 27 animals and transferred 75 animals to wildlife rehabilitation groups for ongoing care.

Many marine turtles admitted to the Wildlife Hospital in Sydney were affected by plastic pollution and injuries from marine debris. One Green Turtle hatchling rescued with a stomach full of plastic at Tamarama Beach and weighing only 127g is due for release in the summer of 2023. Taronga collaborates with NSW National Parks and Wildlife rangers and Sydney Harbour Water Police to release marine birds and turtles offshore from Sydney Heads. The Taronga Marine Turtle Satellite Tracking Program released five Green Turtles with satellite tags, bringing the total of tagged turtles to 41, including one female that underwent a five-hour surgery to remove seven ingested fishing hooks and fishing line, which caused extensive intestinal damage.

Both hospitals successfully rehabilitated Platypus this year. One young female, entangled in fishing line, was admitted to hospital in Dubbo with foot and bill injuries. It recovered well and was released after a week. In Sydney, another young female weighing 300g, presented with poor body condition, dehydration, a heavy tick burden and poor waterproofing. It was assessed as not suitable for release and now resides in Taronga's collection as a Platypus conservation ambassador.

Since the opening of the new wildlife hospital in Dubbo in December 2022, seven Wedge-tailed Eagles have been admitted. The new hospital includes a flight tunnel for flight testing birds prior to release and the new raptor mews has noticeably improved housing for these large raptors.

In Sydney, an adult male Sea Eagle, injured after being struck by a boat in Newcastle Harbour, underwent treatment and weeks of veterinary attention and physiotherapy. Following four months of physiotherapy and exercise at Raptor Recovery in Falls Creek, the eagle returned to Taronga for leg banding and was returned to Hunter Wildlife for release where it had been found.

In conjunction with the Australian Bird and Bat Banding Scheme, 42 birds from 22 species were leg banded and released, allowing for post-release monitoring and data collection on survival and movement patterns.

## Training in Wildlife Rehabilitation

Taronga is the leading provider of veterinary services in wildlife rescue and rehabilitation in NSW and continues to expand its offerings in wildlife education. Education and knowledge sharing is a crucial strategy to improve both Taronga's and the nation's capacity to respond to wildlife crises through wildlife first aid.

## Veterinary Professional Training in Wildlife

Taronga offers Veterinary Professional Training in Wildlife Treatment and Care. With a strategic priority to increase capacity to assist wildlife in need, Taronga renewed partnerships with Zoos Victoria and Currumbin Wildlife Sanctuary to deliver workshops interstate in addition to its local offering. This hybrid program, combining online and face-to-face training, focuses on building the confidence, knowledge and skills required for the triage, first aid, treatment and care of wild Australian species.



GIRAFFE 'JIMIYU' UNDERGOING A HEALTH CHECK AT TARONGA ZOO SYDNEY  
PHOTO BY HARRY VINCENT





ECHIDNA REHABILITATION  
AT TARONGA WILDLIFE  
HOSPITAL, DUBBO  
PHOTO BY RICK STEVENS



Developed in collaboration with the NSW Department of Environment, NSW National Parks and Wildlife Service, and the University of Sydney's Koala Health Hub, the course is endorsed and accredited by the Australian Veterinary Association and the Veterinary Nurses Council of Australia. Since 2020, 1468 vet professionals have completed the online component, with 981 receiving subsidies from the Federal Government or the NSW Government's Koala Strategy.

### Taronga Wildlife Hospitals and Nutrition Research

Taronga collaborates with university and industry partners to conduct research, aiming to enhance wildlife welfare and conservation. While hospital teams collect numerous samples annually through the opportunistic sampling program, Taronga staff also take the lead in research. These include investigating skeletal development in Short-beaked Echidna, establishing urinalysis reference ranges for monotremes and marsupials, monitoring vitamin D levels in Southern Hairy-nosed Wombats, satellite tracking marine turtles, studying health and disease in Platypus, vaccinating Zoo animals for SARS-CoV-2, and conducting nutrition research on various species. This includes projects on carotenoids in Regent Honeyeaters, the vitamin E status of Plains-wanderers, gastric emptying, glucose metabolism and milk composition in Short-beaked Echidna and improving the Koala feed base with toxin assessment tools and artificial leaf supplements.

### Zoo Vet Residency

Dr Jess Whinfield, the first Resident in this three-year program, has now completed two and half years of training. The residency comprises hands-on training in Zoo and wildlife medicine and a research component. The research topic is 'Investigating the Health and Diseases of Platypuses in NSW'. Two of five thesis chapters have been written: 'Disease Risk Analysis for Platypus translocations', and a 'Retrospective review of Platypus medical records across Australia'. Research is progressing on the topics of protozoa of wild Platypuses in NSW; epidemiology of Leptospirosis in Platypuses; and novel disease processes in Platypuses. There has been crossover between the research aspects of the Residency and Platypus-focused clinical work, including the rearing of a rescued juvenile Platypus, and the translocation of Platypuses to Royal National Park. Research was presented at the 2022 Wildlife Disease Association Australasian-section conference and will be presented at 'The Future of the Platypus Conference' at Healesville Sanctuary, and International Translocation Conservation Conference in Perth.

## Wildlife Care and Welfare Snapshot

316



**native animals  
returned to the wild**  
following care at Taronga's  
two Wildlife Hospitals.

**'Tama', the Green Turtle  
hatchling, weighing only**

127g



was rescued  
with a stomach full of plastic  
on Tamarama Beach.

7

**Wedge-tailed  
Eagles**



admitted  
to the Wildlife Hospital  
at Taronga Western Plains Zoo.

**Critically endangered Black  
Rhinoceros** born after a

490



**day gestation period**, is the  
fifth calf born to the conservation  
breeding program in eight years.

STRATEGY



# CONSERVATION ACTION

Deliver world leading conservation  
action, recovery and science







GREATER BILBY AT  
THE TARONGA  
SANCTUARY IN DUBBO  
PHOTO BY RICK STEVENS



## Conservation Science and Recovery

Taronga's conservation science programs work to address a range of key threatening processes, impacting a diverse range of species, with a focus on some of the most critically endangered in Australia and around the world. With support from the Taronga Foundation and other funding bodies, Taronga drives wildlife conservation initiatives that ensure the long-term security of wildlife in suitable ecosystems and habitats.

Over the past 12 months, Taronga scientists, conservation officers and partner organisations have conducted multidisciplinary programs under a unified mission of increasing understanding and protection of wildlife through investigation, evidence-based application and communication of science to the community.

### In the Water

#### Marine Turtle Research

Taronga researchers are working with Macquarie University to analyse the tracking data obtained from turtles that have been released following rehabilitation at the Taronga Wildlife Hospital in Sydney between 2014 and 2023. Taronga has tracked 32 Green Turtles, five Hawksbill Turtles, one Loggerhead Turtle, and one Olive Ridley Turtle. Most turtles were tracked for more than 100 days (max 279 days), travelling up to 5,000km. Green Turtles generally stayed close to the coast and used the estuaries of the central and north coast of New South Wales. Hawksbill Turtles ranged widely into the South Pacific Ocean.

These results demonstrate successful rehabilitation of sick marine turtles and provide information on movement patterns and habitat use of juvenile turtles, an age class where little is known. By combining these tracks with habitat data from along the coast of New South Wales researchers can identify key areas of habitat critical for the conservation and management of Green Turtles in New South Wales.

#### CryoDiversity Bank

Working with local and global partners, Taronga scientists have continued to refine methodologies for cryopreservation of gametes (biobanking) across a range of species to support genetic management and wider conservation goals.

During 2022/23, Taronga staff and collaborators from the University of Wollongong cryopreserved 139 sperm samples from 44 frogs across four of Taronga's conservation breeding programs: Booroolong Frogs, Yellow-spotted Bell Frogs and Southern and Northern Corroboree Frogs. These scientists also attended



Melbourne Zoo to train and assist their staff in the collection and biobanking of sperm for the first time for an additional three breeding programs: the Baw Baw Frog, Spotted Tree Frog and Stuttering Frog.

In 2023, Taronga scientists also performed gamete rescue procedures to cryopreserve sperm from important animals within hours of death. Post-thaw tests of rhinoceros, hippopotamus and amphibian samples indicate good fertility potential and suitability for use in future assisted reproduction procedures to ensure managed wildlife populations remain genetically diverse and adaptive to change

#### Reef Recovery

Taronga continues to lead cryopreservation and biobanking efforts to secure the genetic diversity of corals from the Great Barrier Reef as part of the Australian Government's Reef Restoration and Adaptation Program. In 2022/23, Taronga scientists and collaborators including First Nations Peoples cryopreserved 239 samples from 33 colonies across four species collected from the central Great Barrier Reef, and a further 150 samples from 24 colonies of *Acropora millepora* collected in the Keppel Islands region (Konomie).

Importantly, many of the samples are from colonies with phenotypes indicating tolerance to ocean warming events, making these samples extremely valuable for future breeding of resilient corals. Fertilisation experiments showed that cryopreserved sperm can be used for production of coral larvae at the scale required to support aquaculture for reef restoration. Collaboration with Smithsonian Institution and University of Minnesota scientists to cryopreserve coral larvae have shown great promise, and Taronga's Cryodiversity Bank now contains cryopreserved coral larvae from the hard coral *Fungia fungites*.





REGENT HONEYEATER  
AT THE TARONGA  
SANCTUARY IN DUBBO  
PHOTO BY RICK STEVENS

### Australian Shark Incident Database

The Australian Shark Incident Database (ASID) was launched to the public last year via the open access platform GitHub, linked through Taronga's website. The move to open access has significantly increased the reach and impact of this data and improved efficiencies in data sharing across media, academia and the general public. As of June 2023, the online database has received more than 15,000 individual views and nearly 7,000 downloads. Taronga remains the custodian and curator of this legacy dataset.

Since June last year there have been a total of 14 shark incidents reported to the ASID. Twelve of these have been classified as unprovoked, with two fatalities recorded within this reporting period occurring in Western and South Australia. Taronga's experts are regularly called upon by media and news organisations to provide commentary on attacks and share important perspectives on the conservation of sharks.

### Making the Waves Safe

This Australian Research Council funded project with Macquarie University and other partners aims to investigate the effects of pulsed electric fields on shark physiology and behaviour, develop novel electronic pulse waveforms that maximise the deterrent effect on shark species, and deliver innovative improvements in electronic shark deterrent technology that will save the lives of humans and sharks.

To generate novel electronic shark deterrent technology with improved deterrent range, researchers measured muscle twitching in sharks exposed to 12 novel wave forms and selected four that produced the best results. Using our specially developed electronic wave generator, researchers have started measuring behavioural and physiological effects of Port Jackson Sharks, White-tipped Reef Sharks and juvenile Bull Sharks when exposed to these four wave forms, simulating what a shark would feel from close range and from distance. Next steps include testing these wave forms on White Sharks, Tiger Sharks and other Whaler Sharks.

### Bellinger River Turtles

As part of the bushfire rehabilitation recovery efforts, Taronga secured Federal Government funding to expand the holding facilities for this critically endangered freshwater turtle. The expansion has significantly increased Taronga's breeding and holding capacity and will allow for ongoing translocations to the wild.

Adults and older juvenile turtles were transferred to new outdoor facilities in March 2023. Taronga staff provided input at a workshop to reevaluate conservation planning and actions for the Bellinger River Turtle, held in August 2022. The most recent breeding season (2022/23) produced 43 hatchlings that are doing well, and the insurance population at Taronga now consists of 203 turtles.

### Seabirds to Seascapes

Seabirds to Seascapes seeks to understand how coastal restoration influences marine species and broader biodiversity. Taronga's contribution to this NSW Environmental Trust major project will explore the population genetics of Little Penguins and identify their foraging hotspots. Little is known about the status of penguins in New South Wales and their vulnerability to the impacts of a rapidly changing marine environment. The project aims to shed light on these threats and identify management strategies.

Similarly, the recovering populations of fur seals in New South Wales are still poorly understood. The project will assess the New South Wales population and gather data on habitat preference. In December 2022 Taronga's scientists tracked 'Skip', a young male New Zealand Fur Seal that was released off Sydney Harbour after being rehabilitated at Sea World. Over six months Skip travelled 10,000km along the state's coast, Bass Strait, and into the Southern Ocean around Tasmania's south-west. The tracking shows the rehabilitation was a success and that Skip has re-joined a wild colony.



## Spotlight

### Platypus Conservation

This year marked a milestone achievement for Platypus conservation, with Taronga partnering with the University of New South Wales, NSW National Parks and Wildlife Service and WWF Australia to undertake the first translocation of this iconic species in New South Wales. Ten Platypus were successfully released into the Royal National Park, where they have been locally extinct for 50 years. The release marks the culmination of two years of collaborative, science-driven planning involving a comprehensive Disease Risk Assessment, Habitat Suitability Assessments, and in-situ population and eDNA surveys.

The 10 translocated Platypus were collected from several rivers across New South Wales to ensure genetic diversity of the release population. The six female and four male Platypus underwent health and demographic screening before being bought to the new Platypus Rescue and Rehabilitation Centre at Taronga Zoo, which was funded

by RSPCA NSW and generous donors. During their time at Taronga, the animals had radio tags externally secured and were implanted with acoustic receivers at the Taronga Wildlife Hospital. These tracking devices allow the Platypus to be monitored post release. After three weeks at Taronga, the female Platypuses were released to establish themselves first, followed a week later by the males. Initial results indicate high survivability and establishment of nesting burrows. Monitoring will continue for up to three years post release.

Construction of the new, state-of-the-art Platypus Rescue and Rehabilitation Centre known as Platypus HQ at Taronga Western Plains Zoo is on track for target completion by December 2023. Comprising both research and rescue facilities, as well as an exciting new Platypus exhibit and pre-release sanctuary. This facility is an ambitious project that will support scientific outcomes, and fill knowledge gaps, across reproductive biology and emergency rescue interventions, providing the science to secure a future for our emblem species.



## On the Land

### Regent Honeyeater

Taronga's Regent Honeyeater conservation breeding program has continued to go from strength to strength with 52 chicks born from 16 breeding pairs at Taronga Zoo and Taronga Western Plains Zoo in the 2022/23 breeding season. A further 50 Regent Honeyeaters were released in November 2022 in Tomalpin Woodlands, Wonnarua Country, at the same site as the 2021 release, alongside representatives from the NSW Department of Environment's Saving Our Species Program and Birdlife Australia. A song tutoring program is being trialled at both Zoos; it aims to assist zoo-bred chicks with learning the wild song repertoire.

### Plains-wanderer

During the last 12 months, Taronga continued working with partner organisations to develop the long-term release strategy for these birds. Two additional releases were undertaken, one in August 2022 and one in April 2023. The birds were released into natural habitat in the Hay Plains, New South Wales Riverina (in private land and National Park). The results will be consolidated, and recommendations provided to the National Recovery Team. Successful breeding continues at both Taronga Zoo and Taronga Western Plains Zoo, with 18 chicks hatching during the 2022/23 breeding season.

### Greater Bilby

Since its establishment in 2018, the Greater Bilby conservation breeding population in the Taronga Sanctuary has flourished. Despite contending with the impacts of climate change through drought and record rainfall, monitoring conducted in May 2023 has estimated the population size is 136. To date, 137 joeys born within the Sanctuary have been identified and all Bilbies are in excellent condition.

Bilbies from the Taronga Sanctuary have assisted in the reintroduction of the species to two conservation sites where the Greater Bilby had become extinct – Wild Deserts in Sturt National Park in western New South Wales and the Australia Wildlife Conservancy's 'Newhaven' site in the Northern Territory.

The Taronga Sanctuary remains a significant stronghold for conservation efforts for Greater Bilbies and in 2024, Taronga intends to supply Bilbies to a further two conservation sites where the aim is to reintroduce this species.

### Norfolk Island Snails

Over the last year, the Norfolk Island Snail conservation program continued to contribute new information on these elusive invertebrates. Through careful data recording and behaviour observations, life history parameters such as longevity, growth and birth intervals continue to unfold. Additional adjustments to the husbandry were made based on the additional learning. For example, increases in relative humidity were made in the snails' tanks thanks to data from the island suggesting these snails live in a very moist environment, which is expected to have a positive impact.

### Corroboree Frog

Both the Southern and Northern Corroboree Frogs are critically endangered and were greatly impacted by the Black Summer bushfires throughout south-eastern Australia. During the past year, 523 Southern Corroboree Frog eggs and 89 frogs were released into newly refurbished exclosures in Kosciuszko National Park that had been burnt in the 2020 bushfire. For the Northern Corroboree Frog, 210 fertile eggs were released in Brindabella National Park. An additional 148 Northern Corroboree Frog eggs were collected from wild nests to further build the genetic diversity within the insurance colony.

## Conservation in Action Snapshot

10 

**Platypus** returned to the Royal National Park for the first time in decades.

1,371

**frogs released** into the wild this year, including

658 Booroolong Frogs, 


523 Southern Corroboree Frog eggs and 

89 Frogs, and 

210 Northern Corroboree Frogs.

The Australian Registry of Wildlife Health completed

356

**individual animal investigations.** 

### Booroolong Frog

The Booroolong Frog is restricted to New South Wales and North-eastern Victoria, predominantly along the Western-flowing streams of the Great Dividing Range. The 2018-2020 drought severely impacted the habitat for this species within its northern range where several streams completely dried up. Sixty frogs were collected from drying habitats across the known range of the northern populations in 2019/20 and brought to Taronga Zoo for holding and breeding.

Funds from the NSW Department of Environment's Saving Our Species program allowed for the construction of a breeding facility and the operation of the program. So far, 725 offspring were produced by 39 of the wild founders. Habitat conditions recently improved, which allowed for a trial translocation to inform long-term re-establishment and range extension of the Northern Booroolong Frog.

In March, 638 juvenile Booroolong Frogs were released along a 1km section of Mulla Mulla Creek, each with a unique toe-clip ID. Post-release monitoring will search the creek to assess survival and dispersal of released frogs and is scheduled for Spring. About 110 frogs remain within the breeding program and are closely genetically managed to ensure maximum genetic diversity and demographic stability are maintained.

### Koala Conservation and Partnerships

In March 2021, Taronga entered into a partnership with Koala Conservation Australia to develop a world first ex-situ Koala conservation breed-for-release program at the new, purpose-built facility in Port Macquarie, 'Guulaba'. The facility is now nearing completion and the acquisition of founders for the program is planned to commence in August 2023.

Taronga has also entered into an agreement with the University of Newcastle and NSW National Parks and Wildlife Service to deliver a Koala translocation and related research. The understanding of existing populations, habitat suitability, disease profiles and genetics is a major determinant of both translocation necessity and translocation success. A dedicated PhD student has been engaged and Koalas bred within the conservation breeding program will be supplied to facilitate translocations.

### Christmas Island Blue-tailed Skinks and Lister's Gecko

The Christmas Island Blue-tailed Skink and Lister's Gecko are reptiles endemic to Christmas Island and are now considered extinct in the wild primarily due to the impact of the invasive Wolf Snake. Fortunately, some of the last remaining individuals were collected by Parks Australia in 2009/10 and a conservation breeding program was established on Christmas Island with a secondary population at Taronga Zoo.

In the last five years, the program has facilitated the release of 850 Blue-tailed Skinks to the Cocos (Keeling) Islands including 425 Taronga-bred animals. With the support of the Threatened Species Initiative, the reference genome for both species was annotated this year through extractions from Taronga lizards and this has now been published.

The genome and subsequent molecular genetic analysis are helping inform future genetic management of these two species. This year, Taronga hosted the IUCN Species Survival Commission Conservation Planning Specialist Group Christmas Island Reptile workshop funded by Parks Australia. This workshop brought together 25 experts from across the world to guide the development of the next Conservation Plan to conserve and restore Christmas Island's native reptiles.

### Dingo

As the largest terrestrial predator in Australia, Dingoes are an iconic species. Beyond their intrinsic value, Dingoes play an important role in ecosystems, but can also pose risks around human populations and agriculture.

The Myall Lakes Dingo/Dapin Project is a collaboration between Taronga and the University of NSW working closely with NSW National Parks and Wildlife Service and Mid Coast Council to implement evidence-based management of Dingoes while developing non-lethal management tools to enable the effective retention and conservation management of Dingoes in the landscape. Critically, the project is working with local Traditional Owners to gain insights into the Dingoes, and their importance, and represent First Nations Peoples' views and knowledge in research and management.

This year the team has monitored at least seven packs of Dingoes in the region using GPS and radio tracking collars and camera-traps across urban and natural landscapes. Over 6,500 images of Dingoes were collected using remote cameras and 123 reports received through citizen science observers. The research is providing insights into the life history and ecology of the species.

### Wildlife Forensics

Taronga continues to work with Federal and State partners to combat illegal wildlife trade using cutting edge technology. The forensics program leads the way using complementary technologies to dismantle illegal trade on two fronts: detection and tracing.

Partnering with Rapiscan Technologies and the Federal Government, Taronga is working to increase detection accuracy of smuggled lizards, fish and birds in transit pathways such as post and luggage using 3D x-ray CT scan technology. New target specimens such as ivory and Pangolin scale have been recently included in the algorithm development, as well as a range of heavily trafficked marine species such as shark fin, seahorse and coral.





## Spotlight

### Chuditch

In April 2022, Taronga embarked on a new recovery program for Chuditch (Western Quoll) with the acquisition of the first four breeding pairs from remnant and translocation populations. The program experienced rapid success, with joeys produced in the initial year breeding, and the first release of Chuditch from the program occurring in November of the same year – just nine months after the program began. Fifteen Chuditch were released to support the re-introduction of this

species in the Vulkathunha-Gammon Ranges in South Australia, and all post release monitoring demonstrated high survivorship and adaptation to the release site.

In the second year of operations, Taronga has doubled its capacity to eight pairs and aims to supply Chuditch to three different rewilding sites, including Wild Deserts in Sturt National Park. The reintroduction of the species to Wild Deserts will represent the return of Chuditch to New South Wales and is a milestone event in the conservation of this species.



CHUDITCH AT THE TARONGA  
SANCTUARY IN DUBBO  
PHOTO BY  
MORRIGAN GUINANE





(LEFT – RIGHT)  
SANDRA RINGHOF,  
DAVID COOTE,  
TIM WATTS AND  
MICHAEL MCFADDEN  
RELEASE BOOROO LONG  
FROGS IN NORTHERN NSW  
PHOTO BY ALEX PIKE

The novel tracing program, using hand-held x-ray technology (pXRF) to determine the origin of traded specimens, published its second peer-reviewed paper this year, demonstrating the use of the technology in determining provenance in the world's most trafficked South-East Asian species: Pangolins, Cockatoos and Freshwater Turtles.

This year also saw the completion of a second phase of the program, focusing on Australia's most trafficked species, the Shingleback Lizard, with the aim of delivering a cloud-based app that can communicate with the pXRF and deliver real-time determination of the animal's origin.

Over 300 wild and captive lizards have been scanned to develop a comprehensive reference library of elemental signatures and develop the species-specific algorithms for determining origin. Working in partnership with the University of NSW, the University of Technology and ANSTO, models have been successfully developed that can assign provenance of Shingleback Lizards with an accuracy and confidence level of about 75 per cent. The end-to-end prototype will be trialled with staff at the Sydney Gateway Facility and Department of Climate Change, Energy, Environment and Water in August 2023.

### CITES COP19

In November 2022, Nick Boyle, Divisional Director Welfare, Conservation and Science and Dr Phoebe Meagher, Conservation Officer, attended the 19th United Nations Conference of the Parties for the Convention of International Trade of Endangered Species (CITES COP19) in Panama.

Representing Taronga, they made interventions on the review of trade of animal specimens reported as produced in captivity, and supported the up-listing of the Pygmy Blue-tongue Lizard to Appendix I – affording it the greatest level of protection from trade. Taronga's forensic work was also presented at an official side-event giving this work an international platform.

### Conservation Partnerships

Taronga is investing in developing strategic partnerships with like-minded organisations to support in-situ conservation initiatives for vital wildlife, habitat, and communities across the globe. These partners share common, long-term conservation goals and are delivering high-impact research and conservation initiatives in the field.

Long standing partners included the Jane Goodall Institute, International Rhino Foundation, the Northern Rangelands Trust and TRAFFIC, and in 2022 also included Save Vietnam's Wildlife, Botswana Predator Conservation, Cheetah Conservation Botswana, the Department of Biodiversity, Conservation & Attractions (Chuditch) and Save The Bilby Fund.

### Taronga Field Conservation Grants

Every two years Taronga's Field Conservation Grants give funding and support to conservation projects that help wildlife, habitats and communities all over the world. The 2022 round of funding attracted 108 applications from 38 countries and 14 applications were successful in receiving funding, from a total of \$200,000.



## Box-gum Woodlands Rewilding

Taronga is 12 months into its most ambitious conservation project to date – Box-gum Woodland Rewilding Sanctuaries – which will restore more than 5000ha of habitat for Koala and critically endangered Box-gum Woodland<sup>1</sup>. Box-Gum Woodland supports a wide variety of Australia’s plant and animal species, including 36 threatened species<sup>2</sup>. The project received \$16 million in seed funding under the NSW Koala Strategy. In addition, Taronga is catalysing significant additional investment from partners who demonstrate leadership responding to the climate and nature crises, who are committed to going beyond just meeting their carbon neutrality obligations to future-proof their reputation.

Taronga is conducting extensive planning for this multi-decade project, with significant revegetation set to occur over coming years. More than planting trees, Taronga is re-establishing and restoring ecosystems that will provide sanctuaries for endangered wildlife and support communities by diversifying regional economies. Consequently, Taronga is working with First Nations People and local communities to select sites that are valued by people and nature to host sanctuary sites.

Taronga is also working with spatial scientists within the NSW Department of Environment’s Science Economics and Insights division to use cutting edge spatial products to locate sites that maximise climate resilience. Work this year indicates the best project sites are in northern New South Wales, to the west of the Great Dividing Range as far as Moree, south of Goondiwindi, north of Armidale.

## The Australian Registry of Wildlife Health

Taronga hosts the globally unique Australian Registry of Wildlife Health (the Registry), to address the needs of wildlife managers, agriculture, and public health officials. The Registry is supported through agreements with NSW Departments of Primary Industries and Environment, as well as Parks Australia and others.

Taronga’s Registry provides a diagnostic service for free-ranging wildlife, delivers training to build capacity to detect wildlife disease, and conducts research to understand the ecology of newly discovered and known agents.

Known biosecurity threats (e.g. highly pathogenic avian influenza and foot and mouth disease) are approaching Australia with unknown potential impacts on free-ranging Australian wildlife. Environmental instability enhances the potential for emergence of organisms from wildlife hosts that could be significant to human health (as seen in the SARS Cov-2 pandemic). The Registry seeks to support early detection, and risk assessment of disease-causing agents in wildlife for early intervention and mitigation, prior to potential spill over to new hosts or conservation or biosecurity concerns.

Registry priorities moving into 2024 include an electronic database overhaul, enhancing diagnostic capacity in Australian wildlife, and securing sustainable funding beyond 2025. In 2022/23 The Registry conducted approximately 356 individual animal investigations (comprising 45 unusual or mass mortality events).

<sup>1</sup>As per NSW Government definition of Critically Endangered White Box - Yellow Box - Blakely’s Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South-eastern Highlands, NSW Southwestern Slopes, Southeast Corner and Riverina Bioregions.

<sup>2</sup>Based on known species records within Box Gum Woodland within the Glenn Innes-Guyra Basalts subregion of the New England Tablelands bioregion (a representative area for the program) available through NSW Government threatened species search.

## Conservation in Action Snapshot

Long-nosed Fur Seal was tracked for  
**10,000km**

as part of the **Seabirds to Seascapes** project



**389**

**coral samples**  
cryopreserved from the  
Great Barrier Reef as part of  
the Australian Government’s Reef  
Restoration and Adaptation Program.



**15**



**Chuditch released to**  
the Vulkathunha-Gammon Ranges  
in South Australia, the first release as  
part **Taronga’s breeding program**.

**850**



**Blue-tailed Skinks**, including  
**425** Taronga-bred individuals have  
been released in the Cocos (Keeling)  
Islands in the last five years.



# ENVIRONMENTAL LEADERSHIP

Lead environmental sustainability  
and climate change action







AUSTRALIAN  
SEA-LION  
PUP 'AMALIE'  
PHOTO BY  
RICK STEVENS



## Actions

### Switch to renewable electricity

In 2022, Taronga Zoo and Taronga Western Plains Zoo became the first Zoos in NSW to be powered by 100 per cent renewable electricity.

The landmark switch was made seven years ahead of Taronga's sustainability target, which was to be powered by renewable electricity before 2030. It means that every year from now on, approximately 7,000 tonnes of CO<sup>2</sup> are no longer being released into the atmosphere. The emissions saved every year are the weight equivalent of about 300 Humpback Whales.

By making the switch, Taronga is directly supporting the transition to clean energy, which is a significant step towards helping secure a future for wildlife.

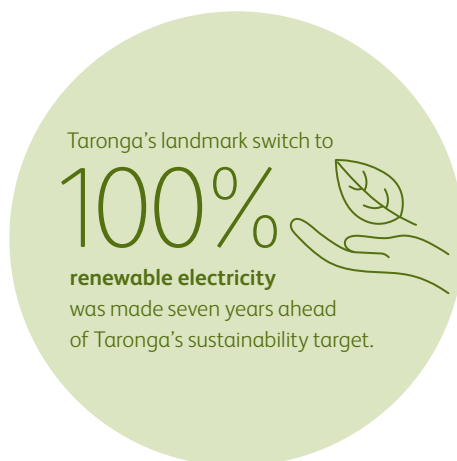
Climate change is a key threatening process that has an impact on many of Australia's unique flora and fauna, and wildlife across the globe. More than 1,900 species in Australia are on the brink of extinction and climate change is accelerating this process. Renewable energy sources such as solar and wind emit little to no greenhouse gas, which is the biggest contributor to climate change.

By switching to Red Energy as its renewable electricity provider, Taronga is directly supporting clean electricity generation from a solar farm that is local, on Wiradjuri Country near Taronga Western Plains Zoo, Dubbo.

### Emissions Management

Since making the switch to renewables, Taronga has significantly lowered its Scope Two emissions and is now focusing on its largest Scope Three emissions, including animal feed, food and beverage and construction.

Taronga is continuously working with its suppliers to make better choices for the environment, including the built environment. The built environment accounts for 20 per cent of Australia's total carbon emissions released into the atmosphere. It also consumes one-third of water and generates 40 per cent of total waste. By selecting sustainable building materials, reducing wastage, recycling, and using recovered material, the embodied environmental impacts of developments can be drastically reduced. In 2022/23 Taronga has updated and implemented an Environmentally Sustainable Design Checklist to use on all new builds across both sites.



### Water Audit

Over the past 18 months, Taronga has collaborated with Sydney Water to identify, prioritise, and achieve large-scale, cost-effective savings to water usage. Initial investigations found that the Zoo's average water usage was higher than benchmarks for similar sized properties, and potable water consumption was calculated to be over 52 million litres per year.

A remote monitoring system was installed to main water meters, which enabled real-time visibility of water usage behaviour. With the benefit of this insight, water usage could be directly correlated to operational activities and leaks could be better identified.

The water usage data was added into planning and prioritisation of maintenance works and, so far, an astonishing 75 per cent reduction in water usage has been achieved. As a result, Taronga Zoo is now saving nearly 40 million litres of water per year, the equivalent of 16 Olympic sized swimming pools.

### Climate Resilience

The devastating impacts of climate change have already been experienced throughout parts of New South Wales. Most recently these have included storms, floods, bushfires, droughts and unprecedented heatwave cycles. It is imperative to act now to secure a future for humans and wildlife.

Taronga has been working to build oversight of climate-related risks and opportunities into its Governance processes. As part of this, Taronga's management team and other internal stakeholders have undergone workshops coordinated by the NSW Government's Climate Risk Ready team to understand climate projections in line with current scenarios. Following this, climate risks relevant to the organisation, such as drought and water resilience have become a key focus for Taronga Western Plains Zoo. Taronga also works to mitigate the impact of its operations on climate, by measuring Scope One, Two and Three Green House Gas emissions.





ONEFISHTWOFISH FOUNDER  
CHRIS GILLIES AND  
MICHELLE SHAW, MANAGER  
OF WILDLIFE HEALTH  
AND REHABILITATION

## Waste Reduction

Taronga has more than 16 different waste streams – and an ambitious target of 90 per cent diversion of operational waste from landfill by 2025. A new addition is the ‘Problem Plastics’ stream. Since its inception in October 2022, 1,617kgs of soft plastics, and more than 60kgs of hard plastic have been recycled. Taronga’s recycling partner Plasmar collects plastics and creates civil and agricultural products that Taronga can buy back and use, creating a circular economy.

Taronga Western Plains Zoo has just begun its ‘problem plastics’ journey. This new waste stream joins several others including the organics waste, that is composted onsite through the ‘HotRot’ Aerobic Digester. The ‘HotRot’ takes compostable packaging, food waste, green waste and animal waste, and produces approximately 250 litres of compost per day. In 2022/23, Taronga Western Plains Zoo achieved an average diversion rate of 83.65 per cent.

## OneFishTwoFish

Taronga’s animal diets rely on 35,000kg of seafood annually. Taronga strives to improve fish sustainability in animal food diets by replacing red-listed species where possible and supporting MSC-certified suppliers. Supporting Taronga’s strategic priorities of Environmental Leadership and Conservation Action, in 2023 Taronga entered into a three-year agreement to participate in Seafood Positive’s OneFishTwoFish program, which launched in February 2023. OneFishTwoFish aims to return two fish to the ocean, for every one fish consumed by investing in ocean conservation projects that measurably improve fish populations and marine life.

## Capital Programs

Taronga continues to lead in the Zoo and tourism industry by including environmentally sustainable design initiatives within all new capital development projects and insisting that new projects investigate and develop innovative design and construction solutions that reduce the impact on global environments and wildlife habitats. All projects consider the use of recycled materials, energy consumption, access to renewables and holistic decisions around lifecycle assessments.





LIBBY HALL WITH  
PRE-RELEASE PENGUIN  
AT TARONGA WILDLIFE  
HOSPITAL, SYDNEY  
PHOTO BY TIM BAUER

### Sustainable and Ethical Procurement

Taronga is committed to the environment, the broader community and as a government agency is also aligned to the NSW Procurement Framework. The purchasing of goods and services for Taronga should not cause harm to the environment or negatively impact Taronga's supply chain.

Taronga demonstrates this commitment by having clear guidelines like the sustainability and ethical framework for its staff and business partners to understand how to purchase and contract goods and services in an environmentally sustainable and ethical fashion.

A strong focus is placed on Taronga's business partners to demonstrate a similar commitment by having open dialogue on important matters such as modern slavery, single use plastics and landfill diversion. Sustainable and Ethical Procurement cannot be achieved by Taronga alone. Taronga relies on its partners to do the right thing and committing to meaningful environmental targets in supplier contracts is the way Taronga ensures minimum environmental impact.



## Influence

### Sustainability Scorecard

Taronga's ongoing commitment to sustainability extends not only to its own operations, but in working with partners on their own sustainability goals. Through the formalised Sustainability Scorecard Framework, developed as part of Taronga's previous Strategic Plan, Taronga has been able to work with both new and existing partners to see significant changes to sustainability practices. This collaborative approach has seen Taronga work with its partners to rework internal practices, review supply chain and procurement processes, increase organisational awareness of key sustainability issues and prioritise future actions. Work is now being undertaken to grow and develop the framework and an updated version will be launched in 2023/24.

### Red Energy Saver

Taronga and Principal Partner Red Energy joined forces on a residential electricity product designed to deliver funding to support Taronga's conservation work. The 'Red Wildlife Saver' product was launched in March 2023 and sees Red Energy contribute \$5 every month to the Taronga Foundation for every residential electricity customer on the plan. In the first few months of launch, Red Energy had more than 210 customers on the 'Red Wildlife Saver' plan with representation from every state they retail in. The number of sign-ups has continued to grow at promising rates. The product has been well-received by customers and highlights the mutually beneficial opportunities of a strong, well-aligned corporate partnership with revenue generated for both organisations.

### Rubbish Run

Taronga Rubbish Run, a unique fitness event that asked participants to prioritise picking up rubbish while engaging in physical exercise, made the focus of its fundraising efforts the Taronga Wildlife Hospitals in Sydney and Dubbo. Our hospital teams have identified an increase in cases of wildlife impacted by rubbish. The treatment, care and rehabilitation of these animals resonated with Taronga's wider community and highlighted the role individuals can play in helping to protect native habitat for native wildlife – by simply 'picking it up to protect'. The campaign received significant support and raised crucial funds.

### Single Use Plastics Plan

The NSW Plastics Action Plan has seen some of the most problematic single-use plastics, including single-use plastic bags, straws, cutlery, plates and bowls and polystyrene food ware and cups, phased out across the state from June 2022. Taronga hosted the original NSW Single Use Plastics Industry Forum and has continued to support the NSW Government with these significant changes within the community. Taronga has provided educational information across its formal education programs, social channels, website and Litter Free Oceans community. Taronga also used its powerful social media platforms to provide commentary and guidance to its 800,000-strong social media community around the plastics changes and the broader impact to wildlife.

## Environmental Leadership Snapshot

Taronga switched to 100% renewable electricity, saving approx.

7,000

tonnes of CO<sub>2</sub> from being released into the atmosphere each year.



The emissions saved every year is the weight equivalent of about

300

Humpback Whales



75%

reduction in Taronga's

water usage, saving nearly 40 million litres of water per year, the equivalent of 16 Olympic sized swimming pools.



Taronga Western Plains Zoo has produced

250 litres

of compost per day from onsite organic waste through the 'HotRot' Aerobic Digester.



1,617kgs

of soft plastics and more than 60kgs of hard plastics recycled through the 'problem plastics' stream since October 2022.





# COMMITMENT TO COUNTRY

Commit to and embed a way of working that respects and includes Indigenous peoples, Culture and place.







CRITICALLY ENDANGERED  
SOUTHERN CORROBOREE  
FROG RELEASED INTO  
NATIONAL PARK LAND  
PHOTO BY HARRY VINCENT



In a time of rapid environmental change, Taronga's commitment to education, wildlife, conservation and science has never been more critical. As a conservation community, we commit ourselves to the ongoing process of Reconciliation within our field; to respect, connect, consult, and be led by the complex and vital knowledge(s) of First Nations Peoples as we urgently work to safeguard the future of our planet.

### Taronga Aboriginal Advisory Group, Cammeraigal Country

Through ongoing meaningful consultation with Taronga's Aboriginal Advisory Group (TAAG), Cammeraigal Country, Taronga continues to strengthen connections, trust and partnerships with First Nations Peoples and Communities. In 2023, the TAAG continued to provide Taronga with Cultural guidance and support across all areas of the organisation, including the Nura Diya Australia Project, employment and traineeship programs and the embedding of Cultural protocol and practice in Education and Conservation projects. With a changeover in membership term in June 2023, expressions of interest have been sent out inviting new members to join the group, supporting the continuation of representing diversity in Country, Community and expertise within the group.

### Yarn Up – Wiradjuri Country

Supporting Taronga's commitment to work respectfully and meaningfully with Country, Community and Culture in Dubbo, guidance and leadership in this area has been facilitated by Indigenous staff working and living on Wiradjuri Country. Through listening and learning from Taronga's people, who hold strong connections and relationships with the Indigenous community and organisations in the local area, ongoing consultation has been provided across multiple areas at Taronga Western Plains Zoo. Community Yarn Ups have provided ongoing opportunities to deepen Taronga's relationships and connections with Traditional Owners and Custodians, sharing knowledge and Cultural advice on capital projects, conservation, education, and training.

### Burbangana

The Burbangana Program, a Sydney language word meaning 'take my hand and help me up', has been running since 2008 as a long-term partnership with the NSW Department of Community and Justice Metro ISS Unit. Young people aged 11–18 are referred to the therapeutic and aspiration-building program, where they engage in Zoo-related learning and develop life skills. Students build long-term relationships with staff through education, science, and Culture, developing the students' sense of worth and self-confidence.



The Sydney Red Gum, Growth and Development Program, launched 12 months ago, is for 18–25-year-olds. It evolved from the Burbangana Program and provides continued support and opportunities for young people who are no longer eligible for the Burbangana Program and are transitioning to adult living. This initiative will continue to provide support, mentoring and skill development in a safe environment, ensuring each young person can continue to think positively about their future while building their life skills. The outcomes range from therapeutic experiences to vocational pathways and training, depending on the individual needs and aspirations of each student.

Classroom teacher and Principal regarding their two students who participate in our program: "We have noticed an increase in empathy and greater care towards fellow students, improvement in the students' language skills and speech and increases in confidence and knowledge, which enhances their engagement in learning.

“

The Zoo has been like my school,  
my second home, my life saver.

”

Current long-term student: "The Zoo has been like my school, my second home, my life saver. I've learnt so much and it's built up my confidence; I'm able to talk to people, socialise more with community and get rid of all the negativity that had been in my life."





WAGANA DANCERS  
AT THE OPENING OF  
NURA DIYA AUSTRALIA  
PHOTO BY HARRY VINCENT



## Spotlight

### Nura Diya Australia

Through the creation of Nura Diya Australia, Taronga has made a commitment honoring Country, Culture and Place. This contemporary precinct is inspired by an ancient and present wisdom of First Nations People and the oldest continuing Culture on the planet.

The development included respectful consultation and collaboration with First Nations People, including Taronga's Aboriginal Advisory Group, First Nations staff, Cammeraigal and Dharawal Elders, Indigenous spatial and landscape designers and Aboriginal contemporary artists Jacob Nash (Bangarra Dance) and Nathan Peckham (Yurana Creative).

Nura Diya shares stories of Australia, of a sanctuary of ochre carrying a legacy and a knowing far beyond its alluring colours. The design of Nura Diya Australia showcases Cultural visual language, sculptural artworks and co-naming of places and species sharing Sydney First Language.

The design features artwork by Jacob Nash Design, including Angophora Bark Precinct Markers and Angophora Leaf Pattern, Travelling Country Cultural line work, Tree Hugger Mother and Child with Spirit Line, Tree Hugger Hands – White Spirit, Animal Cultural Paw prints – buru (Kangaroo), gulamany (Koala) and wuragal (dingo), Cammeraigal Line of Country, nguwing nura (Night Country), Horizon Line artwork and Angophora Leaf gobo lighting projection.

Nathan Peckham from Yurana Creative created the Songline Black Swan and Black Duck, garraway (Cockatoos) in flight and the graphic design of Nura Diya Australia signage. Yuin lore man Les McLeod is also featured using clap sticks through sound art composition.

Taronga is proud that Nura Diya Australia is a place of gathering and learning like nowhere else, connected with pathways of endless journeys taken back and forth on Country.





TARONGA'S BURBANGANA  
STUDENT CATARINA WITH  
LOCAL BRUNGLE PUBLIC STUDENT  
NAVAEH, PAINTED UP AS GYAK.  
THIS IS THE FIRST TIME  
IN ALMOST 200 YEARS THAT  
COMMUNITY HAVE DANCED  
ON COUNTRY FOR GYAK  
PHOTO BY HARRY VINCENT



## Spotlight

### Gyak Project

Gyak is the ancient name of the critically endangered Northern Corroboree Frog, a vital species Taronga is committed to conserving for generations to come. The Gyak in-situ project works on the home Country of the Wolgalu and Wiradjuri people of New South Wales to bring elders, scientists, conservationists, students, and family together, to tell a modern conservation story through cultural dance and the ancient knowledge of this frog and its people.

Local students from Brungle Public School, Tumut High School, Burabinya Girls Group, Taronga Zoo's Burbangana Program and Taronga's School Based

Apprenticeship and Trainee program were the recipients and voices of this project. Together they developed a dance, with help from Bangarra Dance Theatre, to tell this important story. Wolgalu representative and Community leader Shane Herrington said, "This is the first time our mob have danced and told stories on Gyak Country in almost 200 years. Putting Gyak back on Country, puts our people back on Country". The Gyak in-situ project first commenced in March 2022. This is a wonderful collaboration between Taronga, Brungle and Tumut Aboriginal Land Council, the NSW Department of Environment, Brungle Primary School, the University of Wollongong, Buugang Wambaal Project and Bangarra Dance Theatre.



## Menangle Project

The program is facilitated on a rural property in Menangle, south-west of Taronga, where up to nine young people live in a specialised facility. The program sees a Zoo staff member with specialised skills in teaching, urban ecology and farm care engage with young people in the familiar and safe setting of their own home. This project provides much needed experiences to several young people who are not eligible for referral to the Burbangana Program at the Zoo. The students have learnt about composting, worm farms, soil quality and veggie gardens, with the aim of producing their own sustainable veggie patch that they can use for their meals. They also have 11 chickens that they care for each day; they have enjoyed learning about these animals, their needs and requirements, and, best of all, collecting up to 11 eggs each day.

## Walanmarra Program

Walanmarra at Taronga Western Plains Zoo is the sister program to Burbangana. It provides opportunities for Indigenous children living in out-of-home care to participate in a range of activities on Wiradjuri Country whilst being mentored by Taronga staff. The name of the program, Walanmarra, is a Wiradjuri word that means 'to make strong now', which represents the core aim of the program – building confidence and strength in each young person through deepening their connection to Culture and Country. Over the last 12 months, this successful partnership program with the NSW Department of Community and Justice Services has had more than 30 participants from local Dubbo Primary Schools. Each child attended one day a week throughout the school term to work alongside Taronga staff, youth mentors and Community members to develop life skills, self-determination and a sense of pride in their Culture.

## Birrany and Mulungan Business

In partnership with the NSW Office of Regional Youth, this education program at Taronga Western Plains Zoo reconnects young people to Culture, developing an increased sense of worth and reengaging them back into education and training pathways. Since it began in 2022, more than 120 high school students have participated in the program, developing skills in the areas of wildlife care, conservation, tourism and hospitality. The success of this program has resulted in graduate students joining the Youth at the Zoo program to continue their development and training with Taronga and one graduate being recruited and employed as a School Based Apprenticeship and Trainee at Taronga Western Plains Zoo.

## School Based Apprenticeship and Trainee Program

Over the last 12 months, the Taronga School Based Apprenticeship and Traineeship program expanded after a new partnership was established with the Elsa Dixon Aboriginal Employment team. Taronga has employed an additional 12 Indigenous trainees, including five at Taronga Western Plains Zoo undertaking a certification in Animal Care, and seven at Taronga Zoo studying Tourism, Animal Care and Conservation and Ecosystem Management. The Community and Cultural programs team mentor the trainees to ensure they are successful in their course whilst also considering future opportunities – providing support with life skills, personal and professional development. Teams from across all divisions are working alongside the trainees; this is a mutually beneficial relationship with positive outcomes for all.

## Training and Employment

Supported by Taronga's Aboriginal Advisory Group (TAAG), Cammeraigal Country, Wiradjuri Community members and Indigenous staff, there has been a strong focus over the last 12 months on increasing training and employment opportunities for First Nations Peoples. A review of Taronga's current Aboriginal Employment showed there are about 50 Indigenous staff employed across both sites; this includes 17 newly created targeted School Based Traineeships and two newly targeted positions to mentor and train them. These newly created targeted roles are essential in not only supporting the trainees through their training courses and practical placements, but also in creating and developing ongoing training and employment opportunities through long-term career pathways. The next stage in Taronga's Aboriginal Employment plan is to further develop the School Based Apprenticeship and Trainee Program and increase targeted and identified roles throughout different levels and grades within the organisation, such as supervisor, management and executive.

## Reconciliation Week

The 2023 National Reconciliation Week theme, 'Be a Voice for Generations', provided opportunities on Cammeraigal and Wiradjuri Countries for Taronga staff, students and volunteers to reflect on ways to positively contribute to true reconciliation. To launch Reconciliation Week, Taronga Zoo hosted a special event with the Aboriginal People and Culture team from the NSW Department of Planning and Environment. More than 250 staff from across multiple portfolios were invited to participate in a range of cultural activities, including dance and weaving workshops and panel discussions. A highlight of this event was Taronga's School Based Trainees opening proceedings by delivering a personal Acknowledgement of Country, sharing their journey and the importance of being a voice for generations.





STUDENTS FROM  
BRUNGLE PUBLIC  
SCHOOL LOOKING AT  
A CORROBOREE FROG  
PHOTO BY  
HARRY VINCENT

## NAIDOC Week

Throughout NAIDOC in the first week of the July School holidays, a range of activities and staff events were held on Cammeraigal and Wiradjuri Country to celebrate the 2022 theme, 'Get Up, Stand Up, Show Up'. These celebrations were an opportunity to connect staff and guests to Indigenous Cultures across both Zoos and to provide opportunities for ongoing meaningful conversations with Indigenous staff, Traditional Owners and Custodians and Community members. A highlight of the 2022 NAIDOC celebrations was once again the Animals of Dreaming Zoomobile program delivered by Brewarrina Elder, Colin Hardy OAM, alongside Taronga

Education staff. This highly engaging program connected more than 500 students throughout New South Wales to Australian native wildlife and Indigenous Culture through the power of storytelling and music.

## Wild Lights at Taronga

Wild Lights at Taronga featured artist Nathan Peckham, an Aboriginal artist at the cutting edge of contemporary First Nations art and design. A direct descendant of the Tubbah Gah clan within the Wiradjuri Nation of New South Wales, Nathan is the creative director and founder of Yurana Creative. Based in Dubbo, he is proud to see his art and work reaching and connecting with people across the globe.



“

Celebrations were an opportunity to connect staff and guests... and to provide opportunities for meaningful conversations.

”

Nathan Peckham’s artwork was crafted onto the canvasses of many new lanterns, including the wilay (Possum), bura (Kangaroo) and gulamany (Koala) as well as featuring in projections.

As part of the access and inclusion partnership with Cushman & Wakefield, Nathan Peckham also created a unique mural with 16 students from St Lucy’s School for Children with Disabilities. Together they created a shared story of connecting place and nature and uniting people of all abilities in caring for Country. A broadcast feature was secured with NITV (National Indigenous Television), highlighting the collaboration.

### Supply Nation Partnership

Taronga is a proud member of Supply Nation, an indigenous supplier advocacy organisation. Taronga recognises that \$1 spent with an Indigenous supplier leads to \$4.41 of social return. This means that by having Taronga partner directly with a Supply Nation business, a greater impact to the Indigenous community is achieved. Indigenous businesses are also 100 times more likely to employ other Indigenous businesses. Taronga has recently engaged with Supply Nation members on asset management and facilities opportunities and is actively looking to engage with Indigenous suppliers in a variety of categories at both Zoos.

### Loggerhead Turtle Translocation

Taronga has continued its journey towards integrating Cultural practices and knowledge in its conservation science programs. In January 2023, representatives from Taronga’s Community and Cultural team and the Darkinjung Local Aboriginal Land Council from the Central Coast of New South Wales came together in a handover of precious endangered Loggerhead Turtle Eggs, excavated from Darkinjung Country and transported to Cammeraigal Country. Taronga’s vet and herpetofauna team carefully incubated and cared for the turtles until their return to the Central Coast, where the hatchlings were welcomed back to Country by the local mob and then released into the ocean. NSW National Parks and Wildlife Service engaged the Darkinjung representatives during the excavation and rescue, and they were keen to meet Taronga’s Indigenous team to formally receive responsibility of the turtles while they were off Country. Having Darkinjung Local Aboriginal Land Council perform Cultural processes throughout the event was received with gratitude by the many volunteers, conservation and ranger teams who worked hard to return these turtles to the ocean. Cultural representation enhances conservation and grows connection and relationships between people and places.

## Commitment to Country Snapshot

30+



participants from the local Dubbo Primary Schools engaged in the **Walanmarra Program**.

50



**Indigenous staff** are now employed across Taronga.

17



**new targeted School Based Traineeships** and two new targeted positions to mentor and train them implemented in the last 12 months.

16

students



worked with artist Nathan Peckham to create a mural connecting people of all abilities to Country and Culture.



# ORGANISATIONAL STRENGTH

Enhance our reputation,  
financial position and  
organisational effectiveness







(LEFT TO RIGHT) KIRSTY  
DUNDAS-HARGRAVES,  
LEANNE SUTCLIFFE  
AND TELEISHA-FAY  
BROOK CELEBRATING  
RECONCILIATION WEEK 2023  
ON CAMMERIAGAL COUNTRY,  
TARONGA ZOO SYDNEY



## Financial Strength

### Admissions

#### Taronga Zoo

Taronga Zoo delivered strong visitation numbers throughout the year, welcoming almost 1,500,000 guests – a significant growth from 2021/22. The NSW Government Parent Vouchers were in market until the end of October 2022, which helped to boost ticket sales, however, visitation continued to grow beyond October and throughout the rest of the year. The summer ‘mega peak’ period delivered the third-highest results for the month of December, while Zoo Friends visitation remained strong and consistent throughout the year.

With the opening of borders and a recovery of the Sydney visitor economy, there was a steep return in international guests from several key markets. Domestic visitation remained strong with Sydneysiders continuing to show strong patronage and support for Taronga Zoo, while new experiences such as Nura Diya Australia provided new reasons to visit.

#### Taronga Western Plains Zoo

The 2022/23 financial year was a positive one for Taronga Western Plains Zoo, recording its second-best visitation result as well as a record year for Zoofari Lodge.

Heading into summer, the brand-new Wildlife Hospital officially opened, with guests now able to see the work of vets and scientists, previously conducted behind-the-scenes. A new commercial experience was also launched in summer with the introduction of pedal boats at Taronga Western Plains Zoo. Guests can now hire a pedal boat and pedal around the Savannah Lake for a closer look at the resident Spider Monkeys and Lemurs. Complementing this new activity in the Visitor Plaza, the café underwent a re-brand to Café Wild, with further works planned to enhance the interior and exterior spaces.

During the year, Taronga Western Plains Zoo was honoured to win the Gold Awards for Major Tourist Attraction and Unique Accommodation at the NSW Tourism Awards, going on to represent New South Wales in these categories at the National Tourism Awards.



### Overnight Programs

#### Taronga Zoo

The Wildlife Retreat at Taronga has welcomed nearly 32,000 guests. A commitment to delivering exceptional service and a distinctive offering have contributed to maintaining high Google and Trip Advisor rankings.

The Wildlife Retreat won several awards, including a TripAdvisor Certificate of Excellence, a Bronze for Accommodation at the NSW Tourism Awards, and several awards at the Hotel Management Awards, notably Environmental Program of the Year. These accolades reflect the Wildlife Retreat's commitment to exceptional service, environmental sustainability, and providing a unique experience.

In September 2022, Roar and Snore proudly shared its beautifully renovated new bathrooms with guests. This consistently popular program welcomed 10,088 guests in 3,918 tents, allowing staff to share important messages about Taronga's conservation work.

#### Taronga Western Plains Zoo

Taronga Western Plains Zoo's range of overnight guest experiences had another outstanding year. Zoofari Lodge was the hero experience with a total of 14,286 visitors, and an occupancy of 91 per cent. Zoofari Lodge also set a new revenue record for the year while juggling bathroom refurbishments in all 10 animal view lodges and upgrading the gardens and paths around the main house. Savannah Cabins accommodated 16,599 guests during 2022/23, at an occupancy rate of 82 per cent. Billabong Camp had 7,266 visitors experience this overnight program – this represented an increase of 106 per cent on the prior year.





PEDAL BOATS AT  
TARONGA WESTERN  
PLAINS ZOO DUBBO  
PHOTO BY RICK STEVENS

## Retail

### Taronga Zoo

In a demanding year for the retail industry, marked by the aftermath of the COVID-19 pandemic, increased cost of living pressures, and prevailing uncertainty, Taronga Zoo's retail operations have achieved notable success, exceeding revenue forecasts for the year. A combination of factors contributed to this positive outcome, including busy domestic school holiday periods and rising international attendance, coupled with effective store merchandising practices.

The introduction of a new metal souvenir range has garnered popularity among visitors. The expansion of eco-friendly product offerings has also made a significant impact in diverting plastic waste from landfill and safeguarding our waterways.

### Taronga Western Plains Zoo

Taronga Western Plains Zoo's retail outlet performed strongly, surpassing forecasted revenue throughout 2022/23. A change to the store's layout and the introduction of a new Beads for Wildlife display wall and merchandising area was well received and saw a significant increase in sales.

## Catering and Functions

### Taronga Zoo

Throughout 2022/23, in-zoo catering returned positive results in line with general admissions. The View Restaurant was reactivated, operating as a pop-up Saltwater Bistro – a Trippas White Group initiative serving a range of MSC-certified seafood options. The Taronga Function Centre benefitted from continued delayed demand in the wake of the pandemic and had an extremely busy year. This year also saw a focus on reengaging corporate business. Overall catering revenue was the highest on record.

### Taronga Western Plains Zoo

Taronga Western Plains Zoo's catering offering had another successful year. The Zoo café was rebranded to Café Wild to create a more comfortable atmosphere for guests and increase dwell time and appeal to non-zoo visitors. In conjunction with the rebrand and launch of the new pedal boats on the Savannah Lake, Café Wild's average transaction value and spend per head increased consistently throughout the year. The Zoo's function operations had a record year, the result of diversifying offerings and hosting new events such as Boo at the Zoo. A strategic approach to focus on identifying and targeting conference events was set early in the year and proved highly successful.

“

Taronga Zoo's resident gorilla statue was decorated... to celebrate the diversity of our communities and the spirit of inclusion.

”

## Tourism and Trade

With returning international travellers and buoyancy in the domestic market, 2022/23 saw a return to face-to-face trade engagement, with representatives from Taronga's trade sales team attending tradeshow domestically and overseas. A focus on both well-established and newer emerging markets saw representatives attend Tourism Australia's Marketplace Tradeshow in the USA, Japan and Korea and the UK and Europe as well as the Australian Tourism Exchange (ATE) and Destination Australia Conference.

India is a key emerging market and Taronga attended the Destination NSW's Focus on India event, which brought 40 top Indian travel agents to New South Wales to experience the state's unique offerings. Attendance at these events combined with onsite 'famils' has helped to ensure greater brand awareness and recognition in international markets and is helping the recovery of this demographic to Taronga Zoo.

## Zoo Friends

Zoo Friends Memberships had a steady start to 2022/23, with a boost in new and renewing members thanks to redemptions of the NSW Government's Parents NSW vouchers until the end of October 2022. Since then, cost of living pressures had an impact on new memberships, which slowed in the last six months of the year. Renewals had a good finish to the financial year in response to a focus on Zoo Friend Member benefits.

The Zoo Friends product continued to evolve in 2022, based on regular focus groups across a diverse range of members. Feedback identified the need for an additional membership type to cater for grandparents, who were no longer being offered the flexibility to bring multiple grandchildren from different households to Taronga. As a result, the new grandparents' membership was launched in November 2022. Member engagement continued to be a focus, with the introduction of a Festive Friday event in November, offering member savings across a range of Taronga gifts and a late opening festive experience at Taronga Zoo.

In 2022/23, Taronga's Zoos welcomed 27,336 new Zoo Friends members and welcomed back 29,692 existing or reactivated members, showing steady growth from the previous year.

## Lion Incident

In November 2023, Taronga Zoo experienced a significant event with five lions, one adult male and four cubs, temporarily breaching their habitat after making a hole in the fence. The incident occurred before Zoo opening hours and was responded to quickly and efficiently by staff who followed Taronga's emergency protocols to ensure no injuries to people or animals. Four lions returned to their habitat on their own, with one cub tranquilised by veterinary staff and relocated back to her den after she was unable to re-enter on her own.

The incident attracted significant global attention and interest from media. Communications were effectively managed, with regular updates provided to the public on the nature and cause of the incident, timeline for repairs and welfare of the animals.

Following the incident, a significant review was undertaken to assess the fencing system, with subsequent repairs undertaken. The works to the fence took several months and the lions were returned to their main habitat in June 2023. The Lions' hiatus from public display had a marked impact on the guest experience and feedback from Taronga's Zoo Friends membership felt the impact of decreased animal visibility throughout this period.

## Taronga's Financial Model

Taronga is a NSW Government Agency constituted under the Zoological Parks Board Act 1973. Taronga is a self-funded agency, not-for-profit organisation and a Public Non-Financial Corporation. Taronga's financial model self-generates over 85 per cent of its operating revenues through its Zoo Admissions, Accommodation, Retail stores, Education Programs and donations through the Taronga Foundation. Any operational surplus is held in reserves and invested in Taronga's conservation projects and capital infrastructure with no dividends distributed.

Taronga receives a recurrent grant of \$16.5 million per annum from the NSW Government, which is allocated to asset maintenance and social policy programs. All other NSW Government funding is project specific and relates mainly to capital works or conservation programs.





QUEEN NYANI  
AT TARONGA  
ZOO SYDNEY  
PHOTO BY  
HARRY VINCENT



## Spotlight

### World Pride

Taronga Zoo celebrated 2023 World Pride – which was hosted from 18 February until 5 March 2023 in Sydney – and welcomed thousands of guests to learn more about wildlife. Taronga kicked off the celebration with the unveiling of ‘Queen Nyani’ as part of the Rainbow City project that celebrated 45 free public artworks and marked 45 years of the Sydney Gay and Lesbian Mardi Gras. Taronga Zoo’s resident gorilla statue was decorated with a giant rainbow cape and surrounded by disco balls, welcoming everyone to sit in their hands

and celebrate the diversity of our communities and the spirit of inclusion.

The Taronga Zoo forecourt and retail areas came to life with World Pride flags and colourful window displays were on show across the Zoo. The Twilight at Taronga concert series featured a special World Pride Amplified listed event – with an inaugural Drag Gala show held in March. To celebrate diversity, Taronga also partnered with Rainbow Families, offering a discount on Zoo tickets across a dedicated weekend.



## Operational Strength

### People Matter: Employment Engagement and Culture

The People Matter Employee Survey is an annual employee engagement survey that asks all NSW Government employees about their experiences with their work, workgroup, managers, and organisation. Taronga encourages all employees to have their say and give feedback to improve their workplace experience and help make Taronga, and the NSW public sector, a better place to work.

The survey was undertaken over a four-week period in August and September 2022. All up, 594 survey responses were recorded, a response rate of 88 per cent. Taronga's overall engagement score was 71 per cent, an increase from the previous year, and 7 per cent higher than the NSW public sector's overall score. The results highlighted our people are proud to work for Taronga (83 per cent) and the top scoring areas of the survey were Ethics and Values (89 per cent), Risk and Innovation (88 per cent) and Inclusion and Diversity (87 per cent).

By reviewing survey feedback, Taronga identified three key themes for focus and targeted initiatives across the organisation: Learning and Development, Recognition and Employee Voice and Psychosocial Safety and Wellbeing.

## Learning and Development

Taronga is committed to developing its people to ensure that all employees receive the training and development needed to do their job well. Taronga also strives for employees to be satisfied with opportunities available for career development.

Taronga partnered with National Institute of Dramatic Art (NIDA) to deliver courses to develop storytelling, presentation skills and confidence. Drawing on NIDA's expertise in performance and the art of communication, the customised one-day short courses were designed specifically for Taronga's people and over 100 employees attended the face-to-face sessions at both sites.

Taronga also partnered with Tim Sullivan, who delivered a special two-day course. Mr Sullivan is an internationally renowned and award-winning specialist in animal behavioural husbandry and training. Twenty-five staff from Taronga's wildlife operations team were involved in this intimate two-day workshop drawing on participants' real life experience and ideas for professional growth, networking and to benefit the animals in our care.

In collaboration with TAFE NSW, 20 employees completed an Australian Sign Language Short Course (AUSLAN). This course introduced a variety of signing skills to help participants communicate with the Deaf community.



ZOOFARI LODGE  
AT TARONGA  
WESTERN PLAINS  
ZOO DUBBO  
PHOTO BY  
RICK STEVENS



“

**Taronga is committed to a diverse workplace, fostering a culture of belonging and inclusion.**

”

The design and build of a new Learning Management System (LMS), an SAP SuccessFactors module, is also underway and will be launched next financial year. The new system will host all internal eLearning modules, track training, monitor compliance licence and qualifications and allow more visibility over Taronga’s learning opportunities.

### Mr. Len Bleasel AM Leadership Program

Mr Len Bleasel AM continues to support Taronga and its people with a Scholarship and Leadership Program. Mr Bleasel generously committed to funding the Taronga and University of Technology Sydney (UTS) collaborative 24-month program that provides 12 Taronga employees with the opportunity to complete a Diploma of Leadership and Management. All participants successfully achieved their Diploma in Leadership and Management. The team celebrated their success with a graduation ceremony held in Sydney in April 2023. This event included attendees from UTS, Taronga and Mr Bleasel.

The Scholarship program awarded 27 applicants in 2022; this is the most supported in a single year. Celebrations for awardees were held in April at Taronga Zoo and June in Taronga Western Plain Zoo. Aligned to the Bleasel Scholarships, the Dr Susan Freidman Living and Learning with Animals course specifically for the Wildlife Operations teams will take a Taronga cohort through eight weeks of study commencing in July 2023. Mr Bleasel has directly supported over 140 team members in their learning and development since the program’s inception in 2017.

### Employee Recognition

Taronga continues to recognise the efforts of people and teams through many formal and informal initiatives, with a deliberate focus on the employee experience and team culture. In 2022/23, Taronga’s recognition strategy saw the relaunch of the Values Awards, which gives employees the chance to nominate their colleagues who have demonstrated Taronga’s core values. Monthly

nominees go into the draw to win accommodation experiences across both Zoos monthly. The program was an instant success, with 120 nominations received in the first month alone.

In November 2022 the Silver Shovels Awards night returned to its traditional face-to-face format with events at both Zoos. There were more than 250 nominations received highlighting the diverse and incredible work done by our people.

### Wage Remediation

On 9 June 2023, Taronga announced the voluntary remediation of underpayments to casual staff totalling approximately \$2.6 million. The underpayments were identified during a proactive review of Award interpretations and their application to a newly implemented payroll system in 2021. The underpayments affect current and former casual staff covered by Taronga’s Salaried Employees, Wages Employees’ and Retail and Restaurant Employees’ Awards. The payments include interest of 6 per cent and superannuation at 11 per cent. To remedy this situation, Taronga has taken several important steps. Taronga engaged the services of independent legal experts to provide advice on the correct entitlements calculations related to casual and shift loadings to be paid the ordinary hourly rate of pay. Furthermore, Taronga engaged an independent audit to review the accuracy of the underpayment calculations. The remediation process is ongoing and repayments to affected staff will be made in early 2023/24.

### Workforce Diversity and Multicultural Themes

Taronga is committed to a diverse workplace, fostering a culture of belonging and inclusion. NAIDOC Week, National Reconciliation Week, International Women’s Day and World Pride were some of the celebrations to promote inclusion for Taronga’s people and a greater understanding of our diverse community. These celebrations were acknowledged and shared with our people through virtual communications platform Workplace and publicly across our website and social media platforms.

Taronga is proud to be supporting 19 School Based Apprenticeship and Traineeship participants (SBATS) who have joined Taronga for up to two years and are studying either tourism, wildlife or horticulture, while completing the practical part of their studies. Work has continued on Taronga’s Aboriginal Employment Strategy with stakeholder and community representative engagement. Taronga’s Indigenous Youth Programs have continued to operate in partnership with the NSW Government, delivering over \$2 of social value for every \$1 invested.

## Equal Employment Opportunity

### Disability Inclusion Action Plan

The NSW public sector has set a target to increase the representation of people with disabilities to 5.6 per cent by 2025. Taronga continues to make progress towards this target while supporting volunteers, students and guests by removing social and physical barriers impacting accessibility. Taronga hosted two 'Night of Inclusion' events as part of Wild Lights at Taronga, supported by partner Cushman & Wakefield. More than 2,000 guests from schools, community groups and other organisations supporting families with children with disabilities were provided tickets to attend the experience during an accessible session with additional volunteers and support measures provided.

### Assistance Animals

One of Taronga's many goals is that all members of the community feel welcome to visit its safe, inclusive and accessible Zoos. Taronga continues to play a leadership role in supporting members of our community who require an assistance animal during their visit. In 2022/23, Taronga worked closely with an external accessibility consultant to better understand the access needs of people who have an assistance animal, relevant legislative requirements and consider a best-practice model that suits Taronga's Zoos and operations. During this phase of consultation, staff and guest safety, along with animal health and welfare, have been carefully considered. Information sessions for staff and volunteers are underway with a new policy to be rolled out by the end of 2023.

### Volunteers

During 2022/23, Taronga's Volunteer Programs team increased the number of people volunteering with the organisation to 521, while also expanding the types of opportunities on offer. Taronga introduced new roles, such as horticulture volunteer positions at both Zoos, established a workplace health and safety volunteer role at Taronga Western Plains Zoo and a new and improved education volunteer role at Taronga Zoo.

In 2023, 'The Change Makers' was the theme for National Volunteer Week, a fitting description for Taronga's volunteers who are represented in more than 30 different teams across administration, animal care, guest experience, science and research and regularly champion new initiatives.

The recruitment of Keeping volunteers in 2022 saw the introduction of online resources to educate potential volunteers on Taronga's animal care positions. This platform reached more of the community than ever before and provided a more accessible platform for recruitment.

Division	Volunteer Headcount
Corporate Services & Governance	1
Marketing, Communications & Fundraising	2
People, Culture & Safety	5
Taronga Zoo – Guest Experience	162
Taronga Zoo – Zoo Keeping	135
Taronga Zoo – Other	67
Welfare, Conservation & Science	56
Taronga Western Plains Zoo	93
<b>Total</b>	<b>521</b>

## Work Health and Safety (WHS)

### Safety Culture and Leadership

Taronga remains committed to embedding a positive safety and wellbeing culture, with the leadership team placing a strong emphasis on the importance of health and safety, providing resources, support and guidance to teams. Taronga believes that a safe work environment is a shared responsibility and encourages active participation from its people and ensures safety by design for new capital work programs.

### Health and Safety Key Performance Indicators

Throughout 2022/23, Taronga closely monitored key performance lead indicators (KPIs) to assess our health and safety performance. Some of the notable KPIs include:

- 1. Near Miss Reporting:** Taronga actively encouraged employees to report near misses. The increased reporting indicates an improved safety culture and a proactive approach to identifying potential hazards and preventing accidents.
- 2. Emergency planning:** Taronga actively schedules emergency drills as a way of providing its people with confidence and knowledge in the event of a real emergency. Local emergency service organisations facilitated a simulated drill at Taronga Zoo as a learning activity for other agencies within the local emergency management committee.
- 3. Safety interactions and observations:** Leaders completed the scheduled interactions, which shows visible leadership and a commitment to safety. This in turn increases the safety culture and provides staff with the trust and confidence to report physical and psychosocial risks.
- 4. Identification and management of critical controls:** Critical controls for high-risk activities were closely monitored and managed for effective mitigations to reduce the risk of harm.

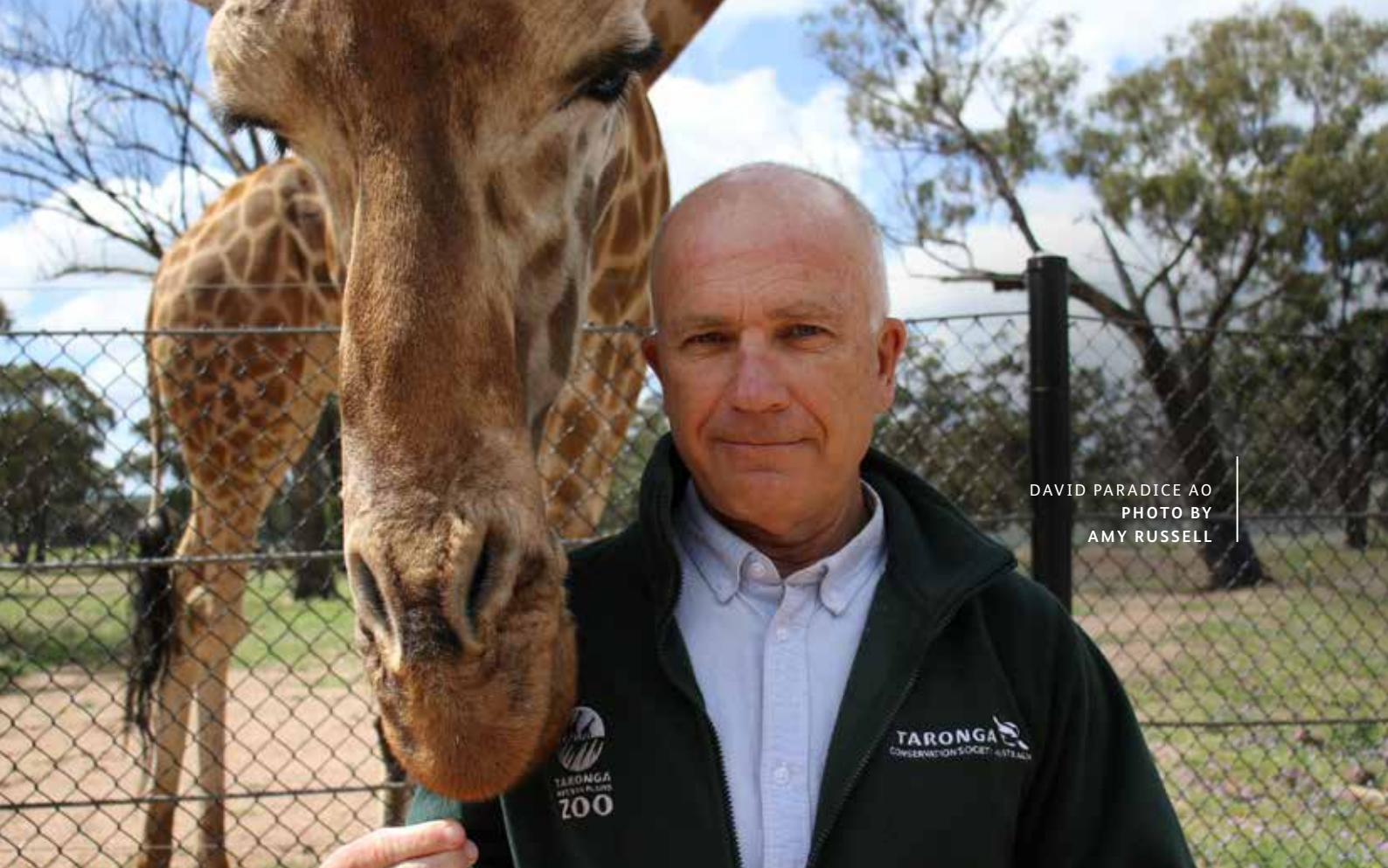




GUESTS ENJOYING  
NIGHT OF INCLUSION  
AS A PART OF WILD  
LIGHTS AT TARONGA  
PHOTO BY CAM BLOOM







DAVID PARADICE AO  
PHOTO BY  
AMY RUSSELL

## The Taronga Foundation Chairman's Report

This year has seen some big milestones for wildlife conservation. Thanks to our incredible supporters, from individuals and community fundraisers through to major donors and corporate partners, we are creating a future for the country's wildlife that is bursting with positive possibilities.

In December, we opened the doors to our new Wildlife Hospital at Taronga Western Plains Zoo, increasing our capacity to care for injured, orphaned and sick wildlife as well as boosting our conservation programs. One of the highlights of my year was to host some of our supporters at the opening of this state-of-the-art hospital.

We are in the final stages of completing our Amphibian and Reptile Conservation Centre at Taronga Zoo in Sydney, foreseeing an acceleration in our conservation efforts for vulnerable species like the Corroboree Frog, in tandem with ongoing planning for the new Taronga Wildlife Hospital, Sydney.

These three initiatives together form Wild Futures, our most transformative project yet, which aims to increase Taronga's, as well as the entire nation's, capacity to care for wildlife. I am incredibly grateful for the ongoing support for this project.

Philanthropy played a crucial role in the first ever translocation program for Platypus in New South Wales, which saw these elusive animals return to Sydney's Royal National Park.

Prior to release, the Platypus were cared for at a new purpose-built Platypus facility at Taronga Zoo. With construction underway for the Platypus Rescue and Rehabilitation Centre, known as Platypus HQ, at Taronga Western Plains Zoo, both facilities will provide critical refuge for Platypus during emergency translocations when intervention is required to save a population.

Another milestone was completing our first-ever translocation of Chuditch from the Taronga Sanctuary, our engine room for breed and release programs of endangered species, into the Vulkathunha-Gammon Ranges National Park in South Australia.

With sincerest gratitude, I thank our generous supporters, for caring so deeply about the future of our most vulnerable species, those that are invaluable to our nation's identity, and for helping us future-proof Australian wildlife. Your support has ensured that Australia is renowned for its unique wildlife across the globe.

Finally, my sincere thanks to Taronga Chief Executive, Mr Cameron Kerr AO, the Chair, the Board and the committed people across the organisation for their dedication to our vision, to wildlife and the work it delivers.

**David Paradise AO**  
Chairman, Taronga Foundation



## Health and Safety Initiatives

In 2022/23, several initiatives were implemented to enhance health and safety across the organisation. This included conducting comprehensive risk assessments across all departments, identifying potential hazards and implementing control measures to mitigate risks.

Regular training sessions were provided on various compliance training and health and safety topics, including hazard recognition, emergency response, risk management, psychosocial hazards, contractor management, and a review of the positive duty and other changes to the Sex Discrimination Act. These training programs ensure that our people and the leadership team have the knowledge and skills to safely perform their health and safety duties.

Taronga's safety committee was re-established, comprising representatives from different departments. These committees promote open communication, gather feedback, and drive continuous improvement in health and safety practices.

The implementation of a robust incident reporting and investigation process to identify the root causes of accidents was an important initiative that allowed for corrective actions to prevent similar incidents from occurring in the future.

## Information Management and Technology

Taronga's Information Technology program plays a critical role in enabling Taronga's strategic objectives and supporting business operations by enhancing technology systems and infrastructure to support the evolving needs of the organisation. The business improvement program, Move to Improve, was launched this year with the goal of enhancing business performance through technology solutions. The program focused on identifying and addressing the pain points and issues that the business faced.

By working across four key strategic technology pillars – customer service, business processes, data insights and resilient governance – Taronga's digital strategy resulted in a number of highlights throughout 2022/23. This includes the implementation of Taronga Kiosks, which have enabled self-service ticketing and cashless cards across Taronga Zoo, the establishment of technology infrastructure for Taronga Western Plan Zoo's Wildlife Hospital and Taronga Zoo's Nura Diya Australia experience and standardised financial reporting through analytics dashboards. As part of the Cybersecurity enhancement initiative, Taronga set up a Security Operating Centre to monitor and respond to cyber threats. This is a key milestone in Taronga's journey to improve its cyber resilience and protect data and systems from malicious.

## Taronga Foundation

The Taronga Foundation was privileged to receive support throughout the year, generating gross income of \$19.1 million. These funds were generously donated from individuals through direct marketing, regular giving, trusts and foundations, corporate partners and individual supporters who kindly remembered Taronga in their Will. Funds raised throughout the year supported field conservation grants program, in-situ conservation partnerships, education and research projects.

The focus remained on securing philanthropic pledges towards the Wild Futures project, the building of two state-of-the-art veterinary teaching hospitals at Taronga Zoo and Taronga Western Plains Zoo. When completed they will not only build on the nations capacity to respond to wildlife emergencies in the future, but also add to the guest experience at both Zoos, with procedures able to be viewed by guests. Whilst 2022/23 was a challenging year economically across the country, Taronga is heartened by the support of the community who gave generously to ensure that wildlife is protected, and habitats are restored.

## Corporate Partnerships

The Foundation secured over \$5 million in financial support from corporate partners to fund Taronga's critical conservation work during the financial year. This included more than \$3.7 million in cash contributions and more than \$1 million of in-kind support providing significant savings in the operation of both Zoos. The success of Taronga's Corporate Partnerships program is attributed to over 55 partners, many of which have made long-standing investments with Taronga, and whose ongoing support has been integral to the financial sustainability of the organisation. Additionally, Taronga engaged various new corporate partners throughout the year including Visa, joining the likes of Red Energy, Peters Ice Cream, Coca Cola Amatil and Citi as a strategic partner of Taronga's conservation efforts.

## Fundraising Events and Community Fundraising

The Taronga Rubbish Run returned for its second year encouraging participants to 'pick it up to protect wildlife'. This community fundraising campaign was moulded and updated based on learning's from the previous year's campaign. Taronga also saw community fundraisers engaged across a number of public running events through the Run Wild campaign. Other large-scale community fundraising initiatives included the ECP Golf Day and a co-produced Girl Guides fundraiser and sleep out event at both of Taronga's Zoos. November 2022 also saw the return of Taronga's Zoofari Gala. After a two-year hiatus, Taronga's donors and supporters were back in force raising over \$400,000 at the event.



GLORIA BRADLEY  
IS TARONGA ZOO  
SYDNEY'S LONGEST-  
SERVING VOLUNTEER  
AFTER HELPING VISITORS  
FOR 48 YEARS

### Major Gifts and Gifts in Wills

The Taronga Foundation is grateful to the generous supporters who included a gift in their will, contributing over \$1 million in support of Taronga's conservation work. Generous gifts of \$7.9 million were received from philanthropists, helping fund new initiatives, such as supporting the development of Platypus Conservation Centres in Sydney and Dubbo, the translocation of Platypus to the Royal National Park and the establishment of a new breed-and-release program for the Chuditch (Western Quoll), which saw the first release into the Vulkathunha-Gammon Ranges National Park in South Australia in 2022.

These donations also supported the Wild Futures project, helping the completion and opening of a new Wildlife Hospital at Taronga Western Plains Zoo, as well as ongoing wildlife recovery work in Australia and conservation projects overseas. Taronga Foundation hosted several events this year to thank donors and partners for their extraordinary support, including Twilight and Vivid events and a Friends of the Future lunch.

### Regular Giving and Zoo Parents

Taronga's individual giving programs raised more than \$3 million from new and existing supporters. Programs include appeal, Zoo Parent animal adoption and Taronga Wildlife Defenders. These results in a difficult and uncertain economic time are testament to the trust in Taronga from its supporters.

Taronga would like to acknowledge the following generous supporters who donated \$20,000 or more this financial year:

**Mr Lindsay Allen**

**Auxilium Foundation**

**Dinah Beeston**

**Bird Holcomb Foundation**

**Mr Len Bleasel AM**

**Mr Leslie Boardman and Mrs Dianne Boardman**

**BridgeLane Foundation**

**Conen-Spence Trust**

**Crookes Family Foundation**

**The Curtis Foundation**



Min Darling and Ian Darling AO  
 Max and Dianne Denton  
 Mr Jerry Ellis AO and Mrs Ann Ellis  
 Mr Richard Elmslie and Mrs Leslie Tilly  
 Kennards Hire Foundation  
 Ferris Family Foundation  
 For Animals Foundation  
 Dr Martin Gleeson  
 Greater Good Charities  
 Ms Rosie Williams and Mr John Grill AO  
 Steven and Victoria Horne  
 Dr Sandra and Mr Graham Humphrey  
 Anna Josephson and Rickard Gardell  
 Alan and Lynne Rydge  
 Mrs Ingrid Kaiser  
 The Kinghorn Foundation  
 Maple-Brown Family Foundation  
 Jacob Meredith-Elali  
 Mark and Louise Nelson  
 Orinoco Foundation  
 Ottomin Foundation  
 Mr and Mrs John and Rosalinda Sample  
 Skipper-Jacobs Charitable Trust  
 The Skipper Family  
 The Suters Family  
 Janelle, Corinne and Mark Turner  
 Ms Lisa Walker  
 Mr George Wang  
 Julia Vonwiller AM and Chris Vonwiller AM

Friends of the Future Income  
 (Funds received from estates 2022/23)

The Estate of the Late David Bennett  
 The Estate of the Late Alma Bower  
 the Estate of the Late Danielle Coles  
 The Estate of the Late Joan Davis  
 The Estate of the Late Jane Mary Frolich  
 The Estate of the Late Lynette Forbes  
 The Estate of the Late Jean Dorothy Hill  
 The Estate of the Late Reiko Izawa  
 The Estate of the Late Helen Kemp  
 The Estate of the Late Ottilie King  
 The Estate of the Late Irene Martin  
 The Estate of the Late Don John McClimont  
 The Estate of the Late Milena Nemec  
 The Estate of the Late Gweneth Mossman  
 The Estate of the Late Jenny Tait  
 The Estate of the Late May Wilson

## Organisational Strength Snapshot

The number of **volunteers** across the organisation reaches

521 

spanning over 30 teams.

A record-breaking year for overnight experience Zoofari Lodge which saw

14,286 

visitors over the year.

The two Zoos welcomed over

27,336 

new Zoo Friends members.

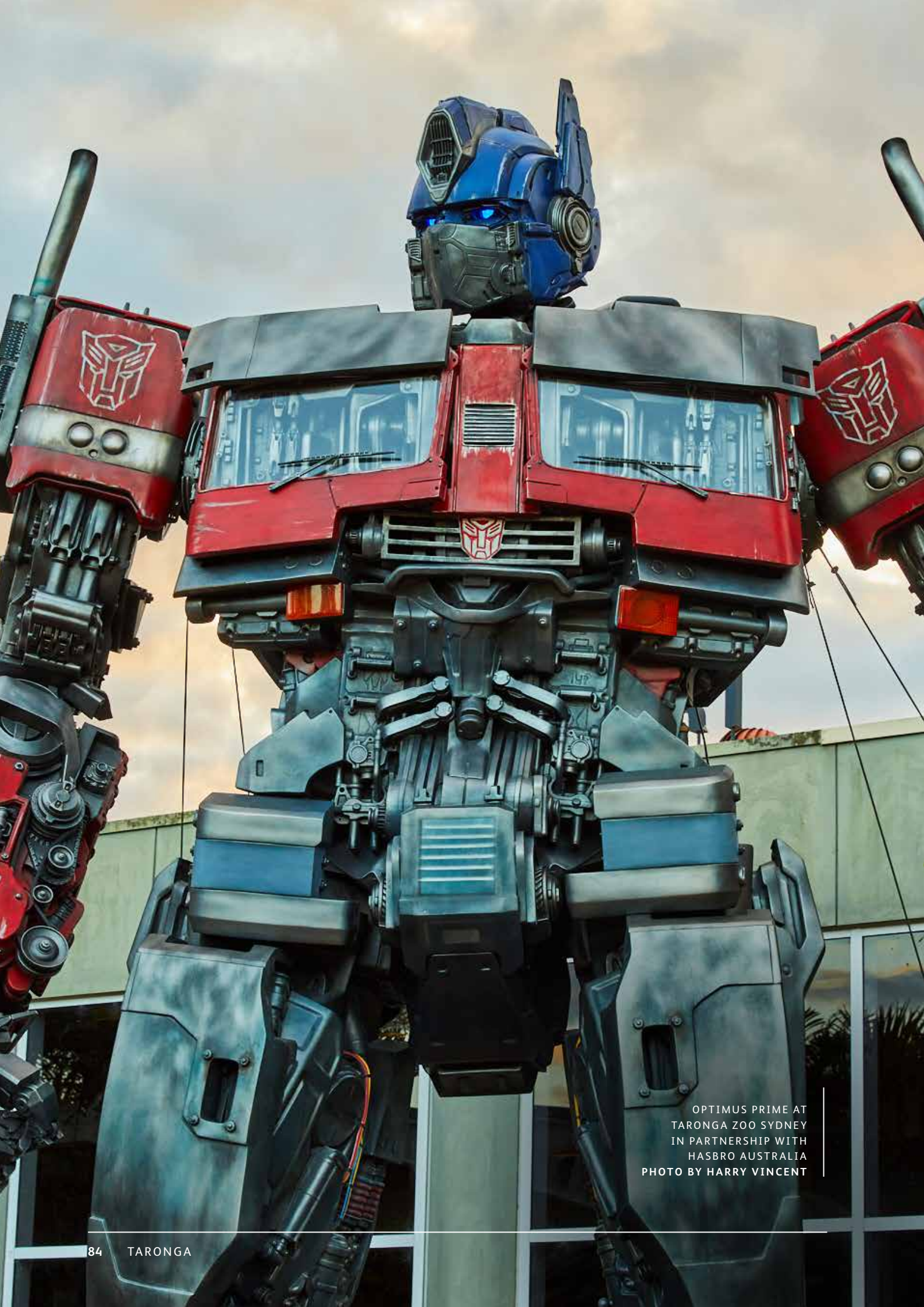
The Len Bleasal Scholarship was awarded to

27 

applicants in 2022; the most in a single year.

20 

employees completed an Australian Sign Language Short Course (AUSLAN) in partnership with TAFE NSW.



OPTIMUS PRIME AT  
TARONGA ZOO SYDNEY  
IN PARTNERSHIP WITH  
HASBRO AUSTRALIA  
PHOTO BY HARRY VINCENT



# TARONGA ZOO *and* TARONGA WESTERN PLAINS ZOO'S PARTNERS IN CONSERVATION

Sponsorship supports the Taronga Foundation's contribution to conservation

## Principal Sponsors



## Crown Sponsors



## Presidential Sponsors



## Primary Sponsors

Brookfield and  
Brookfield Properties

Epicure  
Genovese

Lifestyle Solutions  
Lion Nathan

OPPO Australia  
Veolia

## Champion Sponsors

ASX  
Aussie Drops  
Bayer Cropscience  
Boehringer Ingelheim

Bourne Digital  
Hulsbosch  
IXOM  
Maximus International

Minter Ellison  
Other Side of The Table  
The Amazing Baby Company  
Ticketek

Troy Animal Healthcare  
Zoetis

## Supporters

Buds & Bowers  
Chartis Technology  
Kelato Animal Health  
Koko Black

KPMG  
North Shore Veterinary  
Specialist Centre  
Norton Rose Fulbright

NSW Fire Brigades Relief  
& Welfare Fund  
SASH Small Animal  
Specialist Hospital

Tourism and Transport Forum  
Virbac  
Waterlogic Australia

# STATUTORY FINANCIAL STATEMENTS

## Taronga's 2022/23 Financial Results

Taronga's business operations enjoyed a successful year in 2022/23 as the organisation continued its post-pandemic recovery. To consider the core operating cash result, certain reclassifications need to be made from the Net Result reported in the 2023 Financial Statements.

Reclassifications include exclusion of Capital Grants received from the NSW Government which must be applied to nominated capital projects but are recognised as revenue under Australian Accounting Standards, other government grants and insurance proceeds relating to business continuity support during the pandemic, and non-cash expenditure Depreciation and Amortisation. The reclassifications are outlined in the table below.

Taronga's core operations cash result of \$15.2m was a strong performance and an improvement on the prior year by \$22.7m. The current financial year saw a return to pre-pandemic levels of turnover for many parts of Taronga's business operations and growth in key areas – total sales turnover reached \$100m, compared

with \$60m in the prior year. While there remains some lag in the return of international guests, strong results were recorded across all categories of domestic sector visitation at Taronga Zoo. Further, growth in ancillary spend, excellent accommodation occupancies at Taronga Western Plains Zoo, and a continued increase in Education programs has driven the record sales revenue. A focus on effective cost management has also contributed to a strong bottom line.

The Taronga Foundation had a good year in 2022/23 with \$14m in fundraising surplus. The Foundation continues to focus on the Wild Futures campaign. The annual result in 2022/23 fell short of the prior year comparison which had been particularly strong. It is noted that Taronga Foundation fundraising revenue must be applied to agreed capital and conservation programs and cannot be used to support the general operations of Taronga.

For the Year ended 30 June 2023	2023	2022	
	\$'000	\$'000	
Net Result	77,481	59,272	
<i>Exclude:</i>			
Capital grants – NSW Government	80,179	48,537	(Note 3. Government Grants)
Additional grants – pandemic support	nil	10,949	(Note 3. Government Grants)
Insurance proceeds	1,660	21,453	(Note 5. Other Income)
Depreciation and Amortisation	(33,553)	(34,211)	(Note 6. b) Depreciation and Amortisation Expenses)
<b>Cash Operating Result</b>	<b>29,195</b>	<b>12,544</b>	
<i>Represents:</i>			
Taronga core operations	15,198	(7,551)	
Taronga Foundation	13,997	20,095	(Note 19. Restricted Assets – Net Fundraising Surplus)





MEERKAT PUPS BORN  
TO MUM 'MIDRA' AND  
DAD 'HOWELL' AT  
THE WATERHOLE AT  
TARONGA WESTERN  
PLAINS ZOO DUBBO  
PHOTO BY RICK STEVENS



## INDEPENDENT AUDITOR'S REPORT

### Taronga Conservation Society Australia

To Members of the New South Wales Parliament

#### Opinion

I have audited the accompanying financial statements of Taronga Conservation Society Australia (the Taronga), which comprise the Statement by the Accountable Authority, the Statement of Comprehensive Income for the year ended 30 June 2023, the Statement of Financial Position as at 30 June 2023, the Statement of Changes in Equity and the Statement of Cash Flows, for the year then ended, notes comprising a Statement of Significant Accounting Policies, and other explanatory information.

In my opinion, the financial statements:

- have been prepared in accordance with Australian Accounting Standards and the applicable financial reporting requirements of the *Government Sector Finance Act 2018* (GSF Act), the Government Sector Finance Regulation 2018 (GSF Regulation) and the Treasurer's Directions
- presents fairly the Taronga's financial position, financial performance and cash flows.

My opinion should be read in conjunction with the rest of this report.

#### Basis for Opinion

I conducted my audit in accordance with Australian Auditing Standards. My responsibilities under the standards are described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report.

I am independent of the Taronga in accordance with the requirements of the:

- Australian Auditing Standards
- Accounting Professional and Ethical Standards Board's APES 110 'Code of Ethics for Professional Accountants (including Independence Standards)' (APES 110).

Parliament promotes independence by ensuring the Auditor-General and the Audit Office of New South Wales are not compromised in their roles by:

- providing that only Parliament, and not the executive government, can remove an Auditor-General
- mandating the Auditor-General as auditor of public sector agencies
- precluding the Auditor-General from providing non-audit services.

I have fulfilled my other ethical responsibilities in accordance with APES 110.

I believe the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.



## **The Board's Responsibilities for the Financial Statements**

The Board is responsible for the preparation and fair presentation of the financial statements in accordance with Australian Accounting Standards, the GSF Act, GSF Regulation and Treasurer's Directions. The Board's responsibility also includes such internal control as The Board determines is necessary to enable the preparation and fair presentation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, The Board is responsible for assessing the Taronga's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting.

## **Auditor's Responsibilities for the Audit of the Financial Statements**

My objectives are to:

- obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error
- issue an Independent Auditor's Report including my opinion.

Reasonable assurance is a high level of assurance but does not guarantee an audit conducted in accordance with Australian Auditing Standards will always detect material misstatements. Misstatements can arise from fraud or error. Misstatements are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions users take based on the financial statements.

A description of my responsibilities for the audit of the financial statements is located at the Auditing and Assurance Standards Board website at: [www.auasb.gov.au/auditors\\_responsibilities/ar4.pdf](http://www.auasb.gov.au/auditors_responsibilities/ar4.pdf) . The description forms part of my auditor's report.

The scope of my audit does not include, nor provide assurance:

- that the Taronga carried out its activities effectively, efficiently and economically
- about the security and controls over the electronic publication of the audited financial statements on any website where they may be presented
- about any other information which may have been hyperlinked to/from the financial statements.



Min Lee  
Director, Financial Audit

Delegate of the Auditor-General for New South Wales

27 September 2023  
SYDNEY

**TARONGA CONSERVATION SOCIETY AUSTRALIA (TARONGA)**  
**FINANCIAL STATEMENTS AND NOTES**  
FOR THE YEAR ENDED 30 JUNE 2023

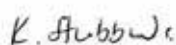
**Statement by the Accountable Authority**

Pursuant to section 7.6(4) of the *Government Sector Finance Act 2018* ('the Act'), we being members of the Board state that these financial statements:

- have been prepared in accordance with the Australian Accounting Standards and the applicable requirements of the Act, the *Government Sector Finance Regulation 2018* and the Treasurer's Directions, and
- present fairly Taronga's financial position, financial performance and cash flows.



Chair of the Board



Member of the Board

Sydney  
26 September 2023



**INCOME STATEMENT**  
FOR THE YEAR ENDED 30 JUNE 2023

	Notes	2023 \$'000	2022 \$'000
<b>Revenue</b>			
Sale of Goods and Services	2	100,524	60,224
Government Grants	3	97,923	76,847
Investment Revenue	4	8,495	761
Other Income	5	18,386	40,947
<b>Total Revenue</b>		<b>225,328</b>	<b>178,779</b>
<b>Expenses</b>			
Personnel Services	6(a)	60,181	48,160
Depreciation and Amortisation	6(b)	33,553	34,211
Finance Costs	6(c)	1,451	1,456
Operating Expenses	7	52,662	35,680
<b>Total Expenditure</b>		<b>147,847</b>	<b>119,507</b>
<b>NET RESULT</b>		<b>77,481</b>	<b>59,272</b>

The accompanying notes form part of these Financial Statements.

**STATEMENT OF COMPREHENSIVE INCOME**  
**FOR THE YEAR ENDED 30 JUNE 2023**

	Notes	2023 \$'000	2022 \$'000
<b>NET RESULT</b>		<b>77,481</b>	<b>59,272</b>
<b>Other comprehensive income:</b>			
<i>Items that will not be reclassified to net result in subsequent periods</i>			
Changes in revaluation surplus of property, plant and equipment	11	33,300	53,615
<b>Other comprehensive income for the year</b>		<b>33,300</b>	<b>53,615</b>
<b>TOTAL COMPREHENSIVE INCOME</b>		<b>110,781</b>	<b>112,887</b>

The accompanying notes form part of these Financial Statements.



**STATEMENT OF FINANCIAL POSITION**  
AS AT 30 JUNE 2023

	Notes	2023 \$'000	2022 \$'000
<b>ASSETS</b>			
<b>Current Assets</b>			
Cash and Cash Equivalents	22(a)	11,674	24,293
Receivables	8	8,051	5,903
Inventories	9	1,696	1,310
Other Financial Assets	10	276,000	200,000
<b>Total Current Assets</b>		<b>297,421</b>	<b>231,506</b>
<b>Non-Current Assets</b>			
Property, Plant and Equipment	11		
-Land and Buildings		514,220	485,199
-Plant and Equipment		6,544	6,012
-Infrastructure		125,549	111,767
-Work-in-Progress		27,149	27,248
Total Property, Plant and Equipment		673,462	630,226
Right-of-use Assets	12	80	153
Intangible Assets	13	45	187
<b>Total Non-Current Assets</b>		<b>673,587</b>	<b>630,566</b>
<b>Total Assets</b>		<b>971,008</b>	<b>862,072</b>
<b>LIABILITIES</b>			
<b>Current Liabilities</b>			
Trade and Other Payables	15	28,237	23,085
Other Liabilities	16	36,036	39,687
Borrowings	17	3,589	4,940
<b>Total Current Liabilities</b>		<b>67,862</b>	<b>67,712</b>
<b>Non-Current Liabilities</b>			
Borrowings	17	46,942	47,616
Trade and Other Payables	15	2,031	3,183
Other Liabilities	16	836	1,005
<b>Total Non-Current Liabilities</b>		<b>49,809</b>	<b>51,804</b>
<b>Total Liabilities</b>		<b>117,671</b>	<b>119,516</b>
<b>Net Assets</b>		<b>853,337</b>	<b>742,556</b>
<b>Equity</b>			
Reserves		446,583	413,283
Accumulated Funds		406,754	329,273
<b>Total Equity</b>		<b>853,337</b>	<b>742,556</b>

The accompanying notes form part of these Financial Statements.

**STATEMENT OF CHANGES IN EQUITY**  
**FOR THE YEAR ENDED 30 JUNE 2023**

	Accumulated Funds	Asset Revaluation Reserve	Total
	\$'000	\$'000	\$'000
<b>Balance at 1 July 2022</b>	329,273	413,283	742,556
<b>Net result for the year</b>	77,481	-	77,481
<b>Other comprehensive income:</b>			
Net change in revaluation surplus of property, plant and equipment	-	33,300	33,300
<b>Total other comprehensive income</b>	-	33,300	33,300
<b>Total comprehensive income for the year</b>	77,481	33,300	110,781
<b>Balance at 30 June 2023</b>	<b>406,754</b>	<b>446,583</b>	<b>853,337</b>

<b>Balance at 1 July 2021</b>	261,560	359,668	621,228
Correction of prior period error	8,441	-	8,441
<b>Restated Balance at 1 July 2021</b>	270,001	359,668	629,669
<b>Net result for the year</b>	59,272	-	59,272
<b>Other comprehensive income:</b>			
Net change in revaluation surplus of property, plant and equipment	-	53,615	53,615
<b>Total other comprehensive income</b>	-	53,615	53,615
<b>Total comprehensive income for the year</b>	59,272	53,615	112,887
<b>Balance at 30 June 2022</b>	<b>329,273</b>	<b>413,283</b>	<b>742,556</b>

The accompanying notes form part of these Financial Statements.



**STATEMENT OF CASH FLOWS**  
FOR THE YEAR ENDED 30 JUNE 2023

	Notes	2023 \$'000	2022 \$'000
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>			
<b><u>Receipts</u></b>			
Sale of Goods and Services		124,353	85,509
Interest Received		6,062	390
Capital grant - NSW Government		74,820	69,225
Recurrent Grant - NSW Government		16,458	15,919
Other Grant - NSW Government		1,286	6,442
Other Grant - Australian Government		1,213	4,736
Insurance Proceeds		1,660	21,453
<b>Total Receipts</b>		<b>225,852</b>	<b>203,674</b>
<b><u>Payments</u></b>			
Personnel Services		(57,198)	(51,329)
Suppliers for Goods and Services		(57,453)	(35,135)
Finance Costs		(1,705)	(2,102)
<b>Total Payments</b>		<b>(116,356)</b>	<b>(88,566)</b>
<b>Net Cash inflow from Operating Activities</b>	22(b)	<b>109,496</b>	<b>115,108</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>			
Purchases of Property, Plant and Equipment		(44,326)	(19,545)
Purchases of Other Financial Assets		(76,000)	(102,000)
<b>Net Cash outflow from Investing Activities</b>		<b>(120,326)</b>	<b>(121,545)</b>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>			
Repayment of Borrowings		(1,788)	(69)
<b>Net Cash flow from Financing Activities</b>		<b>(1,788)</b>	<b>(69)</b>
<b>Net increase/(decrease) in cash and cash equivalents</b>		<b>(12,619)</b>	<b>(6,506)</b>
<b>Cash and cash equivalents at beginning of the year</b>		<b>24,293</b>	<b>30,799</b>
<b>Cash and cash equivalents at end of year</b>	22(a)	<b>11,674</b>	<b>24,293</b>

The accompanying notes form part of these Financial Statements.

**NOTES TO THE FINANCIAL STATEMENTS**

<b>Note</b>	<b>Contents</b>
1	Summary of Significant Accounting Policies
2	Sale of Goods and Services
3	Government Grants
4	Investment Revenue
5	Other Income
6(a)	Personnel Services
6(b)	Depreciation and Amortisation Expenses
6(c)	Finance Costs
7	Other Operating Expenses
8	Trade and other receivables
9	Inventories
10	Other Financial Assets
11	Property, Plant and Equipment
12	Leases
13	Intangible Assets
14	Fair Value Measurement of Non-Financial Assets
15	Trade and Other Payables
15(a)	Personnel Services
16	Other Liabilities
17	Borrowings
18	Financial Instruments
19	Restricted Assets
20	Remuneration of Auditors
21	Related Party Disclosures
22	Notes to the Cash Flow Statement
23	Commitments for Expenditure
24	Contingent Assets and Liabilities
25	Subsequent Events



## **NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 30 JUNE 2023**

### **1. Statement of Significant Accounting Policies**

#### **a) Reporting Entity**

Taronga is a NSW Government Public Non-Financial Corporation constituted under the *Zoological Parks Board Act 1973*. Taronga is a not-for-profit entity as profit is not its principal objective. The reporting entity is consolidated as part of the NSW Total State Sector Accounts.

Taronga comprises the activities of Taronga Zoo, Taronga Western Plains Zoo and the Taronga Foundation. Taronga's commercial activities, namely retail, catering, experience activities and accommodation are also included.

These financial statements for the year ended 30 June 2023 have been authorised for issue by the Board on 26 September 2023.

#### **b) Basis of Preparation**

The entity's financial statements are general purpose financial statements which have been prepared in accordance with:

- i. Applicable Australian Accounting Standards (AAS) (which include Australian Accounting Interpretations)
- ii. The requirements of the *Government Sector Finance Act 2018* (GSF Act)
- iii. Treasurer's Directions issued under the GSF Act.

Property, plant and equipment and certain financial assets and liabilities are measured using the fair value basis. Other financial statement items are prepared in accordance with the historical cost convention except where specified otherwise.

Judgements, key assumptions and estimations management has made are disclosed in the relevant notes to the financial statements.

All amounts are rounded to the nearest one thousand dollars and are expressed in Australian currency, which is the entity's presentation and functional currency.

#### **c) Comparative Figures**

All comparative information presented for the preceding financial year corresponds to the disclosures specified for the current financial year, except where an Australian Accounting Standard permits or requires otherwise.

#### **d) Statement of Compliance**

Taronga's financial statements and notes comply with Australian Accounting Standards, which include Australian Accounting Interpretations.

**e) Animal Collection**

The animal collection managed by Taronga is reflected in Taronga's accounting records at one dollar. This is consistent with worldwide industry practice. Taronga regards the animals as part of a regional and international collection and not the specific property of the institution.

**f) Accounting for Goods and Services Tax**

Revenues, expenses and assets are recognised net of the amount of GST, except where:

- The amount of GST incurred by Taronga as a purchaser that is not recoverable from the Australian Taxation Office is recognised as part of the cost of acquisition of an asset or as part of an item of expense.
- Receivables and payables are stated with the amount of GST included. The net amount of GST recoverable from, or payable to, the Australian Taxation Office is included with other receivables or payables in the Statement of Financial Position.

Cash flows are included in the Statement of Cash Flows on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to, the Australian Taxation Office are presented as operating cash flows.

**g) Changes in Accounting Policy, Including New or Revised Australian Accounting Standards****Effective for the first time in 2022/2023**

All new or revised Australian Accounting Standards, amendments and interpretations applied for the first time in 2022/2023 are either not relevant to the operations of Taronga or do not have any impact on Taronga's results or disclosures.

**Australian Accounting Standards issued but not yet effective**

NSW public sector entities are not permitted to early adopt new Australian Accounting Standards unless NSW Treasury determines otherwise.

When the following Accounting Standards and amendments become mandatory, additional disclosures may be required. Taronga has made an assessment and determined that there will be no material impact on the Financial Statements.

- AASB 2020-1 Amendments to Australian Accounting Standards - Classification of Liabilities as Current or Non-Current – Applicable from 1 July 2023
- AASB 2021-2 Amendments to Australian Accounting Standards – Disclosure of Accounting Policies and Definition of Accounting Estimates - Applicable from 1 July 2023
- AASB 2022-10 Amendments to Australian Accounting Standards – Fair Value Measurement of Non-Financial Assets of Not-for-Profit Public Sector Entities - Applicable from 1 July 2024
- AASB 2022-1 Amendments to Australian Accounting Standards – Initial Application of AASB 17 and AASB 9 – Comparative Information - Applicable from 1 July 2023



#### **h) Major Event**

During the comparative financial year 2021/2022 coronavirus (COVID-19) pandemic was a significant issue for Taronga with a major negative impact on revenue from operations. Due to the lockdowns and international travellers ban, revenue from sale of goods and services was lost, these losses were offset by insurance proceeds in other income and special grants from NSW and Australian Government. In the current year revenue from zoo operations has normalised as the impact of pandemic is largely reduced.

## **2. Sale of Goods and Services**

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
Sale of goods	13,428	7,658
Rendering of services	87,096	52,566
<b>Total Sale of Goods and Services</b>	<b>100,524</b>	<b>60,224</b>

### **Recognition and Measurement**

Revenue is measured at the fair value of the consideration received or receivable. Amounts disclosed as revenue are net of returns, trade allowances, and amounts collected by third parties.

Taronga recognises revenue when the amount of revenue can be reliably measured, it is probable that the future economic benefits will flow to the entity and specific criteria have been met for each of Taronga's activities. Revenue is recognised in accordance with the requirements of AASB 15 Revenue from Contracts with Customers or AASB 1058 Income of Not-for-Profit Entities, dependent on whether there is a contract with a customer defined by AASB 15 Revenue from Contracts with Customers.

### **Sale of Goods**

Revenue from sale of goods is recognised when Taronga satisfies a performance obligation by transferring the promised goods. Taronga satisfies its performance obligations at the time of the sale of souvenirs, food items and at the same time the customer obtains control of promised goods. The payment is typically due at the time of transfer.

### **Rendering of Services**

Revenue from rendering of services is recognised when Taronga satisfies the performance obligation by transferring the promised services. Taronga typically satisfies its performance obligations by providing entry to the guests visiting the zoos, providing catering facilities, ropes course experience, overnight accommodation, car parking facility, attendance to the events and experience from zoo activities. The customer obtains control of the promised services upon delivery of the experiences and providing access to certain facilities. Payments are due upon reservation of services and at times upon providing access to certain facilities. Revenue is measured at the prices published on Taronga's website and displayed at ticketing kiosks.

### 3. Government Grants

	2023 \$'000	2022 \$'000
<i>Grants to Construct a Recognisable Non-Financial Asset to be Controlled by Taronga:</i>		
Capital grant - NSW Government	27,179	737
<i>Grants without Sufficiently Specific Performance Obligations:</i>		
Capital grant - NSW Government	53,000	47,800
Recurrent grant - NSW Government	16,458	15,919
Other grant - NSW Government	1,286	6,442
Other grant - Australian Government	-	5,949
<b>Total Government Grants</b>	<b>97,923</b>	<b>76,847</b>

#### Recognition and Measurement

Included in Government Grants income is the Recurrent grant received from NSW Government to fund public education, research, conservation work and asset maintenance. The note also includes Capital grants received to assist with the construction of major new assets (Visitor Experience Program, TZ Sky Safari, TWPZ Platypus Conservation Centre).

#### Grants to construct a Recognisable Non-Financial Asset to be controlled by Taronga

Where there is a written enforceable agreement in place, income from grants to acquire or construct a recognisable non-financial asset to be controlled by Taronga is received and recognised when Taronga satisfies its obligations under the transfer. Taronga satisfies the performance obligations under the transfer agreement to construct assets over time as the non-financial assets are being constructed. Revenue is recognised upon receipt of cash and completion of the construction activities whichever is at the later occurrence.

#### Grants without Sufficiently Specific Performance Obligations

Income from grants without sufficiently specific performance obligations, including where no written enforceable agreement is in place, is recognised upon receipt of cash.

### 4. Investment Revenue

	2023 \$'000	2022 \$'000
Term Deposits and Bank Interest	8,495	761
<b>Total Investment Revenue</b>	<b>8,495</b>	<b>761</b>

#### Recognition and Measurement

Interest income is recognised using the effective interest method. The effective interest rate is the rate that exactly discounts the estimated future cash receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the net carrying amount of the financial asset.



## 5. Other Income

	2023	2022
	\$'000	\$'000
Sponsorship	4,746	4,379
Donations and Bequests	11,980	15,115
Proceeds from Insurance	1,660	21,453
Total Other Income	18,386	40,947

### Recognition and Measurement

#### Sponsorship

Sponsorship revenue is brought to account as it is earned and is recognised when services are provided per sponsorship agreements. The value of goods and services received by way of sponsorship was included in revenue for the year as sponsorship income. The respective goods and services related to this income are reflected in the appropriate expense or asset accounts. The values of such sponsorships are brought to account on the condition that a fair value for the sponsorship could be ascertained.

#### Donations and Bequests

The Taronga Foundation's pledged donations including bequests are not recognised as income until received.

#### Proceeds from Insurance

Proceeds from insurance comprises of claims related to loss of revenue due to business disruption and destruction or damage to Taronga's assets. These claims are recognised as revenue upon receipt of approved payments.

## 6. Expenses

### a) Personnel Services

	2023	2022
	\$'000	\$'000
Salaries and Wages (including annual leave)	51,682	43,003
Superannuation - Defined Contribution Plans	5,297	4,204
Superannuation - Defined Benefit Plans*	(992)	(2,144)
Long Service Leave	675	545
Workers Compensation Insurance	410	406
Payroll Tax and Fringe Benefits Tax	3,109	2,146
Total Personnel Services	60,181	48,160

### Recognition and Measurement

The personnel services is the expense incurred by Taronga on personnel services provided by the Department of Planning and Environment (DPE).

\*As the employment is undertaken by DPE, the defined benefit superannuation actuarial gain/loss is included in Personnel Service Expenses in the Income Statement rather than in the Statement of Comprehensive Income. In 2023 a defined benefit superannuation actuarial gain of \$1,157,000 is included in superannuation defined benefit expense (\$2,344,000 gain in 2021/2022).

Personnel Service related costs amounting to \$2,521,046 have been capitalised during the year (\$2,038,170 in 2021/2022). These personnel service costs are excluded from the above.

Included in Salaries and Wages is \$1,539,000 accrual for salary and wage remediation payments owed to casual employees for prior years. The liability arises due to misinterpretation of Taronga's Awards regarding casual loading payments and associated method of calculation of the 1/12th allowance which is paid in lieu of annual leave.

An accrual of \$315,000 for interest to be paid to employees on identified remediation payments is included in Other operating expenses in Note 7.

#### b) Depreciation and Amortisation Expenses

	2023 \$'000	2022 \$'000
<b>Depreciation</b>		
Land and Buildings	24,270	24,910
Land and Buildings right-of-use assets	20	20
Plant and Equipment	1,715	1,807
Plant and Equipment right-of-use assets	53	49
Infrastructure	7,355	7,094
<b>Amortisation</b>		
Intangible Assets	140	331
<b>Total Depreciation and Amortisation Expenses</b>	<b>33,553</b>	<b>34,211</b>

Refer to Note 11, 12, and 13 for recognition and measurement policies on Depreciation and Amortisation.

#### c) Finance Costs

	2023 \$'000	2022 \$'000
Interest on Borrowings	1,684	1,900
Interest on Lease Liabilities	4	4
Amortisation of premiums relating to borrowings	(237)	(448)
<b>Total Finance Costs</b>	<b>1,451</b>	<b>1,456</b>

#### Recognition and Measurement

Finance costs consists of interest and other costs incurred in connection with the borrowing of the funds. Borrowing costs are recognised as expenses in the period in which they are incurred in accordance with Treasury's Mandate to not-for-profit entities.



## 7. Other Operating Expenses

	2023 \$'000	2022 \$'000
Advertising and Promotions	3,336	2,940
Animal Husbandry & Research Support	3,561	2,786
Assets Written off	654	26
Communications and Digital Technology	4,609	2,923
Contingent Labour	1,820	1,135
Contract Services	6,094	3,954
Cost of Goods Sold	4,766	2,676
Maintenance	7,035	6,077
Supply and Services	17,203	11,221
Utilities	3,584	1,942
Total Other Operating Expenses	52,662	35,680

### Total Maintenance Expenses

	2023 \$'000	2022 \$'000
Maintenance expense - Contracted Labour and other (non-employee related) included in Note 7	7,035	6,077
Employee related Maintenance expense included in Note 6(a)	1,628	1,373
Total Maintenance expenses included in Note 6(a) and Note 7	8,663	7,450

### Recognition and Measurement

Operating costs are recognised as an expense in the reporting period in which they are incurred. These expenses generally represent the day-to-day operating costs incurred in Taronga's normal operations.

#### Cost of Goods Sold

Cost of goods sold represents the amount of inventories sold during the year from retail activities and the cost of food and beverage for zoo activities.

#### Maintenance

The cost of day-to-day servicing or maintenance is charged to expenses as incurred, except where they related to the replacement of a part or component of an asset, in which case the costs are capitalised and depreciated.

#### Supply and Services

Supply and Services includes operating costs such as animal transport, audit fees, bank charges, conservation activities, catering, insurance, legal, postage, printing and stationery, professional services, staff development, travel and vehicle costs.

## 8. Trade and Other Receivables

	2023 \$'000	2022 \$'000
Trade Receivables from Contracts with Customer	6,873	4,685
Less: Allowance for expected credit losses	-	-
	6,873	4,685
Prepayments	1,178	1,218
Total Trade and Other Receivables	8,051	5,903

### Recognition and Measurement

#### Receivables

Trade receivables, which generally have 30-day terms, are recognised and carried at original invoice amount less an allowance for any uncollectible amounts. Short-term receivables with no stated interest rate are measured at the original invoice amount where the effect of discounting is immaterial.

#### Impairment

Taronga applies a simplified approach in calculating Expected Credit Losses (ECLs). Taronga recognises a loss allowance based on lifetime ECLs at each reporting date. Taronga has established a provision matrix based on its historical credit loss experience for trade receivables, adjusted for forward-looking factors specific to the receivable.

## 9. Inventories

	2023 \$'000	2022 \$'000
<b><u>Held for Distribution</u></b>		
Food for Animals	158	195
Stores and Spare Parts	202	236
	360	431
<b><u>Held for Resale</u></b>		
Souvenirs and Catering	1,336	879
	1,336	879
Total Inventories	1,696	1,310

### Recognition and Measurement

Inventories held for distribution are stated at the lower of cost and current replacement cost. Inventories held for resale are stated at the lower of cost and net realisable value. The cost is calculated using the weighted average cost method. Current replacement cost is the cost Taronga would incur to acquire the asset on the reporting date. Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.



## 10. Other Financial Assets

	2023 \$'000	2022 \$'000
<b>Term deposits:</b>		
91 - 180 Days	32,000	19,000
181 - 270 Days	219,000	88,000
Over 270 Days	25,000	93,000
Total Term Deposits	276,000	200,000
Less: Allowance for expected credit losses	-	-
Total Other Financial Assets	276,000	200,000

### Recognition and Measurement

Other financial assets include short term deposits that are due to mature between 3 and 12 months from the acquisition date. Term deposits due to mature within 3 months from the acquisition date are classified as cash and cash equivalents. Refer to note 18 for further disclosure on Other Financial Assets.

## 11. Property, Plant and Equipment

	Work in Progress \$'000	Land and Buildings \$'000	Plant and Equipment \$'000	Infrastructure \$'000	Total \$'000
<b>At 1 July 2022 fair value</b>					
Gross carrying amount	27,248	714,039	18,678	165,329	925,295
Accumulated Depreciation	-	(228,840)	(12,667)	(53,562)	(295,069)
Net carrying amount	27,248	485,199	6,011	111,767	630,226
<b>At 30 June 2023 - fair value</b>					
Gross carrying amount	27,149	767,108	20,850	186,465	1,001,572
Accumulated Depreciation	-	(252,888)	(14,306)	(60,916)	(328,110)
Net carrying amount	27,149	514,220	6,544	125,549	673,462

### Reconciliation

Reconciliations of the carrying amount of each class of property, plant and equipment at the beginning and end of the current financial year is set out below:

	Work in Progress \$'000	Land and Buildings \$'000	Plant and Equipment \$'000	Infrastructure \$'000	Total \$'000
<b>Year ended 30 June 2023</b>					
Net carrying amount at beginning of year	27,248	485,199	6,011	111,767	630,226
Additions	42,141	565	1,180	40	43,926
Transfers	(41,974)	26,739	1,067	14,168	-
Disposals	-	(606)	(76)	-	(682)
Expensed	(266)	-	-	-	(266)
Revaluation increment	-	26,371	-	6,929	33,300
Depreciation expense	-	(24,270)	(1,714)	(7,355)	(33,339)
Depreciation on disposals	-	222	76	-	298
Net carrying amount at end of year	27,149	514,220	6,544	125,549	673,462

	Work in Progress \$'000	Land and Buildings \$'000	Plant and Equipment \$'000	Infrastructure \$'000	Total \$'000
<b>At 1 July 2021 - fair value</b>					
Gross carrying amount	8,254	667,270	19,013	156,145	850,682
Accumulated Depreciation	-	(203,930)	(11,528)	(46,468)	(261,926)
Net carrying amount	8,254	463,340	7,485	109,677	588,756
<b>At 30 June 2022 - fair value</b>					
Gross carrying amount	27,248	714,039	18,678	165,329	925,295
Accumulated Depreciation	-	(228,840)	(12,667)	(53,562)	(295,069)
Net carrying amount	27,248	485,199	6,011	111,767	630,226

### Reconciliation

Reconciliations of the carrying amount of each class of property, plant and equipment at the beginning and end of the previous financial year is set out below:

	Work in Progress \$'000	Land and Buildings \$'000	Plant and Equipment \$'000	Infrastructure \$'000	Total \$'000
<b>Year ended 30 June 2022</b>					
Net carrying amount at beginning of year	8,254	463,340	7,485	109,677	588,756
Additions	19,828	1,444	344	77	21,693
Transfers	(834)	597	15	221	-
Disposals	-	-	(694)	-	(694)
Expensed	-	-	-	-	-
Revaluation increment	-	44,728	-	8,887	53,615
Depreciation expense	-	(24,910)	(1,807)	(7,095)	(33,812)
Depreciation on disposals	-	-	668	-	668
Net carrying amount at end of year	27,248	485,199	6,011	111,767	630,226

### Recognition and Measurement

#### (a) Acquisition of Property, Plant and Equipment

The cost method of accounting is used for the initial recording of all acquisitions of assets controlled by Taronga. Cost is the amount of cash or cash equivalents paid or the fair value of the consideration given to acquire the assets at the time of its acquisition plus the costs incidental to the acquisition.

Assets acquired at no cost or for nominal consideration are initially recognised at their fair value at the date of acquisition. Fair value is the price that would be received to sell an asset in an orderly transaction between market participants at measurement date.

#### (b) Capitalisation Thresholds

Property, plant and equipment and intangible assets costing \$2,000 and above individually (or forming part of a network costing more than \$2,000) are capitalised.



### **(c) Revaluation of Property, Plant and Equipment**

Physical non-current assets are valued in accordance with the 'Valuation of Physical Non-Current Assets at Fair Value' (TPP 21-09). This Policy and Guideline Paper adopts fair value in accordance with AASB 13 *Fair Value Measurement* and AASB 116 *Property, Plant and Equipment*.

It further clarifies that fair value is determined by reference to its 'highest and best use' by market participants taking into account the existing physical, legal, financial and socio-political environment in which the entity operates and which results in the highest value.

Property, plant and equipment is measured at the highest and best use by market participants that is physically possible, legally permissible and financially feasible. The highest and best use must be available at a period that is not remote and take into account the characteristics of the asset being measured, including any socio-political restrictions imposed by government. In most cases, after taking into account these considerations, the highest and best use is the existing use. In limited circumstances, the highest and best use may be a feasible alternative use, where there are no restrictions on use or where there is a feasible higher restricted alternative use.

Fair value of land, infrastructure, buildings and plant and equipment is based on market participants' perspective, using valuation techniques that maximise relevant observable inputs and minimise unobservable inputs.

Non-specialised assets with short useful lives are measured at depreciated historical cost as an approximation of fair value. Taronga has assessed that any difference between fair value and depreciated historical cost is unlikely to be material.

Taronga revalues each class of "property, plant and equipment" except plant and equipment and WIP in accordance with TPP21-09. This requires a comprehensive revaluation at least every three years for Land using the market approach as the most appropriate valuation technique for that asset under AASB 13. Buildings and Infrastructure assets are re-valued using the cost approach and under AASB 13 will be re-valued at least every five years.

### **(d) Interim Revaluations**

At the reporting date, Taronga consults Valuer General NSW a cluster agency under The Department of Planning and Environment for an indexation advice to determine if the carrying value of its assets differs materially from the fair value. In the event the carrying value of assets differs materially from fair value, Taronga performs a revaluation based on the advice of Valuer General and updates its asset values.

Details of the most recent comprehensive revaluation for all classes of assets are as follows:

#### **Land**

The value of the Taronga's land at the reporting date is based on a comprehensive revaluation conducted by FPV Consultants and Aspect Property in March 2023 for Taronga Zoo and Taronga Western Plains Zoo respectively. The land has been valued at fair value having regard to current use as indicated by the zoning, heritage restrictions and other controls over the property. Taronga has formed the opinion that there was no material change to the valuation for the period to 30 June 2023. The next comprehensive revaluation for land is due to be performed during the financial year 2025/2026.

#### **Mosman – Taronga Zoo (28.1 hectares)**

Zoning: Special Activities 1 – Zoological Gardens under Mosman Local Environmental Plan 2012. As per FPV Consultants valuation in March 2023, based on comparable values for open recreation land, \$84,300,000.

**Dubbo – Taronga Western Plains Zoo (767.5 hectares)**

Zoning: SP3 Tourist under the Dubbo Regional Local Environment Plan 2022.

As per Aspect Property valuation in March 2023 based on comparable zoning values, \$5,900,000.

**Infrastructure**

Valuation of the infrastructure includes all site works which are considered to add value to the site as used and not already valued as individual fixed assets (such as buildings). This includes all services, roads and landscaping, etc. The value for infrastructure was split between the major categories of roads, services and landscaping and its value to the site expressed at Depreciated Replacement Cost. The last comprehensive valuation was conducted by the Estate Property Consultants Pty Ltd in October 2018. In the interim period up to 30 June 2023 management has assessed the indexation rates in consultation with Valuer General NSW and in March 2023 Taronga has adjusted these assets to reflect the cumulative indexation increment of 15.2%. The next comprehensive revaluation for infrastructure is due to be performed during 2023/2024.

**Buildings, Enclosures and Improvements**

The last comprehensive revaluation of Taronga's buildings, enclosures and improvements was conducted by the Estate Property Consultants Pty Ltd in October 2018. In the interim period up to 30 June 2023 management has annually assessed the indexation rates in consultation with Valuer General NSW and in June 2023 Taronga has adjusted these assets to reflect the cumulative indexation increment of 15.2%. The next comprehensive revaluation for infrastructure is due to be performed during 2023/2024.

**(e) Revaluation Increments/Decrements**

Revaluation increments are recognised in other comprehensive income and credited directly to the asset revaluation reserve, except to the extent that an increment reverses a revaluation decrement in respect of that class of asset previously recognised as loss in net result, the increment is recognised immediately as revenue in the net result.

Revaluation decrements are recognised immediately as expenses in the net result, except that, to the extent that a credit balance exists in the asset revaluation reserve in respect of the same class of assets, they are debited directly to the asset revaluation reserve.

As a not-for-profit entity, revaluation increments and decrements are offset against one another within a class of non-current assets, but not otherwise. When revaluing non-current assets the gross amount and the related accumulated depreciation are separately restated.

Where an asset that has previously been re-valued is disposed of, any balance remaining in the asset revaluation reserve in respect of that asset is transferred to the accumulated funds.

**(f) Impairment of Property, Plant and Equipment**

As a not-for-profit entity with no cash generating units, impairment under AASB 136 Impairment of Assets is unlikely to arise. As property, plant and equipment is carried at fair value or an amount that approximates fair value, impairment can only arise in the rare circumstances such as where the costs of disposal are material.



### (g) Depreciation and Amortisation

Taronga has adopted a policy whereby depreciation is calculated on a straight-line basis for all depreciable assets so as to write off the depreciable amount of each asset as it is consumed over its useful life. Details of depreciation rates and methods are as follows:

Category of Asset	Rate of Depreciation
Motor Vehicles	10.00%
Plant & Equipment	The rate being determined by the estimated life of the asset (3 – 10 years as appropriate).
Infrastructure	The rate being determined by the estimated life of the asset (3 – 40 years as appropriate).
Buildings, Enclosures and Improvements	The rate being determined by the estimated life of the asset (1 – 50 years as appropriate).

Taronga's intangible assets are amortised using the straight line method. Details of amortisation rates are as follows:

Category of Asset	Rate of Amortisation
Financial Application and Other Software	10.0% – 33.3%

These rates are consistent with those used in the previous year.

## 12. Leases

### Entity as a Lessee

#### Right-of-use assets under leases

	Land and Buildings \$'000	Plant and Equipment \$'000	Total \$'000
Balance at 1 July 2022	82	71	153
Additions	-	-	-
Depreciation Expense	(20)	(53)	(73)
Balance at 30 June 2023	62	17	80

	Land and Buildings \$'000	Plant and Equipment \$'000	Total \$'000
Balance at 1 July 2021	102	100	202
Additions	-	20	20
Depreciation Expense	(20)	(49)	(69)
Balance at 30 June 2022	82	71	153

**Lease liabilities**

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
<b>Balance at 1 July</b>	153	202
Additions	-	20
Interest Expenses	4	4
Payments	(77)	(73)
<b>Balance at 30 June</b>	<b>80</b>	<b>153</b>

The following amounts were recognised in the statement of comprehensive income in respect of leases where Taronga is the lessee:

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
Depreciation expense of right-of-use assets	(73)	(69)
Interest expense on lease liabilities	(4)	(4)
<b>Total amount recognised in the statement of comprehensive income</b>	<b>(77)</b>	<b>(73)</b>

Future minimum lease payments under non-cancellable leases are as follows:

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
Within one year	71	82
Later than one year and not later than five years	50	172
<b>Total (including GST)</b>	<b>121</b>	<b>254</b>
Less: GST recoverable	11	23
<b>Total (excluding GST)</b>	<b>110</b>	<b>231</b>

Taronga had total cash outflows for leases of \$66,028 during 2022/2023 (\$74,684 2021/2022).

Taronga leases land for browse plantations, office and warehouse equipment. Lease contracts are typically made for fixed periods of 2 to 10 years. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes. Taronga does not provide residual value guarantees in relation to leases.

Extension and termination options are included in a number of property and equipment leases. These terms are used to maximise operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by Taronga and not by the respective lessor. In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). Potential future cash outflows have not been included in the lease liability because it is not reasonably certain that the leases will be extended (or not terminated). The assessment is reviewed if a significant event or a significant change in circumstances occurs which affects this assessment and that is within the control of the lessee. During the current financial year there was no financial impact of revising lease terms to reflect the effect of exercising extension and termination options.



### **Right-of-use assets**

Taronga recognises right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are initially measured at the amount of initial measurement of the lease liability, adjusted by any lease payments made at or before the commencement date and lease incentives, any initial direct costs incurred, and estimated costs of dismantling and removing the asset or restoring the site.

The Right-of-use assets are subsequently measured at cost. They are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as follows:

- Land and buildings 1 to 10 years
- Plant and machinery 1 to 5 years
- Motor vehicles and other equipment 1 to 5 years

If ownership of the leased asset transfers to Taronga at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

The right-of-use assets are also subject to impairment. Taronga assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the entity estimates the asset's recoverable amount. When the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. After an impairment loss has been recognised, it is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the net result.

### **Lease liabilities**

At the commencement date of the lease, Taronga recognises lease liabilities measured at the present value of lease payments to be made over the lease term. Lease payments include:

- Fixed payments (including in substance fixed payments) less any lease incentives receivable;
- Variable lease payments that depend on an index or a rate;
- Amounts expected to be paid under residual value guarantees;
- Exercise price of a purchase options reasonably certain to be exercised by Taronga; and
- Payments of penalties for terminating the lease, if the lease term reflects Taronga exercising the option to terminate.

Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, which is generally the case for the Taronga's leases, Taronga's incremental borrowing rate is used, being the rate that Taronga would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments

(e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Taronga's lease liabilities are included in borrowings.

### Recognition and measurement for leased assets

Taronga assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Taronga recognises lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets, except for short-term leases and leases of low-value assets.

As a lessee, Taronga recognises a lease liability and right-of-use asset at the inception of the lease. The lease liability is measured at the present value of the future lease payments, discounted using the interest rate implicit in the lease, or the incremental borrowing rate if the interest rate implicit in the lease cannot be readily determined. The corresponding right-of-use asset is initially measured at the value of the lease liability adjusted for lease payments before inception, lease incentives, initial direct costs and estimates of costs for dismantling and removing the asset or restoring the site on which it is located. In subsequent years right-of-use asset is measured at cost less any accumulated depreciation and impairment losses.

## 13. Intangible Assets

	<b>Software and other Intangibles \$'000</b>
<b>At 1 July 2022</b>	
Cost (gross carrying amount)	2,427
Accumulated Amortisation and Impairment	(2,240)
Net carrying amount	187
<b>At 30 June 2023</b>	
Cost (gross carrying amount)	2,408
Accumulated Amortisation and Impairment	(2,363)
Net carrying amount	45
<b>Year ended 30 June 2023</b>	
Net carrying amount at beginning of year	187
Additions (acquisitions)	-
Transfers	-
Disposals	(2)
Amortisation	(140)
Amortisation on disposals	-
Net carrying amount at end of year	45



	<b>Software and other Intangibles \$'000</b>
<b>At 1 July 2021</b>	
Cost (gross carrying amount)	2,427
Accumulated Amortisation and Impairment	(1,909)
Net carrying amount	518
<b>At 30 June 2022</b>	
Cost (gross carrying amount)	2,427
Accumulated Amortisation and Impairment	(2,240)
Net carrying amount	187
<b>Year ended 30 June 2022</b>	
Net carrying amount at beginning of year	518
Additions (acquisitions)	-
Transfers	-
Disposals	-
Amortisation	(331)
Amortisation on disposals	-
Net carrying amount at end of year	187

### Recognition and Measurement

Taronga recognises intangible assets only if it is probable that future economic benefits will flow to Taronga and the cost of the asset can be measured reliably. Intangible assets are measured initially at cost. Where an asset is acquired at no cost or nominal cost, the cost is its fair value as at the date of acquisition.

Intangible assets are subsequently measured at fair value only if there is an active market. As there is no active market for some of Taronga's software classified as intangible assets, these assets are carried at cost less any accumulated amortisation and impairment losses.

In general, intangible assets are tested for impairment where an indicator of impairment exists. If the recoverable amount is less than its carrying amount the carrying amount is reduced to the recoverable amount or the reduction is recognised as an impairment loss.

Cost of software as a service is not considered as an intangible asset, instead it is recognised as a service expense during the year. Any costs related to configuration and or customisation of cloud software is also recognised as an expense.

### 14. Fair Value Measurement of Non-Financial Assets

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either in the principal market for the asset or liability or in the absence of a principal market, in the most advantageous market for the asset or liability.

When measuring fair value, the valuation technique used maximises the use of relevant observable inputs and minimises the use of unobservable inputs. Under AASB 13, Taronga categorises, for disclosure purposes, the valuation techniques based on the inputs used in the valuation techniques as follows:

Level 1 - quoted (unadjusted) prices in active markets for identical assets / liabilities that the entity can access at the measurement date.

Level 2 - inputs other than quoted prices included within Level 1 that are observable, either directly or indirectly.

Level 3 - inputs that are not based on observable market data (unobservable inputs).

Taronga recognises transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

#### (a) Fair Value Hierarchy

2023	Level 1	Level 2	Level 3	Total Fair Value
	\$'000	\$'000	\$'000	\$'000
<b>Property Plant and Equipment</b>				
Land and Buildings	-	90,485	423,735	514,220
Infrastructure	-	-	125,549	125,549
	-	90,485	549,284	639,769
<b>2022</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total Fair Value</b>
	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>	<b>\$'000</b>
<b>Property Plant and Equipment</b>				
Land and Buildings	-	88,698	396,501	485,199
Infrastructure	-	-	111,767	111,767
	-	88,698	508,268	596,966

There were no transfers between Level 1 or 2 during the year.

#### (b) Valuation Techniques, Inputs and Processes

The Fair value of land, buildings and infrastructure was determined by Valuer General NSW and Aspect Property. Taronga's land has been valued using the direct comparison approach and classified as level 2, under this valuation method transactions of land acquired for special uses and open space purposes are analysed and considered for comparison purposes.

Fair value of buildings and infrastructure is measured using the cost approach. This valuation technique reflects the amount that would be required currently to replace the service capacity of the asset. Buildings and infrastructure are categorised as level 3.



### (c) Reconciliation of Recurring Level 3 Fair Value Measurements

2023

	Buildings \$'000	Infrastructure \$'000	Total Recurring Level 3 Fair value \$'000
<b>Fair Value as at 1 July 2022</b>	<b>396,501</b>	<b>111,767</b>	<b>508,268</b>
Additions	27,304	14,207	41,511
Revaluation increments recognised in other comprehensive income	24,583	6,930	31,513
Disposals	(384)	-	(384)
Depreciation	(24,270)	(7,354)	(31,624)
<b>Fair Value as at 30 June 2023</b>	<b>423,734</b>	<b>125,550</b>	<b>549,284</b>

2022

	Buildings \$'000	Infrastructure \$'000	Total Recurring Level 3 Fair value \$'000
<b>Fair Value as at 1 July 2021</b>	<b>382,965</b>	<b>109,677</b>	<b>492,642</b>
Additions	1,756	298	2,054
Revaluation increments recognised in other comprehensive income	36,690	8,887	45,577
Depreciation	(24,910)	(7,095)	(32,005)
<b>Fair Value as at 30 June 2022</b>	<b>396,501</b>	<b>111,767</b>	<b>508,268</b>

### 15. Trade and Other Payables

	2023 \$'000	2022 \$'000
<b>Current Liabilities</b>		
Operating Expense Creditors	4,179	4,059
Capital Creditors	2,635	3,035
Accruals and Other Creditors	4,823	3,526
Personnel Services	16,600	12,465
<b>Total Current Trade and Other Payables</b>	<b>28,237</b>	<b>23,085</b>
<b>Non-Current Liabilities</b>		
Personnel Services	2,031	3,183
<b>Total Non-Current Trade and Other Payables</b>	<b>2,031</b>	<b>3,183</b>
<b>Total Trade and Other Payables</b>	<b>30,268</b>	<b>26,268</b>

## Recognition and Measurement

Payables are initially recognised at fair value, usually based on the transaction cost. Trade accounts payable are generally settled within 30 days.

### (a) Personnel Services

	2023 \$'000	2022 \$'000
<b>Current Liabilities</b>		
Salaries and Wages Payable	3,040	112
Annual Leave Provision	4,044	3,409
Long Service Leave Provision	8,557	8,082
Defined Benefit Superannuation	959	862
<b>Total Current Payable</b>	<b>16,600</b>	<b>12,465</b>
<b>Non-Current Liabilities</b>		
Defined Benefit Superannuation	2,031	3,183
<b>Total Non-Current Payable</b>	<b>2,031</b>	<b>3,183</b>
<b>Total Personnel Services</b>	<b>18,631</b>	<b>15,648</b>

## Recognition and Measurement

Since the Administrative Arrangement Order 2014 all employees are under the employment of DPE, therefore salaries and wages, annual leave and on-costs are classified as personnel services expenses and provisions for annual leave, long service leave and defined benefit superannuation plans are recognised as payables.

Included in Salaries and Wages payables is \$1,539,000 accrual for salary and wage remediation payments owed to casual employees for prior years. The liability arises due to misinterpretation of Taronga's Awards regarding casual loading payments and associated method of calculation of the 1/12th allowance which is paid in lieu of annual leave.

An accrual of \$315,000 for interest to be paid to employees on identified remediation payments is included in Other operating expenses in Note 7.

### (a) Salaries and Wages, Annual Leave, Sick Leave and On-Costs

Liabilities for salaries and wages that fall due wholly within 12 months of the reporting date are recognised and measured in respect of employees' services up to the reporting date at undiscounted amounts based on the amounts expected to be paid when the liabilities are settled.

Unused non-vesting sick leave does not give rise to a liability as it is not considered probable that sick leave taken in the future will be greater than the benefit accrued in the future.

All accrued annual leave is treated as a current liability with the expectation that annual leave will be taken when due. The on-costs i.e. payroll tax, worker's compensation insurance premiums and superannuation which are consequential to employment have been taken into account in calculating annual leave provisions.



### (b) Long Service Leave and Superannuation

The liability for long service leave is recognised as payables under personnel services and measured as the present value of expected future payments to be made in respect of services provided by employees up to the reporting date.

Consideration is given to expected future wage and salary levels, experience of employee departures and periods of service. Expected future payments are discounted using market yields at the reporting date on Government bonds with terms to maturity that match as closely as possible the estimated future cash flows.

Superannuation expense is determined using the formulae specified in the Treasurer's Directions. All employees are entitled to superannuation benefits under one of the superannuation schemes, namely Aware Super (AS), State Authorities Non-Contributory Superannuation Scheme (SANCS), State Authorities Superannuation Scheme (SASS), and State Superannuation Scheme (SSS). All funds are administered by the Superannuation Administration Corporation trading as Mercer Administration Services (Australia) Pty Ltd.

The superannuation schemes SSS, SASS and SANCS are all defined benefit schemes; at least a component of the final benefit is derived from a multiple of member salary and years of membership. All three schemes are closed to new members. Employees who are not members of an associated scheme and were covered by the State Authorities Non-Contributory Scheme (Basic Benefit) are automatically transferred into AS. Employees also have the choice of using other superannuation schemes and some have opted to do so.

### (c) Consequential on-costs

The outstanding amounts of payroll tax, workers' compensation insurance premiums, and fringe benefits tax, which are consequential to employment, are recognised as either liabilities or expenses depending on where the employee benefits to which they relate have been recognised.

## 16. Other Liabilities

	2023 \$'000	2022 \$'000
Contract Liabilities - Current	20,368	18,660
Liabilities arising from transfers to construct non-financial assets	15,668	21,027
Total Other Current Liabilities	36,036	39,687
Contract Liabilities - Non-Current	836	1,006
Total Other Non-Current Liabilities	836	1,006
Total Other Liabilities	36,872	40,693

### Recognition and Measurement

Contract Liabilities represents payments received in advance for Zoo admission, overnight accommodation and other Zoo activities. Liabilities arising from transfers to construct non-financial assets are recognised when funds are received in advance and until the obligation to construct a recognisable non-financial asset is completed.

**Reconciliation of Liabilities arising from transfers to construct non-financial assets**

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
Opening balance of liabilities arising from transfers to acquire/construct non-financial assets to be controlled by the entity	21,027	339
Add: receipt of cash during the financial year	54,800	69,225
Deduct: income recognised during the financial year	60,159	48,537
Closing balance of liabilities arising from transfers to construct non-financial assets to be controlled by the entity	15,668	21,027

**17. Borrowings**

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
<b>NSW Treasury Corporation (TCorp) Borrowings</b>	<b>50,451</b>	<b>51,795</b>
These loans are due to mature as follows:		
Not later than one year	3,519	4,870
Later than one year but not later than two years	2,742	3,583
Later than two years but not later than five years	17,571	13,696
Later than five years	26,619	30,254
Total NSW TCorp Borrowings	50,451	52,403
Lease Liability - Current	70	69
Lease Liability - Non Current	10	84
Total Borrowings	50,531	52,556

**Recognition and Measurement**

Borrowings classified as financial liabilities at amortised cost are initially measured at fair value, net of directly attributable transaction costs. These are subsequently measured at amortised cost using the effective interest method. Gains and losses are recognised in net result when the liabilities are derecognised as well as through the amortisation process. Refer to Note 12 for accounting policy for lease liabilities.

**Face Value and Capital Value of Loans**

	<b>2023</b>	<b>2022</b>
	<b>\$'000</b>	<b>\$'000</b>
Face Value of Loans	50,812	51,795
Add Unamortised Premium	-	608
Less Discount	(361)	-
Capital Value of Loans	50,451	52,403



## Reconciliation of Changes in Liabilities Arising from Financing Activities

### 2023

	1-Jul-22 \$'000	Cash flows \$'000	Amortisation \$'000	30-Jun-23 \$'000
TCorp Borrowings	52,403	(1,715)	(237)	50,451
Total Liabilities from Financing Activities	52,403	(1,715)	(237)	50,451

### 2022

	1-Jul-21 \$'000	Cash flows \$'000	Amortisation \$'000	30-Jun-22 \$'000
TCorp Borrowings	51,795	-	608	52,403
Total Liabilities from Financing Activities	51,795	-	608	52,403

## 18. Financial Instruments

Taronga has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- Market risk

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework.

Taronga's Performance, Audit, Risk & Safety Committee is responsible for monitoring risk management policies. The Committee reports regularly to the Board of Directors on its activities.

Risk management policies are established to identify and analyse the risks faced by Taronga, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and Taronga's activities. Taronga, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Performance, Audit, Risk & Safety Committee oversees how management monitors compliance with Taronga's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by Taronga.

**Financial Instrument Categories**

<b>Financial Assets Class:</b>	<b>Notes</b>	<b>Category</b>	<b>2023 \$'000</b>	<b>2022 \$'000</b>
Cash and Cash Equivalents	22	Amortised Cost, Fair Value	11,674	24,293
Receivables (1)	8	Amortised cost	5,868	4,145
Other Financial Assets	10	Amortised cost	276,000	200,000
<b>Financial Liabilities Class:</b>				
Payables (2)	15	Financial liabilities measured at amortised cost	30,268	26,268
Borrowings	17	Financial liabilities measured at amortised cost	50,451	52,403

(1) Excludes statutory receivables and prepayments (i.e. not within scope of AASB 7).

(2) Excludes statutory payables and unearned revenue in (i.e. not within scope of AASB 7).

Financial Instruments give rise to positions that are a financial asset either of Taronga or its counterparty and a financial liability (or equity instrument) of the other party. For Taronga these include cash, receivables, cash deposited at the bank, payables and borrowings.

In accordance with AASB 7 *Financial Instruments: Disclosures*, information is disclosed below in respect of the market risk, credit risk and liquidity risk of financial instruments.

Financial instruments are carried at amortised cost. However, the fair value of the other classes of financial instruments approximates their carrying value.

Taronga does not enter into or trade financial instruments for speculative purposes. Taronga does not use financial derivatives.

**a) Credit Risk**

Credit risk arises from the financial assets of Taronga which comprises trade and other receivables. The carrying amount of Taronga's financial assets represents the maximum credit exposure. Credit risk is the risk of financial loss to Taronga if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from Taronga's receivables from customers. The maximum exposure to credit risk is represented by the carrying amount of the financial assets (net of any allowance for impairment).

Credit risk arises from the financial assets of Taronga, including cash, receivables and authority deposits. No collateral is held by Taronga. Taronga has not granted any financial guarantees.

Credit risk associated with Taronga's financial assets, other than receivables is managed through the selection of counterparties and the establishment of minimum credit rating standards. Authority deposits held with NSW Treasury Corporation (TCorp) IM Funds are guaranteed by the State.

## Cash and Other Financial Assets

Cash and Other Financial Assets comprises cash on hand, Term Deposits with ANZ Banking Corporation and Bank of Queensland. Interest is earned on daily bank balances. At balance date the cash deposits were earning an average interest rate of 4.62% (2021/2022 1.77%), the weighted average interest rate for the period was 3.65% (2021/2022 0.99%). None of these balances are past due or impaired.

## Receivables - Trade Debtors

Taronga applies the AASB 9 simplified approach to measure expected credit losses which uses a lifetime expected loss allowance for all trade debtors.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected loss rates are based on historical observed loss rates. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. Taronga has identified the GDP and the unemployment rate to be the most relevant factors, and accordingly adjusts the historical loss rates based on expected changes in these factors.

Trade debtors are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include, amongst others a failure to make contractual payments for a period of greater than 91 days past due.

The loss allowance for trade debtors is as below:

30-Jun-23		\$'000				
	Current	<30 days	30-60 days	61-90 days	>91 days	Total
Expected credit loss rate	0%	0%	0%	0%	100%	
Gross carrying amount	5,403	316	76	73	-	5,868
Expected credit loss allowance	-	-	-	-	-	-

30-Jun-22		\$'000				
	Current	<30 days	30-60 days	61-90 days	>91 days	Total
Expected credit loss rate	0%	0%	0%	0%	100%	
Gross carrying amount	4,077	24	3	41	-	4,145
Expected credit loss allowance	-	-	-	-	-	-

Taronga is not materially exposed to concentration of credit risk to a single trade debtor or group of debtors. Taronga's maximum exposure to credit risk at reporting date was \$5,868,000 (\$4,145,000 in 2021/2022).

Taronga's maximum exposure to credit risk for trade receivables at the reporting date by type of customer was:



	2023	2022
	\$'000	\$'000
Trade Receivables Owing from NSW Government Entities	1,242	1,606
Trade Receivables Owing from Non-Government Educational Bodies	3	11
Trade Receivables Owing from Tourism Operators	284	153
Trade Receivables Owing from Other Entities	3,342	560
Trade Receivables Owing from Sponsors	305	76
Trade Receivables Owing from Catering Operator	692	526
Trade Receivables Owing from Australian Government	-	1,213
Less: Expected credit loss allowance	-	-
	5,868	4,145

## b) Liquidity Risk

Liquidity risk is the risk that Taronga will not be able to meet its financial obligations as and when they fall due. Taronga's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient liquidity to meet its liabilities when they fall due under both normal and stressed conditions.

Taronga continuously manages risk through monitoring future cash flows and maturities planning to ensure adequate holding of high quality liquid assets. During the current and prior years, there were no defaults or breaches in any loans payable. No assets have been pledged as collateral.

Liabilities are recognised for amounts due to be paid in the future for goods or services received, whether or not invoiced.

The following are the contractual maturities of financial liabilities, including estimated interest payments:

				Maturity Dates					
30-Jun-2023	Weighted Average Effective Int Rate %	Carrying Amount \$'000	Contractual Cash flows \$'000	< 6 mnths \$'000	6-12 mnths \$'000	>1yr \$'000	<2 yrs \$'000	2-5 yrs \$'000	>5 yrs \$'000
Non-derivative Financial liabilities									
Trade and Other Payables		11,637	(11,637)	(11,637)	-	-	-	-	-
Borrowings - Fixed Interest Rate	2.87%	50,451	(58,319)	(788)	(4,267)	(4,027)	(20,671)	(28,566)	
Lease Liabilities	2.38%	80	(96)	(35)	(35)	(26)	-	-	
30-Jun-2022	Weighted Average Effective Int Rate %	Carrying Amount \$'000	Contractual Cash flows \$'000	< 6 mnths \$'000	6-12 mnths \$'000	>1yr \$'000	<2 yrs \$'000	2-5 yrs \$'000	>5 yrs \$'000
Non-derivative Financial liabilities									
Trade and Other Payables		10,620	(10,620)	(10,620)	-	-	-	-	-
Borrowings - Fixed Interest Rate	2.77%	52,403	(60,494)	(855)	(5,673)	(4,997)	(16,843)	(32,126)	
Lease Liabilities	2.38%	153	(165)	(35)	(35)	(69)	(26)	-	

The Borrowings are shown as maturing in the future periods above, including interest payable thereon. The Board can recommend to either repay the loans on maturity or to extend these loans for a further period.

### c) Market Risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices.

Taronga has no exposure to foreign currency risk and does not enter into commodity contracts.

Taronga's financial instruments comprise trade receivables and payables which do not earn/incur interest and fixed interest treasury loans which are not subject to interest rate fluctuations.

Cash deposited at the bank earns interest at a variable rate. A sensitivity analysis of the impact of an interest rate rise or fall of 100 basis points is included below.

### Interest Rate Risk

Interest rate risk arises through Taronga's Interest bearing financial liabilities.

### Financial Instruments

As at the reporting date the interest rate profile of Taronga's interest bearing financial instruments was:

Fixed Rate Instruments	2023	2022
	\$'000	\$'000
Financial Liabilities - Borrowings	50,451	52,403
<b>Variable Rate Instruments</b>		
Financial Assets	11,674	24,293

Taronga manages its exposure to interest rate risk by financing borrowings through fixed rate borrowings.

### Summarised Sensitivity Analysis

The below sensitivity analysis shows Taronga's exposure to interest rate risk in the event of +/-1% change in the interest rates.

		Interest Rate Risk			
		-1%		+1%	
	Carrying Amount	Profit	Equity	Profit	Equity
2023	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Financial assets</b>					
Cash and cash equivalents	11,674	(117)	(117)	117	117
Receivables	5,868	-	-	-	-
Other Financial Assets	276,000	(2,760)	(2,760)	2,760	2,760
<b>Financial liabilities</b>					
Payables	30,268	-	-	-	-

		Interest Rate Risk			
		-1%		+1%	
	Carrying Amount	Profit	Equity	Profit	Equity
2022	\$'000	\$'000	\$'000	\$'000	\$'000
<b>Financial assets</b>					
Cash and cash equivalents	24,293	(243)	(243)	243	243
Receivables	4,145	-	-	-	-
Other Financial Assets	200,000	(2,000)	(2,000)	2,000	2,000
<b>Financial liabilities</b>					
Payables	26,268	-	-	-	-

There have been no changes in any of the assumptions used in preparing the above sensitivity analysis from the prior year.

### Fair Value Measurement

#### Fair Value Compared to Carrying Amount

Financial instruments are generally recognised at amortised cost.

The amortised cost of financial instruments recognised in the statement of financial position approximates the fair value because of the short-term nature of many of the financial instruments.

	Carrying Value		Fair Value	
	2023	2022	2023	2022
	\$'000	\$'000	\$'000	\$'000
<b>Financial Assets</b>				
Cash and Cash Equivalents	11,674	24,293	11,674	24,293
Receivables	5,868	4,145	5,868	4,145
Other Financial Assets	276,000	200,000	276,000	200,000
	<u>293,542</u>	<u>228,438</u>	<u>293,542</u>	<u>228,438</u>
<b>Financial Liabilities</b>				
Payables	30,268	26,268	30,268	26,268
Borrowings	50,451	52,403	47,324	49,805
	<u>80,719</u>	<u>78,671</u>	<u>77,592</u>	<u>76,073</u>



## 19. Restricted Assets

Taronga received fundraising income into the Taronga Foundation and certain amounts from Government Grants, for specific projects or purposes. As required by the Australian Accounting Standards, amounts have been recognised in the Income Statement or Statement of Financial Position which are yet to be spent in the manner specified. Unexpended amounts totalling \$172,455,000 (\$121,240,000 in 2021/2022) have been included in Other Financial Assets as at 30 June 2023. The unexpended restricted funds are held separately from Taronga's unrestricted funds.

	Unexpended Amount	
	2023	2022
Taronga Foundation and Capital Program	\$'000	\$'000
Taronga Foundation Capital and Conservation Program Fundraising	55,771	47,650
Externally Funded Projects	12,577	6,584
Major Capital Projects Funded by NSW Government	104,108	67,006
Total	172,456	121,240

## Reconciliation of Taronga Foundation

	2023	2022
	\$'000	\$'000
Taronga Foundation and Capital Program		
Opening balance Taronga Foundation	47,650	32,900
Net Fundraising Surplus during the year	13,997	20,095
Distribution to Conservation and Capital programs	(5,876)	(5,345)
Closing Balance	55,771	47,650

## 20. Remuneration of Auditors

The Audit Office fees for auditing Taronga's financial statements were \$119,800 (\$111,900 in 2021/2022). The auditors received no other benefits.

## 21. Related Party Disclosures

Taronga's Key Management Personnel includes the Chief Executive, the Divisional Directors and Members of the Board as they are directly or indirectly authorised and responsible for planning, directing and controlling the activities of Taronga.

### (a) Chief Executive and Divisional Directors

Mr Cameron Kerr – Chief Executive  
Mr Simon Duffy – Executive Divisional Director  
Ms Narelle Beattie – Divisional Director  
Mr Nicholas Boyle – Divisional Director  
Ms Leila Davis – Divisional Director  
Mr Steven Hinks – Divisional Director  
Mr Stuart Marshall -Divisional Director (from 2 Aug 2022)

	2023	2022
Key Management Personnel Compensation	\$'000	\$'000
Short-term employee benefits	1,879	1,750
Other long-term employee benefits	48	127
Total	1,927	1,877

The above compensation forms part of the personnel services provided by DPE – refer note 6(a).

The Key Management Personnel compensation excludes The Minister for Energy and Environment. Ministerial compensation is paid by the NSW Legislature and not by Taronga.

**(b) Members of the Board**

Ms Penelope Bingham-Hall - Chair  
 Ms Kristin Stubbins – Deputy Chair  
 Ms Laura Berry  
 Ms Jennifer Cowley  
 Mr Joe David  
 Ms Catherine Harris  
 Mr Michael Herring  
 Ms Sarah Norgate  
 Dr Ian Roth (to 30 June 2023)  
 Mr Murray Wood

Board remuneration (including superannuation and payroll tax) totalling \$177,238 (\$124,954 in 2021/2022) was paid. This amount included honoraria of \$38,718 (\$36,388 in 2021/2022) paid to the Chair of the Board and \$138,520 (\$90,662 in 2021/2022) paid to the other members of the Board. The rates of remuneration were fixed and approved by the NSW Department of Premier and Cabinet. During the year members of Taronga's Board donated all or part of their honorarium to Taronga Foundation. One member elected to join the Board in a voluntary capacity and received no remuneration.

The Board honorarium remuneration brackets are displayed below together with the number of members in each bracket.

	2023	2022
\$0	1	1
\$10,000 - \$19,999	8	8
\$30,000 - \$39,999	1	1
Board Members	10	10

Other than the above there were no transactions with key management personnel, their close family members and controlled or jointly controlled entities thereof.

### (c) Government Related Entities

During the year, Taronga entered into transactions with other entities that are controlled/jointly controlled/significantly influenced by NSW Government. This includes grants and other project funding from NSW Treasury and Department of Regional NSW (Note 3), Department of Planning and Environment, insurance arrangements obtained from NSW Self Insurance Corporation, personnel services arrangements with DPE (Note 6a), financing arrangements with TCorp (Note 6c), funding from NSW Department of Community and Justice for special indigenous programs, providing conservation and animal welfare expertise for various programs through DPE, delivering accredited courses to students funded by NSW Department of Education, receiving asset valuation services from Valuer General of NSW.

## 22. Notes to the Cash Flow Statement

### (a) Reconciliation of Cash and Cash Equivalents

Cash at the end of the reporting period as shown in the statement of cash flows is reconciled to the related items in the statement of financial position as follows:

	2023 \$'000	2022 \$'000
Cash at bank and on hand	11,674	24,293
Total	11,674	24,293

### (b) Reconciliation of Net Result to Net Cash Provided from Operating Activities:

	2023 \$'000	2022 \$'000
Net Result	77,481	59,272
Depreciation and Amortisation	33,553	34,211
Non Cash Contribution (Capital)	-	(299)
Amounts capitalised in prior years transferred to profit and loss	654	26
<b>Change in Assets and Liabilities:</b>		
(Increase)/Decrease in GST Receivable	134	(130)
(Increase)/Decrease in Accounts Receivable	(2,321)	(1,640)
(Increase)/Decrease in Inventories	(386)	(86)
Increase/(Decrease) in Creditors and Accruals	1,416	2,352
(Increase)/Decrease in Prepayments	39	(601)
Increase/(Decrease) in Contract Liabilities	(3,821)	25,621
Increase/(Decrease) in Employee Entitlements	4,037	(961)
Increase/(Decrease) in Unfunded Superannuation	(1,054)	(2,209)
Movement in Unamortised (Premium)/Discount on Loans	(237)	(448)
Net Cash Provided From Operating Activities	109,496	115,108

Taronga has not entered into any non-cash financing or investing activities.



## 23. Commitments for Expenditure

### Capital Expenditure Commitments

Aggregate capital expenditure for the acquisition of property, plant and equipment contracted at balance date and not provided for:

	2023 \$'000	2022 \$'000
Not later than one year	29,609	29,508
Later than one year and not later than five years	781	1,249
Total including GST	30,390	30,757

GST Input Tax Credit Claimable on Commitments amounts to \$2,762,000 (\$2,796,000 in 2021/2022).

## 24. Contingent Assets and Liabilities

Taronga is not aware of any contingent assets or liabilities at 30 June 2023 (nil in 2021/2022).

## 25. Subsequent Events

There were no subsequent events occurring after balance date that have materially affected or may materially affect the results reported.

### End of Audited Financial Statements





SUMATRAN TIGER  
AT TARONGA ZOO  
SYDNEY'S IMMERSIVE  
TIGER TREK  
PHOTO BY  
HARRY VINCENT



# APPENDICES

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'KWIKILA' THE  
GOODFELLOW'S  
TREE KANGAROO  
IN NURA DIYA  
AUSTRALIA  
AT TARONGA  
ZOO SYDNEY  
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HARRY VINCENT

## Appendix 1

### Functions of the Taronga Conservation Society Australia

The main functions of the Board of the Taronga Conservation Society Australia are specified in Section 15 of the *Zoological Parks Board Act 1973*, which provides as follows:

- (1) The Board may establish, maintain and control zoological parks (Taronga) for the following purposes:
  - a) carrying out research and breeding programs for the preservation of endangered species;
  - b) carrying out research programs for the conservation and management of other species;
  - c) conducting public education and awareness programs about species conservation and management; and
  - d) displaying animals for educational, cultural and recreational purposes.
- (2) The Board may also maintain and control:
  - a) the zoological park established before the commencement of the Act on the land described in Schedules 3 and 4 under the name 'Taronga Zoological Park'; and
  - b) other zoological parks on land or premises vested in or held by the Board, whether or not those parks were established by the Board, for the purposes referred to in this section.
- (3) The Board:
  - a) may cooperate with, and provide funds and other assistance to, such scientific and other institutions, governments and other bodies and individuals as the Board may determine in connection with species conservation and management and for other scientific and zoological purposes; and
- b) may investigate and carry out research into:
  1. the design of, and equipment and procedures in zoological parks; and
  2. the care and well-being of animals kept in zoological parks, whether or not those zoological parks are maintained and controlled by the Board; and
- c) may provide educational services for the public (whether in the nature of lectures, broadcasts, films, publications or otherwise) about species conservation and management, zoological parks and the biology of animals and;
- d) may provide and charge for such services in connection with zoological parks maintained and controlled by the Board as the Board may determine; and
- e) may make recommendations or reports to the Minister with respect to matters connected with the Board's power, authorities, duties, functions or the administration of this Act.
- (4) The Minister may request the Board to make recommendations or reports to the Minister with respect to matters connected with the Board's powers, authorities, duties and functions or the administration of this Act and the Board is to comply with any such request.
- (5) The Board may exercise and perform such other powers, authorities, duties and functions as may be conferred or imposed on the Board or under this or any other Act.

## Appendix 2

## Research Projects and Conservation Programs

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Georges Turtle (Bellinger River Snapping Turtle) virus: finding the source	<b>Dr P Kirkland</b> <b>Dr K Rose</b> <b>Ms J Hall</b> <b>Dr K Parrish</b> <b>Dr E Ariel</b>	NSW National Parks and Wildlife Service, NSW Department of Primary Industries, NSW Health, Local Lands Services	
4a/02/18	Invasive animals and confiscated wildlife: Pathogen Discovery and biosecurity	<b>Prof. E Holmes</b> <b>Dr. W Chang</b> <b>Dr K Rose</b> <b>Dr H Bender</b> <b>Ms J Hall</b>	University of Sydney, NSW Department of Primary Industries, Department of Agriculture, Water and Environment	
3c/10/18	Uluru-Kata Tjuta NP Mala Census	<b>Dr K Rose</b>	Parks Australia	Parks Australia
4a/04/18 3a/12/18	Fire management implications for biodiversity in Kakadu National Park	<b>Dr K Rose</b>	Parks Australia	Parks Australia
	Understanding the impact of disease and pollution on New Zealand Fur Seals ( <i>Arctocephalus forsteri</i> )	<b>Ms J Hall</b> <b>Dr H Bender</b> <b>Dr B Pitcher</b>	NSW Department of Planning and Environment, National Measurement Institute, Griffith University, NSW SPWS	Department of Planning and Environment, NSW National Parks and Wildlife Service
	Persistent pollutants and green turtle health	<b>Ms J Hall</b>	NSW Department of Planning and Environment NSW National Parks and Wildlife Service	Department of Planning and Environment
	Amphibian Mass Mortality Investigation 2021	<b>Dr K Rose</b> <b>Ms J Hall</b> <b>Dr J Rowley</b>	Australian Museum, University of Sydney	
	Beaked Whale Health (Ecotoxicology)	<b>Ms J Hall</b> <b>Dr K Rose</b>	Southern Cross University, Dolphin Marine Conservation Park	Southern Cross University, Ocean Warriors Australia
	Christmas Island Cadmium	<b>Ms J Hall</b> <b>Dr K Rose</b>	Christmas Island National Park (Parks Australia), Department of Planning and Environment	Parks Australia
	Swamp Wallaby Trypanosomiasis prevalence: a field study	<b>Ms J Hall</b> <b>Dr K Rose</b> <b>Dr C Herbert</b> <b>Dr C Price</b>	University of Sydney	University of Sydney, University of New South Wales
	Secondary Pindone Toxicity in Birds of Prey	<b>Ms J Hall</b> <b>Dr K Rose</b> <b>Dr P Taggart</b> <b>Dr C Doyle</b>	NSW Department of Primary Industries, NSW Department of Planning and Environment	NSW Department of Primary Industries
	Defining the viral aetiology of Black and White Bird Disease Syndrome	<b>Dr K Rose</b> <b>Ms J Hall</b> <b>AProf D Phalen</b>	University of Sydney	University of Sydney, University of New South Wales
3d/12/22 3e/12/22	Small Mammal Translocations 2.0, Booderee National Park	<b>Dr K Rose</b> <b>Ms J Hall</b> <b>Dr H Fenton</b> <b>Mr N Dexter</b>	Parks Australia	



AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Wildlife Health and Pathology Short Course & Wildlife Disease Management Symposium	<b>Dr K Rose</b> <b>Dr H Fenton</b> <b>Ms J Hall</b> <b>Ms N Dobson</b>		Cybec Foundation, Davis Thompson Foundation, Association of Reptile & Amphibian Veterinarians
3a/08/23	Retrospective and prospective analyses for emerging arboviruses of public health relevance in New South Wales wildlife	<b>Dr K Rose</b> <b>Dr H Fenton</b> <b>Ms J Hall</b> <b>Ms N Dobson</b>	NSW Health, NSW Department of Primary Industries, University of Wollongong, University of CSIRO	NSW Health
	The chemical exposome of Myall Lake Dingoes: exploring exposure to rodenticides, pesticides and PFAS	<b>Ms J Hall</b> <b>Dr B Pitcher</b> <b>Dr N Jordan</b>	NSW Department of Planning and Environment	NSW Department of Planning and Environment
3c/10/20	The effects of the urban environment on the faecal virome and microbiome of small mammals in Australia	<b>Dr K Rose</b> <b>Dr E Holmes</b> <b>Dr E Harvey</b>	University of Sydney	
4c/10/21	Discovery and genomic characterization of microbes in Australian native, domestic and feral animals	<b>Dr K Rose</b> <b>Dr E Holmes</b> <b>Dr E Harvey</b> <b>Mr J Mifsud</b>	University of Sydney	
4a/10/22	Flora and Fauna Surveys - Uluru-Kata Tjuta National Park	<b>Dr K Rose</b> <b>Ms T Guest</b>	Parks Australia	
3b/08/16	Social foraging olfaction in marine predators	<b>Dr B Pitcher</b> <b>Dr D Slip</b>	Macquarie University	Macquarie University
	Multimodal communication in marine mammals (Sea Lions on the Edge)	<b>Dr B Pitcher</b> <b>Prof R Harcourt</b> <b>Dr A Charriton</b> <b>Dr I Charrier</b>	Macquarie University, CNRS France	CNRS France, Macquarie University
4d/06/22 3a/02/20	Assessing social networks and fitness in the critically endangered, captive bred for release, Regent Honeyeater	<b>Dr J Tripovich</b> <b>Dr B Pitcher</b> <b>Dr A Burns</b> <b>Mr A Elphinstone</b> <b>Dr R Crates</b> <b>Mr D Ingwersen</b>	Australian National University, BirdLife Australia	
3a/08/18	Behavioural ecology of the critically endangered Plains-wanderer	<b>Dr B Pitcher</b> <b>Dr A Burns</b> <b>Dr M Van Sluys</b>		
	Animal Behaviour & Welfare in managed populations & the wild	<b>Dr B Pitcher</b> <b>Dr A Burns</b> <b>Dr N Jordan</b> <b>Prof R Kingsford</b> <b>Dr S Nakagawa</b> <b>Dr G Samarasinghe</b> <b>Dr A Sowmya</b> <b>Dr N Jordan</b>	University of New South Wales, Max Plank Institute	
ZV21009	Developing behavioural welfare tools for Giraffe	<b>Dr B Pitcher</b> <b>Dr M West</b> <b>Dr S Sherwin</b> <b>Dr H Larsen</b>	University of Melbourne, Zoos Victoria	

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Welfare on Display	<b>Dr B Pitcher</b> <b>Mr J Cincotta</b> <b>Dr S Nakagawa</b> <b>Dr A Sowyma</b>	University of New South Wales	
	Threatened Species Conservation Breeding Platform	<b>Dr J Tripovich</b> <b>Mr J Cincotta</b> <b>Dr B Pitcher</b> <b>Ms C Ford</b> <b>Mr A Elphinstone</b>	University of New South Wales	
	Crayweed conservation biobanking	<b>Dr J Daly</b> <b>Dr J O'Brien</b> <b>Prof A Verges</b> <b>Prof. E Marzinelli</b> <b>Prof G Wood</b> <b>Ms C Musrri</b> <b>Fuenzalida</b>	University of New South Wales, University of Sydney, University of Western Australia	
	Platypus emergency response and resilience framework	<b>Dr J O'Brien</b> <b>Dr P Meagher</b> <b>A Elphinstone</b> <b>Prof. R Kingsford</b> <b>Dr G Bino</b> <b>Dr T Hawke</b> <b>Dr J Thomas</b> <b>Dr S May</b> <b>Dr N Jordan</b> <b>Dr B Pitcher</b> <b>Mr J Crane</b>	University of New South Wales, Zoos Victoria, Tidbinbilla Reserve, ACT Government	University of New South Wales
	Great Barrier Reef Recovery Initiative	<b>Dr R Hobbs</b> <b>Dr J O'Brien</b> <b>Dr M Hagedorn</b> <b>Dr J Daly</b> <b>Dr L Bay</b> <b>Dr M van Oppen</b> <b>Dr T Ainsworth</b>	Australian Institute of Marine Science, Smithsonian Institution, University of New South Wales, Great Barrier Reef Foundation	Great Barrier Reef Foundation
3b1020 4b0820	Securing genetic diversity of threatened frogs through strategic biobanking	<b>Dr R Hobbs</b> <b>Dr J O'Brien</b> <b>Mr M McFadden</b> <b>Dr M Magrath</b> <b>Mr D Gilbert</b> <b>Dr A Silla</b> <b>A/Prof P Byrne</b> <b>Mr D Hunter</b>	University of Wollongong, Zoos Victoria, NSW Department of Planning, and Environment	ZAA Wildlife Conservation Fund, Bushfire Crisis Funds
	Expanding access and building capacity for African and Asian Rhino reproductive care within North American AZA/ WAZA facilities: a Rhino Assisted Reproduction Enterprise (RARE)	<b>Dr J O'Brien</b> <b>Dr R Hobbs</b> <b>Dr B Bryant</b> <b>Dr M Stoops</b>	Omaha's Henry Doorly Zoo and Aquarium and multiple North American zoos	Institute of Museums and Library Services

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
University of Newcastle A-2019-935	An Integrated Approach to Understanding and Enhancing Outcomes for Rehabilitated Koalas in Peri-urban Environments	<b>Dr D Higgins</b> <b>Dr J O'Brien</b> <b>Dr N Jordan</b> <b>Dr R Witt</b> <b>Dr K Leigh</b> <b>Dr B Bryant</b> <b>Ms S Ryan</b>	University of Sydney, University of New South Wales, University of Newcastle, Office of Environment and Heritage, Port Stephens Koala Hospital, Port Macquarie Koala Hospital	University of Newcastle Seed Funding, WWF
University of Newcastle A-2022-201	Koala surveys and movement ecology	<b>Dr N Jordan</b> <b>Dr J O'Brien</b> <b>Dr R Witt</b> <b>S Ryan</b>	University of Newcastle University of New South Wales	WWF Australia, Australian Academy of Science, Mid North Coast, Royal Zoological Society of NSW, WIRES
University of Newcastle A-2019-935				
19/119B	Myall Lakes Dingo/Dapin project	<b>Dr N Jordan</b> <b>Dr B Pitcher</b> <b>Dr M Campbell</b> <b>B Alting</b> <b>P Wood</b> <b>Dr K Moon</b> <b>Dr B Smith</b>	University of New South Wales, NSW National Parks and Wildlife Service, Mid Coast Council, TIDE	University of New South Wales, Hermon Slade Foundation, NSW National Parks and Wildlife Service, Mid Coast Council, Australia Pacific Science Foundation
University of NSW 4349086/2/1	African Wild Dog communication and cognition	<b>Dr N Jordan</b> <b>Dr J McNutt</b> <b>Dr K Golabek</b> <b>L Ransome</b> <b>B Alting</b> <b>W Hansen</b> <b>M Claase</b>	Botswana Predator Conservation Trust, University of New South Wales, Griffith University, University of California Santa Cruz, University of Stellenbosch	Department of Education, Skills and Employment, National Geographic, Winnifred Violet Scott, Stellenbosch Bursary
University of NSW 20/166b				
3b/06/20 4a/06/18	Bilby survival and movement ecology	<b>Mr A Elphinstone</b> <b>Dr N Jordan</b> <b>Prof R Kingsford</b> <b>Ms K Cornelsen</b>	University of New South Wales	Department of Education, Skills and Employment
4b/06/17 3b/06/20	Sanctuary flora and fauna surveys	<b>Dr N Jordan</b> <b>Ms K Cornelsen</b> <b>Mr A Elphinstone</b> <b>Dr T Gale</b> <b>Prof R Kingsford</b> <b>Ms B Phu</b> <b>Dr E Thompson</b> <b>Dr L Cole</b>	University of New South Wales	
University of NSW 4349086/2/1	Conservation of Lions and other large carnivores in Botswana	<b>Dr N Jordan</b> <b>Dr J McNutt</b> <b>Dr K Golabek</b> <b>C Radford</b> <b>Prof T Rogers</b> <b>L Ransome</b> <b>Prof D Jones</b> <b>R Appleby</b> <b>Dr A King</b> <b>Dr K Rafiq</b> <b>Dr B Abrahms</b>	University of New South Wales, Botswana Predator Conservation Trust, WildSpy, Griffith University, Swansea University, Liverpool John Moores University, University Of Washington	Columbus Zoo, University of New South Wales, Natural Selection Conservation Fund
University of NSW 20/166b	(old name: Carnivore conflict and conservation ecology)			



AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
4a/10/19	Southern Corroboree Frog Captive Breeding and re-introduction	<b>Mr M McFadden</b> <b>Dr P Harlow</b>	NSW Department of Planning and Environment	
3b/08/14 3a/08/15 3a/11/16 3a/10/20	Artificial Reproductive Technology for captive breeding of frogs	<b>Dr P Byrne</b> <b>Dr P Harlow</b> <b>Mr M McFadden</b>	University of Wollongong	
4a/12/17	Experimental re-introduction of Yellow- spotted Bell Frog to the Southern Tablelands, NSW	<b>Mr M McFadden</b> <b>Dr D Hunter</b>	NSW Department of Planning and Environment	
101025/05	Experimental re-introduction of Northern Corroboree Frogs to the Brindabella National Park, NSW	<b>Mr M McFadden</b> <b>Dr D Hunter</b>	NSW Department of Planning and Environment	
140203/01	Experimental re-introduction of Southern Corroboree Frogs to the field enclosures	<b>Mr M McFadden</b> <b>Dr D Hunter</b>	NSW Department of Planning and Environment	
	Urban Rewilding: Ecologically and Community-informed Futures	<b>Dr T Newsome</b> <b>Dr J Martin</b> <b>Dr B Pitcher</b> <b>Dr C Grueber</b> <b>Dr A Carthey</b> <b>Prof P McManus</b> <b>Prof P Banks</b>	University of Sydney, Macquarie University	ARC Linkage
	Increasing amphibian immunity to combat disease causing mass extinction	<b>A/Prof L Skerratt</b> <b>Prof K Zenger</b> <b>A/Prof L Berger</b> <b>Dr D Hunter</b> <b>Prof J Robert</b> <b>Mr M McFadden</b> <b>Mr D Gilbert</b>	University of Melbourne, Jame Cook University, NSW Department of Planning and Environment, University of Rochester, Zoos Victoria	ARC Linkage, Zoos Victoria, NSW Department of Planning and Environment
3b/12/22	Experimental re-introduction of Booroolong Frogs to the Northern Tablelands, NSW	<b>Mr M McFadden</b> <b>Dr D Hunter</b> <b>Mr D Coote</b> <b>Dr M Van Sluys</b>	NSW Department of Planning and Environment	NSW Department of Planning and Environment
3c/12/22	Determining optimal provision of UVB for Northern Corroboree Frogs	<b>Mr M McFadden</b> <b>Dr P Byrne</b> <b>Dr A Silla</b>	NSW Department of Planning and Environment, University of Wollongong	
	Wild shark migration, movements and social networks	<b>Dr J Day</b> <b>Prof C Brown</b> <b>Dr N Knott</b> <b>Dr T Guttridge</b> <b>Prof C Grueber</b>	Macquarie University, NSW Fisheries, Sonotronics, Bimini Biological Field Station	SeaWorld Research & Rescue Foundation, Macquarie University
	Resolving the warming East Australian Current's impact on a marine food web (AKA Sensing the seascape)	<b>Dr D Slip</b> <b>Prof R Harcourt</b> <b>Dr I Jonsen</b> <b>Prof I Suthers</b> <b>A/Prof M Roughan</b> <b>A/Prof M Doblin</b> <b>Dr M Cox</b>	Macquarie University, University of New South Wales, University of Technology Sydney, Australian Antarctic Division	Macquarie University

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Trophic interactions between key marine apex predators off the Uruguayan coast	<b>Dr D Slip</b> <b>Prof R Harcourt</b> <b>Dr V Raoult</b>	Macquarie University, University of Newcastle, Dirección Nacional de Recursos Acuáticos - National Direction of Aquatic Resources (DINARA)	PADI
	Developing the next generation of animal telemetry tools	<b>Dr D Slip</b> <b>Prof R Harcourt</b> <b>Dr I Jonsen</b>	Macquarie University Sydney Institute of Marine Science (Animal Tracking Facility), Bird Studies Canada and Arcadia University (MOTUS), Dalhousie University (on behalf of the Ocean Tracking Network), Vemco, US Office of Naval Research	Macquarie University, MOTUS, Sydney Institute of Marine Science, Vemco, ONR/ATN
	Improving the effectiveness of electronic deterrents to prevent shark bites	<b>Dr D Slip</b> <b>A/Prof N Hart</b> <b>A/Prof C Huveneers</b> <b>Dr L Ryan</b> <b>Dr J Everett</b> <b>Dr V Peddemors</b>	Macquarie University, Flinders University, Le Centre Sécurité Requin (Shark Security Centre), Iles Reunion, Oceans Research South Africa, University of Miami, Sea World Queensland	Sea World Queensland
	Using eDNA and acoustic surveys to determine the impact of changing prey availability on Australian Little Penguin populations in NSW	<b>Dr J Day</b> <b>Dr B Pitcher</b> <b>Dr D Slip</b> <b>Prof R Harcourt</b> <b>Dr M Stat</b> <b>Dr M Huggett</b>	Macquarie University, University of Newcastle	Macquarie University
4a/04/21	Investigating the microbiome of little penguins	<b>Dr J Day</b> <b>Dr B Pitcher</b> <b>Dr M Stat</b> <b>Dr M Huggett</b> <b>Prof R Harcourt</b>	Macquarie University, University of Newcastle	NSW National Parks and Wildlife Service
	How effective are Australian Marine Parks at protecting EPBC listed species	<b>Dr D Slip</b> <b>Prof R Harcourt</b> <b>Dr A Grech</b> <b>Dr V Tulloch</b>	Macquarie University, James Cook University, University of British Columbia, Department of Agriculture Water and the Environment	Australian Government
	Australian Shark Incident Database	<b>Dr P Meagher</b> <b>Dr D Slip</b> <b>Dr C Huevenueers</b> <b>Dr C Bradshaw</b> <b>Dr M Theile</b> <b>Dr V Peddemors</b>	Flinders University, NSW Department of Primary Industries	
	Seabirds to Seascapes	<b>Dr B Pitcher</b> <b>Dr J Day</b> <b>Dr D Slip</b> <b>Dr D March</b> <b>Mr N Carlile</b>	NSW Department of Planning and Environment, University of New South Wales, Macquarie University, University of Newcastle, Sydney Institute of Marine Science	NSW Environmental Trust
	Fur seals in Sydney Harbour	<b>Dr B Pitcher</b> <b>Prof R Harcourt</b> <b>Ms V Morris</b> <b>Dr V Pirotta</b>	Macquarie University	NSW Department of Planning and Environment

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
3c/12/19	Genetic management of the regent honeyeater breeding program	<b>Dr J Day</b> <b>Dr V Sluys</b> <b>Dr B Pitcher</b> <b>Dr R Crates</b> <b>Dr C Hogg</b> <b>Dr E McLennan</b>	Australian National University, University of Sydney	Bioplatforms Australia
5c/08/19	Tracing origins, resource use and movements of green turtles in NSW: implications for conservation management	<b>Dr J Day</b> <b>Dr P Meagher</b> <b>Dr J van de Merwe</b> <b>Dr O Coffee</b> <b>Dr R Pearson</b>	Griffith University	Bioplatforms Australia, Wettenhall Environment Trust, James N. Kirby Foundation
A21008	Collaborative science for monitoring of Northern Territory marine megafauna	<b>Prof S Banks</b> <b>Dr C Palmer</b> <b>Dr J Day</b> <b>A/Prof C Salgado Kent</b> <b>Dr A Grech</b> <b>Prof R Harcourt</b> <b>Dr V Udyawer</b> <b>Mr B Smith</b> <b>Ms Y Sutherland</b> <b>Mr F Moyle</b> <b>Mr D McAdam</b> <b>Mr J Smith</b>	Charles Darwin University, Macquarie University, Edith Cowan University, James Cook University, Australian Institute of Marine Science, Larrakia Nation Aboriginal Corporation, Mathakal Homelands and Resource Centre Aboriginal Corporation, Parks Australia, Parks & Wildlife Commission of the Northern Territory, Sea Darwin	ARC Linkage, Charles Darwin University, Parks Australia
	Epigenetic clocks	<b>Dr J Day</b> <b>Dr O'Brien</b> <b>Prof S Horvath</b> <b>Dr T Robeck</b>	University of California Los Angeles, SeaWorld San Diego	
3d/12/20 – Wildlife forensics, developing a tool for the illegal wildlife trade: captive vs wild	Disrupting illegal wildlife trade through forensic science - Testing XRF technology to determine provenance of wildlife	<b>Dr P Meagher (2016 - current)</b> <b>Dr L Tong (2016 - 2020)</b> <b>Ms M Shaw (2016 - 2020)</b> <b>Dr K Brandis (2016 - current)</b> <b>Dr D Mazumder (2016 - current)</b> <b>Dr D Ramp (2016 - 2023)</b> <b>Dr J O'Brien (2016 - current)</b> <b>Mr J Cincotta (2020 - current)</b>	University of New South Wales (2016 - current) ANSTO (2016 - current), University of Technology Sydney (2016 - 2023), TRAFFIC (2016 - 2020)	Australian Geographic, For Animals Foundation
21/46B - Detecting provenance of Australia's reptiles using pXRF. May 2021 - May 2024				
	Tracking Illicit Wildlife Movement – Testing 3D Computed Tomography (CT) scanners at in-bound and out-bound screening locations to detect legal transport and illegal trafficking of animals	<b>Dr P Meagher</b> <b>Dr V Pirota</b> <b>Dr J O'Brien</b>	Rapiscan, Department of Agriculture, Fisheries and Forestry	Department of Climate Change, Energy, the Environment and Water



AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
3a/12/20	Determining the sequence and age of ossification of the appendicular skeleton of the Short-beaked Echidna	<b>Dr L Vogelnest</b> <b>Dr G Tobias</b>		
	Characterisation of the reproductive cycle of the Bellinger River Turtle using ultrasonography, behavioural observations and oviposition	<b>Dr L Vogelnest</b> <b>Mr A Skidmore</b> <b>Ms G Liu</b>		
	Haematologic and biochemical parameters of the critically endangered Regent Honeyeater ( <i>Anthochaera phrygia</i> )	<b>Mr P Thompson</b> <b>Dr L Vogelnest</b> <b>Dr F Hulst</b> <b>Dr K Vinette Herrin</b> <b>Dr G Tobias</b> <b>Dr P Meagher</b>		
4a/02/14, 4b/04/17, 3c/08/20	Satellite tracking of marine turtles released from the Taronga Wildlife Hospital	<b>Dr K Vinette Herrin</b> <b>Ms E Hall</b>		Veolia
4c/04/17	Use of pedigree to analyse the mode of transmission of Koala retrovirus variants in Taronga Zoo Koalas	<b>Dr K Vinette Herrin</b> <b>Mr P Thompson</b> <b>Dr D Higgins</b> <b>Dr K Chappell</b>	University of Sydney, University of Queensland	University of Queensland
	Characterisation of milk and spur secretion of the Long-beaked Echidna	<b>Dr L Vogelnest</b> <b>Dr K Belov</b> <b>Dr E Undheim</b>	University of Sydney, University of Queensland	
	Longitudinal Interferon Gamma Responses in a Captive Asian Elephant Population with a History of Tuberculosis	<b>Dr K Plain</b> <b>Dr V Rutten</b> <b>Dr P van Kooten</b> <b>Mr P Thompson</b> <b>Dr L Vogelnest</b> <b>Dr D Begg</b> <b>Mr G Panag</b>	University of Sydney, Utrecht University, University of Pretoria	
	Annual variation in reproductive physiology including galactorrhoea in a zoo-based male Long-beaked Echidna <i>zaglossus bartoni</i>	<b>Dr L Vogelnest</b> <b>Mr P Thompson</b> <b>Dr G Morrow</b> <b>Dr R Nicoll</b>	Veterinary Imaging Associates, University of New England	
	Sustainable Rhino Populations: Investigation of infertility in a Black Rhinoceros	<b>Dr B Bryant</b> <b>Dr J O'Brien</b> <b>Dr M Stoops</b>	Omaha's Henry Doorly Zoo and Aquarium	Institute of Museum and Library Services
	Investigation of White Rhino mass mortality event by metatranscriptomic testing	<b>Dr K Rose</b> <b>Dr B Bryant</b> <b>Dr Cheryl Sangster</b> <b>Dr Eddie Holmes</b>	University of Sydney	
	Monitoring of the Jenolan Caves captive and remnant population of the Brush-tailed Rock-wallaby	<b>Dr L Vogelnest</b> <b>Dr D Ashworth</b>	NSW Department of Planning and Environment	

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
2a/10/18	Investigation into tramadol as an analgesic for Koalas	<b>Dr M Govendir</b> <b>Dr L Vogelnest</b> <b>Mr P Thompson</b>	University of Sydney	
	Investigation of pharmacokinetics of ceftiofur crystalline free acid in macropods	<b>Dr M Govendir</b> <b>Dr L Vogelnest</b> <b>Mr P Thompson</b>	University of Sydney	
	Early diagnosis and clinical management of chronic degenerative musculoskeletal disorders in zoo felids	<b>Dr C Barton</b> <b>Dr D Phalen</b> <b>Dr L Vogelnest</b>	University of Sydney	Jenna Donley fund
	Periodontal disease and hypercementosis in captive Black Rhino	<b>Dr B Bryant</b> <b>Dr M Campbell-Ward</b> <b>Dr L Tong</b>		
	Vaccination practices and outcomes in zoo felids	<b>Dr K Vinette Herrin</b>	University of Sydney	Jenna Donley fund
	Proventriculopathy in little penguins at Taronga Zoo	<b>Dr G. Tobias</b> <b>Dr L Tong</b> <b>Dr K Vinette Herrin</b> <b>Dr L Vogelnest</b> <b>Dr F Hulst</b>		
	Python spinal osteopathy	<b>Dr G Tobias</b> <b>Dr L Tong</b> <b>Dr K Vinette Herrin</b> <b>Dr L Vogelnest</b> <b>Dr F Hulst</b> <b>Dr T Allcock</b>		
3b/11/16	Zoo Management of Lord Howe Island Woodhen and Pied Currawong associated with the Lord Howe Island Rodent Eradication project	<b>Mr M Shiels</b> <b>Dr F Hulst</b> <b>Mr P Thompson</b>	Lord Howe Island Board, NSW Office of Environment and Heritage	
3a/06/15	Haematologic and biochemical parameters of the Port Jackson shark ( <i>Heterodontus portusjacksoni</i> )	<b>Mr P Thompson</b> <b>Dr F Hulst</b> <b>Dr K Vinette Herrin</b> <b>Dr P Meagher</b> <b>Dr J Day</b>	Macquarie University	
	Molecular investigation of fatal isosporosis in Chestnut Breasted Mannikins in a zoological collection	<b>Dr L Tong</b> <b>Ms S Johnson</b>	University of Sydney	
	Developing a brain imaging database of rare and endangered Australian mammals	<b>Dr A Bongers</b> <b>Prof K Ashwell</b> <b>Dr L Tong</b> <b>Mr C Slatyer</b> <b>Mr H Holewa</b>	University of New South Wales, National Imaging Facility Australia, Lowy Cancer Research Centre, Australian Museum, CSIRO	
	Urinalysis reference ranges for monotremes and marsupials	<b>Dr L Vogelnest</b> <b>Mr P Thompson</b> <b>Mrs N Miller</b> <b>Dr O Cohen</b>		

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
5a/08/19	Pharmacokinetics of NSAIDs in Black Rhinoceros  Animal welfare and veterinary ethics in wildlife emergency (bushfire) rescue	<b>Dr B Bryant</b> <b>Dr M Govendir</b>  <b>Dr M Campbell</b>	University of Sydney  Vets Beyond Borders	International Rhino Foundation
3d/06/21	Investigation into the pharmacokinetic profile of oral and injectable paracetamol as an analgesic for Koalas	<b>Dr M Govendir</b> <b>Dr L Vogelnest</b> <b>Mr P Thompson</b>	University of Sydney	
4c/06/22	Vaccination of zoo animals for SARS-CoV-2 at Taronga Zoo and Taronga Western Plains Zoo	<b>Dr L Vogelnest</b> <b>Dr Alisa Wallace</b>		
	Investigating the Health and Disease of Platypuses in New South Wales, Australia	<b>Dr J Whinfield</b> <b>Dr L Vogelnest</b> <b>Dr R Vaughan-Higgins</b> <b>Prof K Warren</b>	Murdoch University	WIRES
3a/02/21	Nutritional requirements of growing Southern Hairy-nosed Wombats	<b>Ms M Shaw</b> <b>Dr G Tobias</b> <b>Dr. L Vogelnest</b> <b>Dr F Hulst</b> <b>Dr K Vinette-Herrin</b> <b>Dr J Whinfield</b>	University of New England	
	Improving the Koala feedbase with rapid assessment tools and an artificial leaf to sustain bushfire-affected Koalas	<b>Ms M Shaw</b> <b>Dr B Moore</b> <b>Dr J Zhou</b> <b>C Flanagan</b>	Western Sydney University, Koala Conservation Australia	Regional Bushfire Recovery for Multiregional Species and Strategic Projects Program
University of Sydney 2021/1920	Wildlife Assist - One Welfare Project (includes development of mobile app to monitor provision of feed, water and shelter to wildlife following catastrophic events)	<b>Ms M Shaw</b> <b>Dr B Jones</b> <b>Dr P McManus</b> <b>Dr P McGreevy</b> <b>Dr C Herbert</b> <b>Dr D Raubenheimer</b> <b>Dr S Finnerty</b> <b>Dr A Lykins</b> <b>Dr B Kennedy</b> <b>Ms D Evans</b>	University of Sydney, University of New England, RSPCA, WIRES, NSW National Parks and Wildlife Service	Wildlife and Habitat Bushfire Recovery Program, RSPCA, WIRES
University of Adelaide S-2020-092	Echidna Nutrition	<b>Ms M Shaw</b>		
Zoos SA AEC 11/02/2021				
Taronga 3a/08/21				
University of Adelaide S-2020-092	Gastric emptying in the Short-beaked Echidna (Tachyglossus aculeatus)	<b>Ms M Shaw</b> <b>Dr S Hatzinikolas</b> <b>Dr C-H Malbert</b> <b>Dr M Horowitz</b> <b>Prof F Grutzner</b> <b>Prof K Jones</b>	University of Adelaide, Zoos SA, Cleland Wildlife Park	
Zoos SA AEC 11/02/2021				



AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
Taronga 3a/08/21  University of Adelaide S-2020- 092  Zoos SA AEC 11/02/2021	Parenting puggles: Amino acids, fatty acids, minerals and vitamins in Short-beaked Echidna (Tachyglossus aculeatus) milk and milk replacers	<b>Ms M Shaw</b> <b>Prof F Grutzner</b> <b>Prof K Jones</b>	University of Adelaide	
Taronga 3a/08/21				
University of Adelaide S-2020- 092  Zoos SA AEC 11/02/2021	Do these spines make me look fat? Short-beaked Echidna body condition scoring (BCS) guide	<b>Ms M Shaw</b> <b>Dr G Tobias</b> <b>Mr B Finlayson</b> <b>Ms A Jarman</b> <b>Ms R Russell-Cook</b> <b>Prof K Jones</b> <b>Prof F Grutzner</b>	University of Adelaide	
Taronga 3a/08/21				
University of Adelaide S-2020- 092  Zoos SA AEC 11/02/2021	Microbiome and volatile fatty acid analysis in Echidnas	<b>Ms M Shaw</b> <b>Dr T Perry</b> <b>Prof K Jones</b> <b>Dr AV Chaves</b> <b>Prof F Grutzner</b>	University of Adelaide, Zoos SA, Western Sydney University	
Taronga 3a/08/21				
University of Adelaide S-2020- 092  Zoos South Australia A AEC 11/02/2021	The highs and lows of glucose in relation to behaviour using continuous glucose monitoring in monotremes	<b>Ms M Shaw</b> <b>Dr B Pitcher</b> <b>Prof F Grutzner</b> <b>Prof K Jones</b>	University of Adelaide, Zoos SA, Western Sydney University	
Taronga 3a/08/21				
	Current perspectives in avian nutrition: domestic animal models and their role in conservation management	<b>Ms A Jarman</b> <b>Ms M Shaw</b> <b>Dr C Grueber</b>	University of Sydney	
3a/08/21	Contribution of carotenoids to the health and fitness of ex-situ critically endangered Regent honeyeaters	<b>Ms A Jarman</b> <b>Ms M Shaw</b> <b>Dr T White</b> <b>Dr C Grueber</b>	University of Sydney	
3a/08/21	Investigating the diets and vitamin E status of Plains-wanderer (Pedionomus torquatus)	<b>Ms A Jarman</b> <b>Ms M Shaw</b> <b>Dr C Grueber</b>	University of Sydney	
	Assesing the sustainability of zoo diets	<b>Ms M Shaw</b> <b>Ms B Corcoran</b>		

AEC no. if Applicable	Project Title	Researchers	Partner Institution	Source of External Funds
	Effect of Taronga herbivore diet on feed intake, faecal consistency, and behaviour in various ungulate species.	<b>Ms M Shaw</b>	University of Sydney	
	Optimising Platypus diets	<b>Ms M Shaw Dr F Grutzner Dr K Jones Dr P Meagher</b>		
	Effect of diet on health and faecal microbiota in Leadbeater's Possums ( <i>Gymnobelideus leadbeateri</i> )	<b>Ms M Shaw Dr L Wicker Dr F Grutzner Dr K Jones Dr T Hayakawa Dr R Eisenhofer</b>	Japan Monkey Centre, University of Adelaide, Healesville Sanctuary	
	Black Rhino oral microbiome and dental disease	<b>Ms M Shaw</b>	University of Adelaide	
	Black Rhino nutrition	<b>Ms M Shaw</b>		
	Effects of gut-loading diets and husbandry on the nutrient composition of crickets ( <i>Achetus domesticus</i> ).	<b>Ms M Shaw</b>		
	Developing body condition scoring guides for bird species for zoos and wildlife rehabilitation.	<b>Ms M Shaw Mr M Kettle</b>		
	Investigating metabolic control in Australia's iconic Platypus and Echidna for application in biotechnology, conservation and captive management.	<b>Dr F Grutzner Ms M Shaw Dr L Tong Dr G Tobias Dr B Forbes Dr P Sexton Dr C Deacon Dr W Warren</b>	University of Adelaide, Flinders University, Monash University, Washington University	
	Gastrophysiology in the Short-beaked Echidna	<b>Ms M Shaw Dr L Tong Dr P Meagher Dr G Tobias Dr K Vinette Herrin Dr F Hulst Dr L Vogelnest Dr M Power Dr Raphael Eisenhofer</b>	Macquarie University, Australian Geographic	
	Comparative digestive anatomy of native and exotic animals	<b>Ms M Shaw Dr L Tong</b>		

## Appendix 3

### Publications

#### Books

Linhoff, L.J., Soorae, P.S., Harding, G., Donnelly, M.A., Germano, J.M., Hunter, D.A., **McFadden, M.**, Mendelson III, J.R., Pessier, A.P., Sredl, M.J. & Eckstut, M.E. (2021). IUCN Guidelines for amphibian reintroductions and other conservation translocations. First edition. Gland, Switzerland: IUCN

#### Book Chapters

Rafiq, K., **Pitcher, B.J.**, Cornelsen, K., Hansen, K.W., King, A.J., Appleby, R.G., Abrahms, B. and **Jordan, N.R.**, (2021) Animal-borne technologies in wildlife research and conservation. In: Conservation Technology. Edited by Wich, S.A and Piel, A.K. Oxford University Press, Oxford University

Smith, B.P., Snijders, L., Tobajas, J., Whitehouse-Tedd, K., van Bommel, L., **Pitcher, B.**, Cassady St. Clair, C., Appleby, R.G., **Jordan, N.R.** and Greggor, A.L. (2022) Deterring and repelling wildlife. Wildlife Research in Australia: Practical and Applied Methods (Eds BP. Smith, HP. Waudby, C. Alberthsen, and JO. Hampton). CSIRO Publishing: Melbourne, Australia

Hunter, D., Young, S., **McFadden, M.**, Kelleher, S. and Waudby HP. (In Press). Amphibians. In: Wildlife Research in Australia: Practical and Applied Methods (Eds BP. Smith, HP. Waudby, C. Alberthsen, and JO. Hampton). CSIRO Publishing: Melbourne, Australia

#### Peer Reviewed Literature

Alting, B.F., Bennitt, E., Golabek, K.A., Pitcher, B.J., McNutt, J.W., Wilson, A.M., Bates, H., **Jordan, N.** (2021) The characteristics and consequences of African wild dog (*Lycaon pictus*) den site selection. Behavioural Ecology and Sociobiology, 75, 109

Klump, B.C. **Martin, J.M.** Wild, S. Hörsch, J.K. Major, R.E. Aplin, L.M. (2021) Innovation and geographic spread of a complex foraging culture in an urban parrot. Science, 373 (6553), 456-460

Meade, J. **Martin, J.M.** Welbergen, J.A. (2021) Fast food in the city? Nomadic flying-foxes commute less and hang around for longer in urban areas, Behavioral Ecology, 32,1151-1162

Keith, R.J., Given, L.M., **Martin, J.M.**, Hochuli, D.F. (2021) Urban children's connections to nature and environmental behaviors differ with age and gender. PLoS ONE, 16(7), e0255421

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Lacasse, C., **Rose, K.**, Allen, M., Ward, M.P., Pulscher, L.A., Giles, A., **Hall, J.**, Phalen, D.N. (2021) Investigation into clinicopathological and pathological findings, prognosis, and aetiology of lorikeet paralysis syndrome in rainbow lorikeets (*Trichoglossus haematodus*), Australian Veterinary Journal, 99, 432-444

Agius, J.E., **Rose, K.**, Emery, J.P., Phalen D.N. (2021) Experimental infection of Asian house geckos with *Enterococcus lacertideformis* demonstrates multiple disease transmission routes and the in-vivo efficacy of antibiotics, Scientific Reports, 11, 13858

Bass, N.C., **Day, J.**, Guttridge, T.L., Mourier, J., Knott, N.A., Vila Pouca, C. and Brown, C. (2021) Residency and movement patterns of adult Port Jackson sharks (*Heterodontus portusjacksoni*) at a breeding aggregation site. Journal of Fish Biology, 99, 1455-1466

Bass, N.C., **Day, J.**, Guttridge, T.L., Knott, N.A., Brown, C. (2021) Preliminary observations on the movement ecology of a crested horn shark (*Heterodontus galeatus*), Journal of Fish Biology, 100, 582-585

Scheele, B.C., Hollanders, M., Hoffman, E.P., Newell, D.A., Lindenmayer, D.B., **McFadden, M.**, Gilbert, D.J. and Grogan, L.F. (2021) Conservation translocation for amphibian species threatened by chytrid fungus: A review, conceptual framework and recommendations, Conservation Science and Practice, 3, e524

**Hobbs, R.J.**, Upton, R., Keogh, L., James, K., Baxter-Gilbert, J., Whiting, M.J. (2022) Sperm cryopreservation in an Australian skink (*Eulamprus quoyii*), Reproduction, Fertility and Development, 34, 428-437

Lacasse, C., **Rose, K.**, Allen, M., Ward, M.P., Pulscher, L.A., Giles, A., **Hall, J.**, Phalen D. (2021) Investigation into clinicopathological and pathological findings, prognosis and aetiology of lorikeet paralysis syndrome in rainbow lorikeets (*Trichoglossus haematodus*), Australian Veterinary Journal, 99(10), 432-444.

Yabsley S.H., Meade J., **Martin J.M.**, Welbergen J.A. (2021) Human-modified landscapes provide key foraging areas for a threatened flying mammal: The grey-headed flying-fox, PLoS ONE, 16(11), e0259395

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Ryan, L.A., **Slip, D.J.**, Chapuis, L., Collin, S.P., Gennari, E., Hemmi, J.M., How, M.J., Huveneers, C., Peddemors, V.M., Toso, L., & Hart, N.S. (2021) A shark's eye view: testing the 'mistaken identity theory' behind shark bites on humans, Journal of the Royal Society Interface 18, 1-12

Stoops, M. Moresco, A., **O'Brien, J.**, Penfold, L., Gillis, J., Wojtusik, J. and Metrione, L. (2021) Overcoming reproductive disorders in female greater one-horned rhinoceros (*Rhinoceros unicornis*) to improve artificial insemination and natural breeding success, Clinical Theriogenology, 13, 394-401

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**Jordan, N.R.**, Golabek, K.A., Behr, D., Walker R.H., Plimpton, L., Lostrom, S., Claase, M., Van der Weyde, L. & McNutt, J.W. (2022) Priority of access to food and its influence on social dynamics of an endangered carnivore, Behavioral Ecology and Sociobiology, 76, 13



- Howell, L., Clulow, J., **Jordan, N.R.**, Beranek, C., Ryan, S., Roff, A. & Witt, R. (2021) Drone thermal imaging technology provides a cost-effective tool for landscape-scale monitoring of a cryptic forest dwelling species across all population densities. *Wildlife Research*, 49, 66-78
- Chang, W.S., **Rose, K.**, Holmes, E.C. (2021) Meta-transcriptomic analysis of the virome and microbiome of the invasive Indian myna (*Acridotheres tristis*) in Australia, *One Health*, 7(13), 100360
- Heinsohn, R., Lacy, R., **Elphinstone, A.**, Ingwersen, D., **Pitcher, B.J.**, Roderick, M., **Schmelitschek, E.**, **Van Sluys, M.**, **Stojanovic, D.**, **Tripovich, J.** and Crates, R., (2022) Population viability in data deficient nomadic species: What it will take to save regent honeyeaters from extinction, *Biological Conservation*, 266, 109430
- Daly, J.**, **Hobbs, R.J.**, Zuchowicz, N., **O'Brien, J.K.**, Bouwmeester, J., Bay L., Quigley, K., Hagedorn, M. (2022) Cryopreservation can assist gene flow on the Great Barrier Reef, *Coral Reefs*, 41, 455-462
- Rose, K.** (2021) Australian Registry of Wildlife Health updates, The Scope, Volume 3. Newsletter of the Australian Society for Veterinary Pathology
- Rose K.**, **Hall, J.** (2021) Combatting a novel pathogen threatening critically endangered reptiles in a biodiversity hotspot, The Scope, Volume 3. Newsletter of the Australian Society for Veterinary Pathology
- Rose K.** (2022) Investigating the Varied Health Threats Potentially Contributing to the Decline of the Critically Endangered Christmas Island Flying Fox (*Pteropus natalis*), The Scope, 1
- Rose K.** (2022) Australian Registry of Wildlife Health – Update, The Scope, 1
- Kelleher, S.R., Silla, A.J., **McFadden, M.S.**, Stares, M.G., Endler, J.A., and Byrne, P.G. (2022) Multiple phenotypic traits predict male mating success in a critically endangered frog, *Behavioral Ecology and Sociobiology*, 76, 40
- Todd, C.M., Westcott, D.A., **Martin, J.M.**, **Rose, K.**, McKeown, A., **Hall, J.**, Welbergen, J. (2022) Body-size dependent foraging strategies in the Christmas Island flying-fox: implications for seed and pollen dispersal within a threatened island ecosystem, *Movement Ecology* 10, 19
- Keith, R.J., Given, L.M., **Martin, J.M.** and Hochuli, D.F. (2022) Collaborating with qualitative researchers to co-design social-ecological studies, *Austral Ecology*, 47, 880-888
- Pulscher, L.A., Peel, A.J., **Rose, K.**, Welbergen, J.A., Baker, M.L., Boyd, V., Low-Choy, S., Edson, D., Todd, C., Dorrestein, A., **Hall, J.**, Todd, S., Broder, C.C., Yan, L., Xu, K., Peck, G.R., Phalen, D.N. (2022) Serological evidence of a pararubulavirus and a betacoronavirus in the geographically isolated Christmas Island flying-fox (*Pteropus natalis*), *Transboundary and Emerging Diseases*, <https://doi.org/10.1111/tbed.14579>
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- Meagher, P.**, Bradshaw, C., Huveneers, C., Peddemors, V. & **Slip, D.** (2022) Australian Shark-Incident Database, Zenodo, DOI: 10.5281/zenodo.6672829
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- Knapp, C.R., Grant, T.D., Pasachnik, S.A., Angin, B., Boman, E., Brisbane, J., Buckner, S.D., Haakonsson, J.E., **Harlow, P.S.**, Mukhida, F., Thomas-Moko, N., van denBurg, M.P. & Wasilewski, J.A. (2021) The global need to address threats from invasive alien iguanas, *Animal Conservation*, 24, 717-719
- Morrison, S., and **Harlow, P.S.**, (2022) *Brachylophus vitiensis* (Fijian Crested Iguana) seed dispersal, *Herpetological Review*, *Natural History Notes*, 53, 130-131
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- Paul, E.N., **Thompson, P.**, **Miller, N.**, **Meagher, P.**, **Vogelnest, L.** (2021) Dispersion of aerosolized bacteria from Asian elephants (*Elephas maximus*) *Journal of Zoo and Wildlife Medicine* 52(2): 749–754, 2021 DOI: 10.1638/2020-0173
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### Grey Literature (non-peer reviewed)

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Rowley, J., & **Rose, K.** (2021) Dead, shrivelled frogs are unexpectedly turning up across eastern Australia. We need your help to find out why, The Conversation: <https://theconversation.com/dead-shrivelled-frogs-are-unexpectedly-turning-up-across-eastern-australia-we-need-your-help-to-find-out-why-165176>

**Rose, K., Hall, J., Dobson, N.** (2022). NSW Wildlife Disease Investigation. Sample and data collection advice for NPWS rangers, EPA officer, District Veterinarians, and Wildlife Veterinarians.

**Jordan, NR**, Behr, D, Golabek, K, Plimpton, L & Claase, MJ (2022) African wild dogs have a feeding queue: why it makes sense. The Conversation: <https://theconversation.com/african-wild-dogs-have-a-feeding-queue-why-it-makes-sense-176056>

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Wildlife First Response for NSW Firefighters Handbook – written by Taronga (**Hall, L.**) and Graphics Department in collaboration with the NSW Govt Project working group.

**Vogelnest, L.** (2022) Assessment, Triage & Treatment of Bushfire Affected Wildlife Module

### Thesis and Reports

Pulscher, L., **Rose, K., Hall, J.** (2021) “Heavy Metal Survey of Christmas Island Flora and Fauna”, A technical report to Christmas Island National Park and Parks Australia

Glen, J. (2021) Honours thesis: “Using Stable Isotope Analysis to guide management of stranded green turtles (*Chelonia mydas*)”, Griffith University. Co-supervised by **Meagher, P**

Hall, M. (2022) PhD thesis: “Ecology of the Australian Brush-turkey in Urban Ecosystems”, University of Sydney. Co-supervised by **Martin, J.** and **Burns, A**

Kadar, J. (2022) PhD thesis: “Modelling movements, activity patterns and behaviours of Port Jackson sharks, *Heterodontus portusjacksoni*”. Macquarie University. Co-supervised by **Day, J**

Potts-Todd, G. (2022) Honours thesis: “Investigating the change in the composition of microbiota in *Eudyptula minor* (Little Penguin) faeces over time”. University of Newcastle. Co-supervised by **Day, J**

Buckley, J. (2022) Masters thesis: “Monitoring giraffe welfare is no longer a tall task: Developing a zookeeper-led behavioural welfare assessment tool for giraffes in captivity” University of Melbourne. Co-supervised by **Pitcher, B**

Radford, CG. PhD thesis (2022): “Human-carnivore conflict: livestock resource selection, predation, and signal-based mitigation”. University of NSW Sydney. Supervised by **Jordan, N.R.**

Crane, J. Honours Thesis. (2022) “Habitat Selection by Nesting Platypuses (*Ornithorhynchus anatinus*) on the Snowy River”. University of NSW Sydney. Supervised by **Jordan, N.R.**

### Conference and Workshop Proceedings

**Samy, N.** Learning from the dead and departed - a nurse's approach to necropsy. Proceedings of the 27th Veterinary Nurses Council of Australia Conference 20th June 2022

## Appendix 4

### Funds Granted to Non-Government Community Organisations

Organisation	Amount of Grant
Northern Rangeland Trust	\$40,000.00
International Rhino Foundation	\$70,000.00
Cheetah Conservation Botswana	\$15,000.00
Botswana Predator Conservation Trust	\$15,000.00
Save the Bilby Fund Ltd	\$15,000.00
TRAFFIC	\$25,000.00
Jane Goodall Institute	\$30,000.00
Jane Goodall Institute	\$45,000.00
<b>Total</b>	<b>\$240,000.00</b>
Field Grants	Amount of Grant
New Nature Foundation	\$20,000.00
Project Numbat Incorporated	\$9,576.00
Giraffe Conservation Foundation	\$13,466.00
Woodland Park Zoo	\$19,850.00
Wildlife Conservation Research	\$14,800.00
International Crane Foundation	\$19,687.00
Soala Foundation	\$14,500.00
Endangered Wildlife Trust	\$15,000.00
ATF Conservation International	\$19,400.00
Birdlife Australia	\$13,313.00
Elephants for Africa	\$11,708.00
Endangered Wildlife Trust Soutpansberg Project	\$15,000.00
Raise Hope Banda Community	\$9,500.00
<b>Total</b>	<b>\$195,800.00</b>
<b>Grand Total</b>	<b>\$435,800.00</b>

## Appendix 5

### Privacy Management

Taronga's Privacy Management Plan sets out how Taronga complies with the *Privacy and Personal Information Protection Act 1998* and the *Health Records and Information Privacy Protection Act 2002*.

Taronga's Privacy Management Plan:

- details Taronga's commitment to protecting the privacy of our staff, students, guests, donors, digital community and others about whom Taronga holds personal information;
- describes the principles applicable to the collection, retention, storage, access and disclosure of personal information and how Taronga adheres to those principles;
- describes the kinds of personal information collected and held by Taronga;
- informs Taronga staff about how to manage and protect personal information;

- describes how a person can request access to and/or amendment of their personal information held by Taronga; and
- details complaint handling and review procedures.

The Privacy Management Plan and Taronga's Privacy Statement are available to members of the public and Taronga staff on Taronga's website:

<https://taronga.org.au/about/privacy>

In the reporting period, Taronga established a group of 'Privacy Champions' who meet monthly to discuss and address privacy matters across all areas of the organisation. The group assists in the review of privacy policies and practices and raises awareness of privacy at Taronga.

Taronga received no requests for review under Part 5 of the Privacy and Personal Information Protection Act 1998 in the reporting period.



## Appendix 6

### Consultants' Fees Incurred in 2022/23

#### Consultants Equal to or More Than \$50,000

##### Capital Projects

Elton Consulting Group - \$64,762

#### Consultants Less Than \$50,000

During the year seven consultancies were engaged in the following area:

Management Services – \$23,280

Capital Projects – \$160,547

**Total Consultancies less than \$50,000 = \$183,827**

**Total Consultancies = \$248,589**

## Appendix 7

### Cyber Security Annual Attestation Statement for the 2022/23 Financial Year

I, Penny Bingham-Hall, am of the opinion that Taronga Conservation Society Australia (Taronga) has managed cyber security risks in a manner consistent with the mandatory requirements set out in the NSW Government Cyber Security Policy.

Governance is in place to manage the cyber security maturity and initiatives for Taronga Conservation Society Australia.

Risks to the information and systems of Taronga Conservation Society Australia have been assessed and are managed.

Taronga Conservation Society Australia is working to continuously improve the management of cyber security governance and resilience by:

---

Implementing governance controls for service delivery and reporting requirements for Taronga's Managed Security Services

---

Implementing security controls in accordance with the ISMS and Essential 8 mitigation strategies to raise E8 Maturity levels

---

Recruiting necessary operational, technical and project related information security roles to meet Cybersecurity program implementation resources requirement

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Implementing an organisational Cyber security and privacy training program to align with the cluster and Payment Card Industry standards, and to increase employee awareness and confidence

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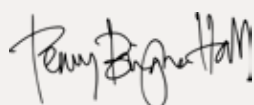
Developing required Cyber security and technology policies to ensure alignment with the cluster and the NSW Government Cyber Security Policy

---

Participating in government auditing of IT activities by the NSW Government Audit office and Cyber Security NSW

---

Engaging external auditors in accordance with the ISMS to inform a risk-based approach to development of Taronga's Cyber security program



**Penny Bingham-Hall**

Chair

Taronga Conservation Society Australia Board

## Appendix 8

### Government Information (Public Access) Act

This section provides information about the operation of the Government Information (Public Access) Act 2009 (GIPA Act) in the reporting period. In line with section 7 (3) of the GIPA Act, Taronga proactively releases a range of information, including in relation to animal care and welfare, scientific research and conservation program outcomes. Information is released on Taronga's website and social media platforms, and the program is reviewed annually.

In the reporting period, Taronga received four open access applications as set out in the tables below.

**Clause 8A:** Details of the review carried out by the agency under section 7 (3) of the Act during the reporting year and the details of any information made publicly available by the agency as a result of the review

Reviews Carried Out by the Agency	Information Made Publicly Available by the Agency
Yes	No

**Clause 8B:** The total number of access applications received by the agency during the reporting year (including withdrawn applications but not including invalid applications)

Total Number of Applications Received
4

**Clause 8C:** The total number of access applications received by the agency during the reporting year that the agency refused either wholly or partly, because the application was for the disclosure of information referred to in Schedule 1 to the Act (information for which there is conclusive presumption of overriding public interest against disclosure)

	Wholly	Partly	Total
Number of Applications Refused	0	0	0
% of Total	0%	0%	

### Schedule 2 Statistical Information About Access Applications to be Included in Annual Report

Table A: Number of Applications by Type of Applicant and Outcome\*

	Access Granted in Full	Access Granted in Part	Access Refused in Full	Information Not Held	Information Already Available	Refuse to Deal with Application	Refuse to Confirm/ Deny whether information is held	Application Withdrawn	Total	% of Total
Media	1	3	0	0	0	0	0	0	4	100%
Members of Parliament	0	0	0	0	0	0	0	0	0	0%
Private sector business	0	0	0	0	0	0	0	0	0	0%
Not for profit organisations or community groups	0	0	0	0	0	0	0	0	0	0%
Members of the public (by legal representative)	0	0	0	0	0	0	0	0	0	0%
Members of the public (other)	0	0	0	0	0	0	0	0	0	0%
Total	1	3	0	0	0	0	0	0	4	
% of Total	25%	75%	0%	0%	0%	0%	0%	0%		

\* More than one decision can be made in respect of a particular access application. If so, a recording must be made in relation to each such decision. This also applies to Table B.

**Table B: Number of Applications by Type of Application and Outcome\***

	Access Granted in Full	Access Granted in Part	Access Refused in Full	Information Not Held	Information Already Available	Refuse to Deal with Application	Refuse to Confirm/ Deny whether information is held	Application Withdrawn	Total	% of Total
Personal information applications*	0	0	0	0	0	0	0	0	0	0%
Access applications (other than personal information applications)	1	3	0	0	0	0	0	0	4	0%
Access applications that are partly personal information applications and partly other	0	0	0	0	0	0	0	0	0	0%
<b>Total</b>	<b>1</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	
<b>% of Total</b>	<b>25%</b>	<b>75%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>		

\*A personal information application is an access application for personal information (as defined in clause 4 of Schedule 4 to the Act) about the applicant (the applicant being an individual).

**Table C: Invalid Applications**

Reason for Invalidity	No. of Applications	% of Total
Application does not comply with formal requirements (section 41 of the Act)	0	0%
Application is for excluded information of the agency (section 43 of the Act)	0	0%
Application contravenes restraint order (section 110 of the Act)	0	0%
Total number of invalid applications received	0	0%
Invalid applications that subsequently became valid applications	0	0%

**Table D: Conclusive Presumption of Overriding Public Interest Against Disclosure: Matters Listed in Schedule 1 of Act**

	Number of Times Consideration Used*	% of Total
Overriding secrecy laws	0	0%
Cabinet information	1	0%
Executive Council information	0	0%
Contempt	0	0%
Legal professional privilege	0	0%
Excluded information	0	0%
Documents affecting law enforcement and public safety	0	0%
Transport safety	0	0%
Adoption	0	0%
Care and protection of children	0	0%
Ministerial code of conduct	0	0%
Aboriginal and environmental heritage	0	0%
Privilege generally – Sch 1(5A)	0	0%
Information provided to High Risk Offenders Assessment Committee	0	0%
<b>Total</b>	<b>1</b>	

\* More than one public interest consideration may apply in relation to a particular access application and if so, each such consideration is to be recorded (but only once per application). This also applies in relation to Table E



**Table E: Other Public Interest Considerations Against Disclosure: Matters Listed in Table to Section 14 of Act**

	Number of Times Consideration Used*	% of Total
Responsible and effective government	0	0%
Law enforcement and security	0	0%
Individual rights, judicial processes and natural justice	2	100%
Business interests of agencies and other persons	0	0%
Environment, culture, economy and general matters	0	0%
Secrecy provisions	0	0%
Exempt documents under interstate Freedom of Information legislation	0	0%
<b>Total</b>	<b>2</b>	

**Table F: Timeliness**

	Number of Applications*	% of Total
Decided within the statutory timeframe (20 days plus any extensions)	4	100%
Decided after 35 days (by agreement with applicant)	0	0%
Not decided within time (deemed refusal)	0	0%
<b>Total</b>	<b>4</b>	

**Table G: Number of Applications Reviewed Under Part 5 of the Act (By Type of Review and Outcome)**

	Decision Varied	Decision Upheld	Total	% of Total
Internal review	0	0	0	0%
Review by Information Commissioner*	0	0	0	0%
Internal review following recommendation under section 93 of Act	0	0	0	0%
Review by NCAT	0	0	0	0%
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>% of Total</b>	<b>0%</b>	<b>0%</b>		

\* The Information Commissioner does not have the authority to vary decisions, but can make recommendations to the original decision-maker. The data in this case indicates that a recommendation to vary or uphold the original decision has been made by the Information Commissioner.

**Table H: Applications for Review Under Part 5 of the Act (By Type of Applicant)**

	Number of Applications for Review	% of Total
Applications by access applicants	0	0%
Applications by persons to whom information the subject of access application relates (see section 54 of the Act)	0	0%
<b>Total</b>	<b>0</b>	

**Table I: Applications Transferred to Other Agencies**

	Number of Applications Transferred	% of Total
Agency-Initiated Transfers	0	0%
Applicant-Initiated Transfers	0	0%
<b>Total</b>	<b>0</b>	

## Appendix 9

## Human Resources

Program Area	Ongoing		
	2021	2022	2023
Executive	12	11	12
Clerical	114	121	130
General	29	17	15
Professional	14	15	19
Services	31	31	35
Technical	6	6	5
Trades	165	165	181
<b>Total</b>	<b>371</b>	<b>366</b>	<b>397</b>

Program Area	Casual		
	2021	2022	2023
Executive	0	0	0
Clerical	35	30	33
General	3	0	0
Professional	5	9	19
Services	250	293	306
Technical	0	0	0
Trades	60	92	92
<b>Total</b>	<b>353</b>	<b>424</b>	<b>450</b>

Temporary		
2021	2022	2023
1	0	0
48	45	52
7	10	18
3	3	7
9	11	8
0	1	2
32	35	30
<b>100</b>	<b>105</b>	<b>117</b>

Total		
2021	2022	2023
13	11	12
197	196	215
39	27	33
22	27	45
290	335	349
6	7	7
257	292	303
<b>824</b>	<b>895</b>	<b>964</b>

## Appendix 10

### Internal Audit and Risk Management Attestation Statement for the 2022-23 Financial Year

I, Penny Bingham Hall, am of the opinion that Taronga Conservation Society Australia (Taronga) has internal audit and risk management processes in operation that are compliant with the seven (7) core requirements set out in the Internal Audit and Risk Management Policy for the NSW Public Sector for the General Government Sector, specifically:

#### Core Requirements

<b>Risk Management Framework</b>	1.1	The Accountable Authority shall accept ultimate responsibility and accountability for risk management in the agency.	Compliant
	1.2	The Accountable Authority shall establish and maintain a risk management framework that is appropriate for the agency. The Accountable Authority shall ensure the framework is consistent with AS ISO 31000:2018	Compliant
<b>Internal Audit Function</b>	2.1	The Accountable Authority shall establish and maintain an internal audit function that is appropriate for the agency and fit for purpose.	Compliant
	2.2	The Accountable Authority shall ensure the internal audit function operates consistent with the International Standards for Professional Practice for Internal Auditing.	Compliant
	2.3	The Accountable Authority shall ensure the agency has an Internal Audit Charter that is consistent with the content of the 'model charter'.	Compliant
<b>Audit and Risk Committee</b>	3.1	The Accountable Authority shall establish and maintain efficient and effective arrangements for independent Audit and Risk Committee oversight to provide advice and guidance to the Accountable Authority on the agency's governance processes, risk management and control frameworks, and its external accountability obligations.	Compliant
	3.2	The Accountable Authority shall ensure the Audit and Risk Committee has a Charter that is consistent with the content of the 'model charter'.	Compliant

The Chair and Members of the Performance, Audit, Risk and Safety Committee are:

- Chair – Ms Kristin Stubbins AM, (Term expires 30 June 2024)
- Member – Ms Penny Bingham-Hall, (Term expires 31 Dec 2023)
- Member – Mr Joe David, (Term expires 30 June 2025)
- Member – Mr Michael Herring, (Term expires 31 Dec 2026)
- Member – Ms Sarah Norgate, (Term expires 30 June 2024)
- Member – Mr Murray Wood, (Term expires 26 Sept 2023)

#### Penny Bingham-Hall

Chair

Taronga Conservation Society Australia Board

## Appendix 11

### Senior Executives and Staff

Band		Number of Senior Executive	Average Remuneration (package) end current year
SE Band 1	Female Senior Executive	2	\$223,330
	Male Senior Executive	8	
SE Band 2	Female Senior Executive	1	\$289,631
	Male Senior Executive	1	
SE Band 3	Male Senior Executive	1	\$389,478
<b>Total</b>		<b>13</b>	<b>\$246,311</b>

Percentage of total employee-related expenditure: 6.13%.

Please note, over the course of 2022/23 there were 13 individuals employed across 12 executive roles. This includes one former staff member.



## Appendix 12

### Overseas Travel by Taronga Staff During the 2022-23 Financial Year

Dates	Employees and Officers	Country	Purpose
3 to 12 August 2022	Trade Sales Manager	United States of America	Participation in the Down Under Answers Roadshow, Swain Travel Event and Tourism Australia USA Marketplace 2022.
10 to 20 September 2022	Executive Director Taronga Zoo and Director Capital Programs	Sweden, Switzerland, France and Singapore	Engagement with global cable car suppliers, visit and meeting with operators and teams of global leading examples of zoo and place design.
23 September to 3 October 2022	Trade Sales Coordinator	South Korea and Japan	Participation in the Tourism Australia Japan and South Korea Marketplace 2022.
2 to 16 October 2022	Manager, Conservation Science	United States of America	Led collaborative research and conservation biobanking of samples from threatened rhinoceroses in partnership with other zoos.
23 to 28 October 2022	Chief Executive	Spain	Participation in the World Association of Zoos and Aquariums Annual Conference 2022.
11 to 20 November 2022	Trade Sales Manager	United Kingdom	Participation in the Tourism Australia UK and Europe Marketplace 2022 and Destination NSW Travel Agent event.
7 to 19 November 2022	Director Guest and Commercial Operations	United States of America	Participation in the International Association of Amusement Parks and Attractions Conference and Exhibition. Visit and meeting with other industry leading venues and zoos.
13 to 27 November 2022	Divisional Director Welfare, Conservation & Science and Wildlife Conservation Officer	Panama	Participation in the 19th meeting of the Conference of the Parties to the Convention of International Trade in Endangered Species of Wild Fauna and Flora.
18 April to 4 May 2023	Manager, Conservation, Recovery and Restoration Programs and Senior Relationship Manager	United States of America	Meeting with prospective donors and philanthropic foundations.

## Appendix 13

### Public Interest Disclosures

Taronga has a Public Interest Disclosures Policy in place, that sets out the process for reporting wrongdoing in line with the *Public Interest Disclosures Act 1994*. The policy is accessible to staff through the intranet and publicly available on Taronga's website. Taronga ensures staff awareness of the policy, reporting process and protections under the policy through training (including induction and refresher training) and communications from the Chief Executive.

Taronga received no public interest disclosures in the period from 1 July 2022 to 30 June 2023.

Taronga finalised no public interest disclosures in the period from 1 July 2022 to 30 June 2023.

## Appendix 14

### Risk Management and Insurance Report

#### Risk Management

Taronga's Risk Management Policy and Enterprise Risk Management (ERM) Framework enables Taronga to identify, evaluate and treat risks arising from its unique operating environment, which encompasses wildlife conservation, education, research, tourism, commercial operations, charitable fundraising and a large and complex capital works program across both sites.

Taronga's Risk Appetite and Tolerance Statement is updated annually and key metrics and parameters for risk identified to aid decision-making. The ERM framework provides a firm foundation to identify, assess and respond to risks arising from significant external events impacting Taronga's operations.

Taronga's Risk Management Policy is reviewed and approved annually by the Taronga Board, following endorsement by the Performance, Audit, Risk and Safety Committee. The Board is issued a summary of high and extreme enterprise risks, any material changes in Taronga's ERM register and key risk trends at each bi-monthly meeting. The Performance, Audit, Risk and Safety Committee reviews internal and external audit reports which may identify weaknesses in existing risk management processes or emerging risks.

In 2022-23, Taronga continued to review and treat risks across the organisation, including fraud and corruption and data governance risks. Training and other mitigation actions were implemented in relation to fraud and corruption prevention, reporting wrongdoing, risk appetite, cyber security and information management.

#### Insurance

As a Public Non-Financial Corporation, Taronga is part of the NSW Government's self-insurance scheme, the Treasury Managed Fund (TMF). The TMF is administered by icare and provides cover to Taronga for all its major assets and significant risks arising from its operations.

## Appendix 15

### Anti-Slavery Statement

Taronga Conservation Society Australia is committed to ensure to the best of our ability that there is no modern slavery in any part of our business operations. We are committed to acting ethically and with integrity in all business dealings and relationships, and where possible, to ensure modern slavery is not taking place in our own business or supply chain.

As part of our contracting processes, we are taking reasonable steps to ensure there are specific prohibitions against the use of forced, compulsory or trafficked labour, or anyone held in slavery or servitude. Our business also expects its service providers, suppliers and contractors to share our commitment to act lawfully and ethically and to work to ensure that modern slavery is not taking place within its organisation or within its supply chain.

## Appendix 16

### Work Health and Safety

#### Severity Rate

Severity Rate	2021/22	2022/23
Lost time injury frequency / workplace accidents for both Zoos	3.98%	6.47%

Causation Factor	2021/22	2022/23
Falls, trips and slips	26%	35%
Bites, stings, scratches (non collection animals)	12%	23%
Contact with collection animal	9%	10%
Body stressing	5%	11%
Hitting objects with a part of the body	5%	9%
Being hit by moving objects	12%	6%
Vehicle incidents	9%	0%
Chemicals and other substances	2%	4%
Heat, electrical and other environmental factors	10%	2%
Mental stress	3%	0%



## Appendix 17

### Workforce Diversity

#### Equal Employment Opportunity (EEO) Target Groups (Permanent and Temporary Staff Only)

##### *Trends in the Representation of EEO Groups*

EEO Group	"Benchmark or Target"	2018	2019	2020	2021	2022	2023
Women	60.0%	63.7%	53.5%	61.7%	67.4%	63.3%	64.0%
Aboriginal People and Torres Strait Islanders	2.6%	2.5%	1.4%	1.40%	3.40%	3.1%	4.5%
People whose Language First Spoken as a Child was not English	19.0%	6.3%	5.3%	5.1%	2.5%	*	*
People with a Disability	n/a	1.2%	0.8%	0.9%	1.6%	0.8%	1.8%
People with a Disability Requiring Work-related Adjustment	1.5%	0%	0%	0%	1%	0.5%	1.2%

##### *Trends in the Distribution of EEO Groups*

EEO Group	"Benchmark or Target"	2018	2019	2020	2021	2022	2023
Women	100	94	93	90	92	98	98
Aboriginal People and Torres Strait Islanders	100	76	87	99	90	56**	44**
People whose Language First Spoken as a Child was not English	100	102	103	95	113	*	*
People with a Disability	100	89	88	89	93	75	66
People with a Disability Requiring Work-related Adjustment	100						

\*Data not currently available.

\*\* Includes 17 school students undertaking various Aboriginal Traineeship scheme programs (up from 8 students in 2022).

## Appendix 18

### Statutory Financial Statements – Taronga's 2022/23 Financial Results

Please refer to audited financial statements on page 86.

## Appendix 19

### Investment and Liability Performance

#### Investment Performance

Taronga had \$276 million invested in fixed term deposits with various banking institutions at 30 June 2023. The average interest rate earned on these deposits was 4.62% pa.

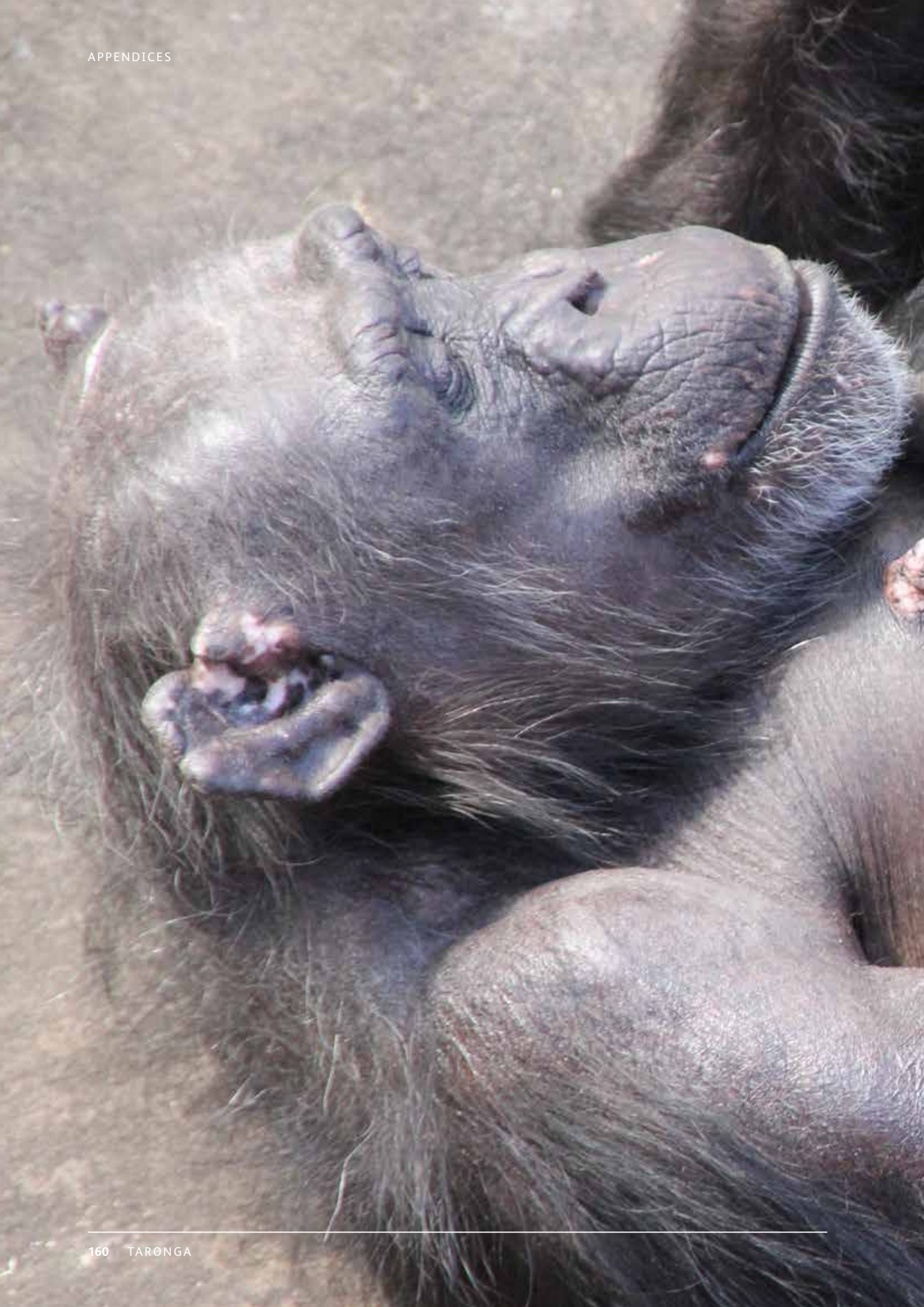
#### Liability Performance

At 30 June 2023, Taronga had total borrowings of \$50.4 million. These borrowings represent fifteen fixed interest rate loans with TCorp maturing at various dates out to 2032.

Liability Performance	Actual	Benchmark
Market value of borrowings at 30 June 2023*	\$47.3m	n/a
Cost of funds pa	2.87%	2.87%**

\*Market value of borrowings represents the value if all debt had to be settled at 30 June 2023 and is different to the capital value based on maturity dates, which is the value used for borrowings reported in the Financial Statements.

\*\*TCorp advises that the benchmark portfolio is identical to the debt portfolio and, as such, debt portfolio performance is equal to benchmark portfolio performance.







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### Power to Protect

Please support our work. You can visit us, become a member or make a donation.

Taronga is a not-for-profit organisation dedicated to wildlife conservation and community education.

For more information go to [taronga.org.au](http://taronga.org.au)



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### Acknowledgements

Editor: Laura Minns

Art Director: Ginni Leonard


Ministerial Coordinators:  
Angeli Aquino and Blair McDonald

Copy Coordinator: Amy Russell

Acknowledgment of Country:  
Christina Nicolas and Wiradjuri  
Elder Aunty Yvonne Hill

CHIMPANZEE 'LISA'  
WITH BABY 'LEMBA'  
PHOTO BY  
SCOTT BROWN

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LOGGERHEAD TURTLE  
HATCHLING BEING RELEASED  
BACK TO THE WILD ON  
DARKINJUNG COUNTRY  
PHOTO BY HARRY VINCENT

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